RECENT LEVELS AND TRENDS OF CONTRACEPTIVE USE AS ASSESSED IN 1983

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Department of International Economic and Social Affairs

RECENT LEVELS AND TRENDS OF CONTRACEPTIVE USE AS ASSESSED IN 1983

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RECENT LEVELS AND TRENDS OF CONTRACEPTIVE USE AS ASSESSED IN 1983

Corrigendum

1. Page 20, table 3, column headed "Year of survey", against "Norway"

   For 1978 read 1977

2. Page 22, table 4, column headed "Earlier date", under column "Year", against "Sri Lanka"

   For 1978 read 1975

3. Page 40, table 6, column headed "Injectables", against "Egypt, 1980"

   For 68 read 0

4. Page 44

   The page number should read 49

5. Page 48, table 7, column headed "Year of survey", against "Norway"

   For 1978 read 1977

6. Page 49

   The page number should read 44

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The present study was carried out by the Population Division of the Department of International Economic and Social Affairs of the United Nations Secretariat, as part of its ongoing assessment of global demographic trends and their determinants. The report contains the first systematic review by the Population Division of data pertaining to the level of contraceptive use, types of methods employed, and recent trends in contraceptive practice for developing and developed countries. In view of the rapidity of change in contraceptive practice, and in view of the recent increase in the availability of data, periodic reviews of these topics are planned for the future.

It is estimated here that, around 1980/81, roughly 34 to 42 per cent of married couples with the wife of childbearing age were currently practising contraception in all developing countries combined, and approximately 62 to 74 per cent in the developed countries. The range of uncertainty primarily reflects the need to make assumptions about use levels for some countries. Estimates of contraceptive prevalence are available from surveys or other sources, for at least one date since 1970, for over 80 per cent of the population of developing countries and for over 60 per cent of that of developed countries. For individual countries, observed levels of contraceptive prevalence range approximately from 50 to 85 per cent of reproductive-aged married women in developed countries, and from 1 to over 70 per cent in developing countries. Levels of use remain very low in most of sub-Sahara Africa and some countries in Asia, although they grew rapidly during the 1970s in much of Asia and Latin America. Use of contraceptive sterilization has increased especially rapidly in developing countries; in developed countries the most notable trend has been towards substitution of a variety of modern methods for older and less reliable methods such as withdrawal. The present study also includes information, for less developed countries, about levels of familiarity with contraception, knowledge of a place to obtain family planning supplies and services, ever-use, and differential practice of contraception in urban and rural areas.

Three related United Nations reports, though less current and less comprehensive geographically than the present study, provide more detailed information about the social and demographic determinants of contraceptive use. For developing countries, see Variations in the Incidence of Knowledge and Use of Contraception: A Comparative Analysis of World Fertility Survey Results for Twenty Developing Countries */ and Factors Affecting the Use and Non-Use of Contraception: Findings from a Comparative Analysis of Selected KAP SurveysI/. For developed countries the Economic Commission for Europe has discussed contraceptive practice in Fertility and Family Planning in Europe Around 1970: A Comparative Study of Twelve National Surveys II/

*/ United Nations publication, ST/ESA/SER.R/40, 1981.

I/ United Nations publication, Sales No. E.79.XIII.6

II/ United Nations publication, Sales No. E.76.XIII.2.

CONTENTS

EXPLANATORY NOTES

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Where the designation "country or area" is used in the text, it covers, as appropriate, countries, territories, cities or areas.

The designations "developed" and "developing" economies are intended for statistical convenience and do not, necessarily, express a judgement about the stage reached by a particular country or area in the development process.

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

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The following symbols have been used in tables throughout the report:

Three dots (...) indicate that data are not available or are not separately reported.

A dash (--) indicates that the amount is nil or negligible.

Details and percentages in tables do not necessarily add to totals, because of rounding.

INTRODUCTION

The amount and quality of information about contraceptive practice has grown very rapidly in recent years. Attempts to measure the nationwide level and composition of contraceptive use began only in the 1950's, though studies of contraceptive practice in sub-national groups had been conducted earlier. For many of the countries discussed below, the 1970's witnessed the first measurement of the national prevalence of contraceptive use. A report published in 1981 was able to cite estimates of contraceptive prevalence (that is, the percentage currently using contraception) for 63 countries and areas.1/ The present report contains estimates for 76. 2/ In all but a few cases the estimates come from surveys dated 1975 or later, and in 39 countries two or more surveys permit examination of trends in contraceptive practice. The countries for which contraceptive prevalence has been assessed contain over three fourths of the total world population.

The increased availability of information about contraceptive practice reflects to some extent the interest of demographic researchers in studies of the determinants of fertility. In addition, the growth and improvement in survey research has been essential, coupled with the realization that persons in most societies are willing to discuss their contraceptive practices openly with survey interviewers.

But the most important impetus to increased knowledge of contraceptive practice has undoubtedly been growing government concern about fertility, and about family planning in particular. The number of Governments providing direct or indirect support for family planning services grew during the 1970's.3/ Support is not confined to countries where the Government favours lower fertility. Family planning services are increasingly viewed as an integral part of the health system, and government support for such services is seen, in many countries, as essential for realization of the right of couples to determine the number and spacing of their children. Once policies relating to fertility are formulated, and funds committed to programmes, there is an increased need for information that will permit the monitoring of trends and the evaluation of programme performance. Governments that do not provide support for family planning have also in many cases, desired better information about fertility and its determinants, and have sponsored surveys that include data about contraceptive practice.

The present study examines recent levels and trends of contraceptive practice throughout the world. Attention is confined to a few basic indicators which, because of their importance, are available for a large number of countries. Except in chapter III, where differences between rural and urban areas are examined separately, attention is restricted to national averages. Induced abortion is not covered here. Chapter I of the report discusses the level of current contraceptive practice among couples with the wife in the childbearing ages. These couples are described as "married", although in fact consensual unions have usually been included where such

unions are common. Chapter I also examines trends in contraceptive prevalence and presents information, for developing countries,4/ about knowledge of contraception, knowledge of a place to obtain family planning supplies and services, and ever-use of contraception. Chapter I concludes with approximate estimates of contraceptive prevalence for the world as a whole. A range of estimates is given, based on alternate assumptions about prevalence in countries where no data were available.

Chapter II discusses the specific methods of contraception employed, and trends in the relative prevalence of different methods. The average level of use of various methods is shown for all countries with data, as well as the patterns for specific countries. Chapter II also discusses some of the reasons for the patterns and trends that are observed.

Chapter III examines differences in level and type of contraceptive practice between rural and urban areas of developing countries, using data collected through the World Fertility Survey programme. The relationship of rural-urban differential contraceptive use to availability of family planning services, to the desired number of children and to educational attainment is briefly considered. A summary and conclusion follow chapter III.

I. KNOWLEDGE AND USE OF ANY CONTRACEPTIVE METHOD

A. Knowledge of contraception in developing countries

In developed countries nearly all women have at least heard of contraception 5/, but this is not universally the case in developing countries, as shown in table 1. The number shown is the percentage of ever-married women of reproductive age who said that they had heard of any method after an interviewer had named or described various types of contraception.6/

At least 80 per cent of women had this minimal level of knowledge in all the Latin American countries for which information was available and in 11 of 17 Asian countries; in many of these familiarity with contraception was nearly universal. However, in 8 of 12 African countries, fewer than 80 per cent had heard of contraception. The lowest levels of knowledge in Africa and Asia are found in Afghanistan, Benin, Cameroon, Mauritania, Nepal, Pakistan and Sudan where between 4 and 52 per cent knew of any method.

The pill, intra-uterine device (IUD) and female sterilization were the methods recognized by the largest number of women in developing countries.7/ Even when the methods were described by the interviewer, fewer women had heard of any of the non-supply methods such as rhythm and withdrawal than of modern supply and clinic methods. In many countries fewer than half the women reported that they had heard of abstinence and withdrawal; it seems likely that most women recognized that these methods would eliminate or reduce the risk of pregnancy, but that they had not heard of couples in their society employing these means to control fertility.

In many developing countries familiarity with contraception is now much more widespread than it was in the 1960's or early 1970's. In Pakistan, though, reported knowledge showed a marked decline between 1975, when 75 per cent of women could name at least one method, and 1979/80, when only 26 per cent could do so.8/ It is unclear how to interpret such a result. The later survey followed a period in which publicity about family planning had been suspended for several years, so that the idea of contraception had probably become less salient to respondents, and younger women may never have been exposed to earlier publicity. It is also possible that a revival of conservative religious and social standards affected attitudes toward contraception, and hence the respondents' willingness to talk about it,9/ even though the Government did not change its official policy favouring lower fertility.10/

Many recent surveys have inquired whether women knew of a place to obtain family planning supplies or other services. This information is shown for 18 developing countries in table 1. In most cases the surveys counted both women who knew of an outlet of an official family planning programme and those who

knew of a non-programme source. In four Latin American and three Asian countries over 90 per cent of married women knew of a place to obtain services. In several others between 70 and 90 per cent knew of an outlet. However, between 20 and 43 per cent knew of an outlet in the four African countries for which this information was available, and in Nepal and Pakistan. In Pakistan, 33 per cent reported knowledge of an outlet in 1975, as opposed to 20 per cent in 1979/81; elsewhere, knowledge of an outlet tended to increase over time. The relationship between availability of services and contraceptive practice is discussed later.

B. Contraceptive use

The definition of "contraception" is not completely straightforward, and even the experts who design and analyse surveys disagree as to which practices should be included. Most definitional differences concern the inclusion or exclusion of traditional methods, particularly abstinence, douching, breast-feeding and a variety of folk methods. The levels of contraceptive practice shown in the present report usually include all contraceptive methods shown in the data source, but exclude breast-feeding and the period of abstinence following a birth (see chapter II). Some exceptions are noted in the tables.

Most surveys employ broadly similar questions to measure contraceptive use. Women (and, in a few surveys, men) are first asked what methods they know about, and the interviewer then names or describes methods that were not mentioned. Respondents are asked about use of each method that was recognized. This procedure helps make clear to the respondent what methods are to be counted as contraceptives. Sometimes, though, methods are not named by the interviewer. In such cases the level of use tends to be under-reported, apparently because it does not occur to many persons to mention methods such as withdrawal and rhythm, which require no supplies or medical services; use of contraceptive sterilization may also be seriously understated.11/

The division between past and current contraceptive use can also be problematic. Most surveys have asked about use "now" or "within the last month", though some have specified other periods. There is usually no information about the regularity with which the method is employed or about the respondent's understanding of the correct means of use.12/ Compared with other information gathered in surveys, current contraceptive use appears to be reported moderately reliably -- more so than information dealing with opinions or desires (desired family size, for instance) but less so than stable personal characteristics such as educational attainment or religion.13/

The sex of the respondent also affects reports of contraceptive use, though usually not to a marked extent. Men typically report higher levels of use of "male" methods such as vasectomy, condom and withdrawal, while women tend to report wider use of other methods. Since most of the surveys reviewed

here interviewed women only, use of the male methods has probably been somewhat understated. Neither sex reports higher overall levels of use consistently across cultures.14/

The importance of differences in survey content and sample composition should not be over-stressed, however. Most of the variation among countries in reported levels of contraceptive use certainly reflects genuine differences in behaviour.

Tables 1 and 3 show, for developing and developed countries, respectively, the percentage of married women of reproductive age using contraception, according to the most recent national survey data available. Table 2 includes prevalence estimates for several additional developing countries based on family planning supplies and services distributed.

1. Developing countries

The range of current contraceptive practice in developing countries or areas was extremely wide, from a near absence of practice in much of Africa and parts of Asia to the estimated 71 to 72 per cent of married women currently using contraception in China, Hong Kong and Singapore. In Africa few countries had prevalence levels exceeding 10 per cent of married women. However, in Egypt and Tunisia approximately one fourth to one third of women were current users, as were 37 to 50 per cent of South African women and 46 per cent of those in Mauritius. The lower figure for South Africa represents the use of clinic and supply methods, whereas the higher figure includes traditional non-supply methods such as rhythm and withdrawal, but also extended breast-feeding and possibly post-partum abstinence.

Asia contains an extreme range of use levels, from under 5 per cent in parts of Southern and Western Asia to over two thirds in some countries of East Asia and of the Southeastern subregion. China, the largest country, falls in the latter group, with 71 per cent of married women currently using contraception according to a 1982 survey. Though prevalence was low or moderate in much of Western and Southern Asia, within each Asian subregion there was at least one country where over one half of the married women or their husbands were using contraception as of the most recent survey: in the Western region, Lebanon; in Southern Asia, Sri Lanka; in the Southeast, Singapore and Thailand; and in East Asia all three countries and areas with data available (China, Hong Kong and the Republic of Korea). At the other extreme, prevalence was under 5 per cent in Afghanistan, Pakistan and the Yemen Arab Republic, and was 7 per cent in Nepal, 13 per cent in Bangladesh, and 14 per cent in Iraq.

The level of use in Latin America was lower than that in East Asia (where the average was determined mainly by China) but was higher than in other developing regions. For Latin American countries with data, there were no instances of prevalence levels below 15 per cent, as was common in Africa and South Asia. In most Latin American countries and areas at least one third of married women were current users, with prevalence exceeding 60 per cent in

Costa Rica, Panama and Puerto Rico and 50 per cent in Jamaica and Trinidad and Tobago. The level of use in Barbados, Colombia, and Venezuela was also near 50 per cent. The lowest prevalence - about 20 per cent - was seen in Guatemala and in Haiti.

Several of the largest countries are omitted from table 1 because comparable survey-based estimates are unavailable at the national level. Of the seven developing countries with at least 75 million inhabitants in 1980, Brazil is not shown, and the estimate for India dates from 1970. In both cases there is some evidence available from surveys of sub-national units or service statistics maintained by family planning programmes, though the information is not fully comparable with the figures shown in table 1.

In India in 1981/82, 26 per cent of reproductive-aged (15 to 44) married women were estimated to be using contraception supplied through the family planning programme (table 2).15/ In general, estimates such as this, derived from programme records of family planning acceptors, understate the prevalence of contraceptive use because programme statistics do not reflect practice of methods such as withdrawal and rhythm, which require neither medical attention nor supplies. If modern methods are frequently obtained outside programme channels this can also lead to an underestimate of the number of current users. On the other hand, prevalence figures derived from acceptor statistics sometimes overestimate the prevalence of particular methods, if too optimistic assumptions are made about the extent to which supplies distributed are actually used, or if rates of discontinuation of IUDs or pills are underestimated.16/ None the less, it appears that contraceptive practice in India is at a moderate level, considerably higher than in neighbouring Pakistan or Bangladesh but lower than in Sri Lanka or in several Southeastern Asian countries such as Malaysia (where it is likely that prevalence has increased to over 40 per cent of women since the 1974 survey) or Thailand.17/

No national-level estimate is currently available for Brazil, but surveys conducted in a number of states between 1978 and 1980 show between 31 per cent and 71 per cent of married women to be using contraception (with the highest figures for the states in the relatively highly developed Southeastern and Southern regions).18/ Thus the level of contraceptive use for Brazil as a whole is probably roughly in the upper middle of the range observed for Latin American countries shown in table 1.

The percentage of women who reported ever using contraception is also shown in table 1. In general, the pattern of variation across countries is similar to that observed for current use. In most Asian and Latin American countries, at least half - and sometimes over 80 per cent - of currently married women who had ever tried contraception were using at the time of the survey, but in most of the African countries fewer than one half of the ever-users were currently practising. A possible contributing factor is that many women use contraception for limited periods in order to increase the spacing between wanted births; this is very often the reason for use in African countries, where desired family size is generally high. However, an analysis of World Fertility Survey data showed that over 50 per cent of women

who had tried contraception had discontinued use in the three African countries studied (Kenya, Lesotho, the Sudan), even among women who said they wanted no more children; in other regions one third or less of such women had stopped using.19/ The frequency of discontinuation among women who want no more children appears in general to be lowest where the percentage of women who ever used contraception is highest. This could be due to a social setting more supportive of contraceptive use, or to the more ready availability of alternative methods when the first method tried is found to be unsatisfactory, or both; these relationships have not yet received systematic study across cultures.

2. Developed countries

In most of the developed countries approximately two thirds to four fifths of married women of reproductive age were current users of contraception (table 3). Substantially lower levels of use were recorded for Japan, Romania, Spain and Yugoslavia (51 to 58 per cent), while 85 per cent of Flemish women in Belgium were currently using.

Part of the apparent variation in contraceptive prevalence among developed countries may be due to differences in the questions included in the surveys from which the information is drawn. The extraordinarily high figure for Czechoslovakia -- 95 per cent using -- probably more nearly resembles the level of ever-use than of current use, as women were asked only to report the methods they used most often, and the time reference was not made clear. Surveys for certain other developed countries also inquired about use at any time during a specified period preceding the interview, rather than, as is usual in developing country surveys, at the time of the interview or in the last month (see notes to table 3). While extending the reference period will tend to increase the apparent level of use, there is a downward bias for some developed countries, because not all surveys inquired about sterilization. However, in these cases, with the exception of Denmark, contraceptive sterilization is probably uncommon. Some of the surveys covered only women who were in their first marriage, while others directed the questions about contraception to all sexually active women (a group which in some cases excluded a small percentage of married women, while including a large number who were unmarried). The surveys also differed in the age range covered, as can be seen from table 3; women aged 45 to 49 were included only in Japan and Portugal. Incomparabilities due to differences in questionnaire content cannot be eliminated. At the same time, the figures shown in table 3 are more standardized with respect to base population than those available for an earlier report, 20/ as a result of a comparative study undertaken by the Economic Commission for Europe. In most cases the figures in table 3 refer to women in their first marriage, or all married women, even when the survey included unmarried women as well.21/

Except where fewer than two thirds of women are using contraception, the majority of non-users in the developed countries are probably either pregnant or immediately post-partum, desire to become pregnant or else believe themselves to be infecund for non-contraceptive reasons. Information about

reasons for non-use is not available for all the countries, but in France only 4 per cent of married women were not using although at the risk of an unwelcome pregnancy.22/ There may be more scope for increased use in Hungary and the United Kingdom, where 11 to 12 per cent of married women were at risk of an unwanted or mistimed pregnancy.23/

The high rates of contraceptive use in developed countries do not guarantee low rates of unwanted pregnancies and births; this depends on the effectiveness of contraceptive use and, in the case of births, on the frequency of recourse to induced abortion. In fact, developed-country women surveyed in the mid 1970's reported that between 9 per cent (Spain) and 65 per cent (Bulgaria) of all pregnancies had been either mistimed or unwanted, with the median value for 13 countries roughly one third of pregnancies.24/ Unwanted pregnancies (reported for 9 countries) constituted between 2 per cent (Spain) and 16 per cent (Czechoslovakia and France) of the total.25/ Another sign that contraception as currently practiced provides incomplete control of fertility is that induced abortion is common in most developed countries, although accurate statistics are not available for all.26/

C. Trends in contraceptive use

Table 4 shows trends in the percentage of women currently using contraception for countries in which two or more national surveys were available. Where more than two surveys had been conducted, the most recent is compared with one as close to 10 years earlier as possible. Usually, however, the trend estimates span a period of less than 10 years, with the most recent survey in the late 1970's or early 1980's and an earlier survey in the late 1960's or early 1970's. Column 6 shows the average annual change between the two surveys. These figures must be regarded as highly approximate, since sampling variability alone can often produce successive estimates of the percentage using contraception that differ by two percentage points (occasionally much more), and variations in survey procedures and population covered might produce important differences. Note that the age range and methods covered in table 4 sometimes differ from those in table 1. This was done in order to improve comparability over time. The 1982 estimate for the United States of America shown in table 3 is not fully comparable with data from earlier published surveys, and therefore the trend between two earlier survey dates is shown in table 4. 27/

Contraceptive prevalence increased during the 1970's in most of the countries for which trend information was available. Developing countries and areas with particularly rapid increases, averaging at least 2 per cent of married women per year, include Colombia, the Dominican Republic, Ecuador, ElSalvador, Jamaica, Mexico, Panama, Paraguay and Peru in Latin America, and in Asia, Hong Kong, Indonesia, Malaysia, the Philippines, the Republic of Korea, Singapore, Sri Lanka, and Thailand. Among the developed countries, France and Poland experienced a rapid growth of contraceptive practice, though the increase for France may be somewhat overstated because sterilization was

excluded in 1972, and the base population differed at the two dates. The rates of change for Czechoslovakia and the Netherlands also appear rapid but are subject to considerable doubt, in the latter case, because of differences in the base population interviewed and, in the former case, because the information obtained overestimates current contraceptive practice by an unknown amount. Both countries probably experienced some growth in the level of contraceptive use, however.

High rates of increase in contraceptive prevalence cannot, of course, be sustained indefinitely. Several of the countries with low growth in prevalence during the period covered in table 4 already had reached a high prevalence by the time of the earlier survey. These include Costa Rica, which experienced a rapid growth in prevalence between the late 1960's and the mid-1970's, and also several of the developed countries. Two developed countries in table 4 apparently experienced a small decline in contraceptive prevalence; the differences in Denmark and Yugoslavia are probably too large to be attributable to sampling error. In Yugoslavia the decline was entirely attributable to a decrease in the proportion of women who were exposed (i.e., reported as being non-pregnant and fecund).28/ In Denmark the statistics may give a false impression, since use of contraceptive sterilization, which was not included in either survey, has probably increased. Besides these two cases, prevalence may also have declined recently in Japan. Although the percentage using contraception was slightly higher in 1981 (56 per cent) than in 1971 (53 per cent), surveys in 1975, 1977 and 1979 all indicated that prevalence was 60 to 62 per cent.29/ Despite these cases, though, most of the countries where a high percentage of women were using contraception at the earlier date did experience some additional growth in the level of use.

There are, however, several countries with lower levels of use in which contraceptive prevalence appears not to have grown or to have increased only slightly. In several cases two surveys showed levels of prevalence within 2 percentage points of each other, and it cannot be concluded that there has been any change in these cases. In Jordan surveys conducted in 1972 and 1976 indicated a small increase, from 22 to 25 per cent currently using. In Tunisia, the apparent slight decline between 1978 and 1980 is probably an artifact of differing survey procedures. Over a longer period, 1971 to 1982, estimates based on family planning supplies and services distributed suggest that prevalence in Tunisia increased from 12 to 20 per cent of married women;30/ these statistics do not reflect the use of non-supply methods such as rhythm. The level of use in Turkey has increased steadily but rather slowly, growing from 32 to 40 per cent in a 10-year period.

The other countries in which there is little if any sign of increased contraceptive use are ones in which prevalence was still very low at the most recent date. Surveys in Bangladesh and Nepal suggest some increase -- in the former case a fairly rapid one -- but there is no evidence of substantial change in Kenya, and in Pakistan use may have decreased slightly. In several of the other African countries included in table 1, use could not have increased substantially prior to the late 1970's, given the near absence of practice at that time.

Although direct information from surveys is often lacking, it is likely that contraceptive practice increased during the 1970's in a number of other countries. In India statistics maintained by the family planning programme imply an increase in current users served through the public sector from 8 per cent of married women aged 15 to 44 in 1970/71 to 26 per cent in 1981/82. This upward trend was interrupted in the late 1970's, when reports of forced sterilization and other excesses led to decreased support for the family planning programme and a sharp but temporary decline in new acceptors. By 1981/82, prevalence of programme contraception had regained the highest level reached in the 1970's.31/

As mentioned earlier, use has increased substantially in China, though no numerical estimate of the trend can be given. Trend estimates are likewise unavailable for two of the other countries with at least 75 million population, Nigeria and the Union of Soviet Socialist Republics, though in the former, the low level of prevalence in 1981/82 suggests no marked trend. Among countries smaller than these, estimates based mainly on family planning service statistics indicate a rapid growth of contraceptive practice during the 1970's in Iran and Mauritius.32/ In the former country the most recent prevalence estimates predate the 1979 revolution, and since then the Government's policy regarding fertility has changed from one of active intervention to encourage lower birth rates to the position that the level of fertility is satisfactory. Though indirect support of family planning services is reportedly provided, direct government support of family planning activities has ceased.33/

D. Estimates of world contraceptive prevalence

There is now a considerably better basis for estimating the average level of contraceptive prevalence than existed even a few years ago. Mainly because of the large number of surveys conducted recently, there is now a prevalence estimate, dated in the 1970's or early 1980's, for over 80 per cent of the population of developing and 60 per cent of that of developed regions. Heroic assumptions are still required in order to derive an estimate for all countries combined, and it is plain that any such estimate must be regarded as highly approximate.

While bearing in mind the approximate nature of the figures presented below, it should also be recognized that the data already gathered set limits to the values that are at all probable for the world, or for developing and developed regions. For instance, the weighted average prevalence level 34/ for developing countries with data, at the most recent time shown in tables 1 and 2, is 41 per cent. This average is imprecisely dated, but must pertain to the late 1970's or early 1980's, since most of the individual country estimates are for this period. Even if no one were using contraception in any of the remaining developing countries (representing approximately 17 per cent of the developing-country total population), the average for all combined could be no lower than 34 per cent, unless the existing data were suspected of

overstating the level of use. In fact, a small allowance for possible overstatement, and for possible understatement, is incorporated into the global estimates presented here.

In order to derive estimates for the world, high, medium and low assumptions are made about contraceptive use in countries for which no national data were available. For developing countries separate assumptions are made for each major region, and for the developed countries a single set of assumptions is employed. An arbitrarily chosen range of 6 percentage points (3 points on either side of the observed mean) is also incorporated in order to allow for possible systematic errors in the measured prevalence levels. Estimates using other assumptions can be derived, if desired, using the information summarized in annex I. The assumptions, and a variety of data problems not mentioned here, are discussed in the annex.

Because contraceptive prevalence has been increasing rapidly in developing countries, it is important to specify a reference date to which the estimates apply. For example, at the average rate of growth of prevalence observed for countries with trend data, contraceptive use would have grown by 8 per cent of reproductive-aged married women in Asia and by 12 per cent in Latin America, between 1975 and 1980 (see annex I). The increases for countries with trend data may not be representative, and the trend estimates do not apply to a single period; none the less it is certain that world prevalence was significantly higher in 1980 than in 1975.

The estimates presented here for developing countries are considered to apply approximately to the period 1980/1981 (see annex I). Although the figures for developed countries pertain approximately to 1979, contraceptive prevalence in 1980/1981 in these countries was probably similar to that a few years earlier.

The global prevalence estimates are shown in table 5. For the world as a whole, between 41 and 50 per cent of married couples with the wife in the reproductive ages are estimated to be using contraception -- 62 to 74 per cent in the developed countries and 34 to 42 per cent in the developing countries. Of the major developing regions, Africa has by far the lowest prevalence, 7 to 17 per cent. The figure for East Asia is dominated by the estimate for China; estimated prevalence is much lower (21 to 28 per cent) in the rest of Asia. For Asia as a whole, though, average prevalence may not be much different from that in Latin America (estimated to be between 36 and 50 per cent), because of the influence of the high prevalence in China. China also has a major influence on the average for all developing countries, which is estimated to be only 19 to 30 per cent with China excluded.

Table 1. Levels of knowledge, ever-use and current use of contraception in developing countries or areas

(Recent survey-based estimates)

	Year of survey	Age range to which estimates refer	Percentage of ever married a/ who had heard of any contraceptive method	Percentage of currently married a/		
				Knowing of a source of family planning information of supplies	Having ever used contraception	Currently using
AFRICA						
Eastern Africa						
Kenya	1977/78	15-50	91	42	32	7
Mauritius	1975	15-49	96 b/	...	64 c/	46 c/
Middle Africa						
Cameroon	1978	15-49	34	...	11	2
Northern Africa						
Egypt	1982	15-44	90 d/	75 d/	42 d/ e/	34 e/
Sudan (North)	1978/79	15-50	51	23	13	5
Tunisia	1980	15-49	100 f/	...	46 f/	27 c/
Southern Africa						
Lesotho	1977	15-49	65	27	23	5
South Africa	1975/76	12-49	...	...	...	37-50 g/
Western Africa						
Benin	1982	15-49	40	...	34	18
Ghana	1979	15-49	69	43	40	10
Mauritania (sedentary pop.)	1981	12-50	8	...	1 c/	1
Nigeria	1981/82	15-49	...	...	15	6
Senegal	1978	15-49	60	...	11	4
Sierra Leone	1969/70	15-49	78 h/	...	6 h/	...

table continues

Table 1 (Continued)

	Year of survey	Age range to which estimates refer	Percentage of ever married a/ who had heard of any contraceptive method	Percentage of currently married a/ Knowing of a source of family planning information of supplies	Having ever used contraception	Currently using
AMERICAS						
Latin America Caribbean						
Barbados	1980/81	15-49	97 i/	...	74	46
Dominican Rep.	1980	15-49	99 i/	...	...	42
Guadeloupe	1976	15-49	...	...	62 c/	29 i/
Haiti	1977	15-50	85	...	37	19
Jamaica	1979	15-44	98 i/	...	...	55
Martinique	1976	15-49	...	...	66 c/	36 i/
Puerto Rico	1976	15-49	...	...	81	69
Trinidad & Tobago	1977	15-49	99	92	80	52
Central America						
Costa Rica	1981	15-49	100	98	88	65
El Salvador	1978	15-44	...	...	...	34
Guatemala	1978	15-44	...	...	...	18 k/
Honduras	1981	15-49	93	76	42	27
Mexico	1979	15-49	88 b/	72 l/	52	39
Panama	1979	15-44	99 j/	...	...	61 k/
Tropical South America						
Colombia	1980	15-49	96	91	66 c/	49
Ecuador	1982	15-49	90	...	59	40
Guyana	1975	15-49	95	...	56	31
Paraguay	1979	15-49	96	91	57	36
Peru	1981	15-49	83	...	57	41
Venezuela	1977	15-44	98	68	70	49

table continues

Table 1 (Continued)

	Year of survey	Age range to which estimates refer	Percentage of ever married a/ who had heard of any contraceptive method	Percentage of currently married a/		
				Knowing of a source of family planning information of supplies	Having ever used contraception	Currently using
ASIA						
East Asia						
China	1982	15-49	...	...	...	71
Hong Kong	1977	15-49	99 m/	...	88	72
Rep. of Korea	1982	15-44	100	94 l/,n/	...	58
South Asia						
Southeastern Asia						
Indonesia	1980	10-49	78 n/	...	3	27
Malaysia (Peninsular)	1974	15-49	92	77	50	33
Philippines	1978	15-49	94	77	58	36
Singapore	1977	15-44	98 m/	95 o/	86	71
Thailand	1981	15-49	99	99	76 c/	56
Southern Asia						
Afghanistan	1972/73	15-44	4	...	...	2
Bangladesh	1979	15-49	95	...	20 j/	13
India	1970	15-44	78 p/	...	18	14
Nepal	1981	15-49	52 q/	35 q/	9	7
Pakistan	1979/80	15-49	26	20	5	3
Sri Lanka	1982	15-49	91 r/	...	...	55
Western Asia						
Iraq	1974	15-49	...	...	38 c/,e/	14
Jordan s/	1976	15-49	97	...	47	25
Lebanon	1971	15-49	91 b/	...	67	53
Syrian Arab Republic	1978	15-49	78	...	34	20
Turkey	1978	15-49	88	...	56	38
Yemen Arab Republic	1979	16-50	25	...	3	1

Table 1 (Continued)

	Year of survey	Age range to which estimates refer	Percentage of ever married a/ who had heard of any contraceptive method	Percentage of currently married a/		
				Knowing of a source of family planning information of supplies	Having ever used contraception	Currently using
OCEANIA						
Fiji	1974	15-49	100	...	69	41

Sources:

Figures tabulated from World Fertility Survey data tapes, for Africa: Cameroon, Ghana, Kenya, Lesotho, Senegal, Sudan; for the Americas: Ecuador, Guyana, Haiti, Paraguay, Trinidad and Tobago, Venezuela; for Asia: Jordan, Malaysia, Philippines, Syrian Arab Republic, Yemen Arab Republic; for Oceania: Fiji.

Other countries (listed alphabetically):

Afghanistan: Calculated from Government of Afghanistan, National Demographic and Family Guidance Survey of the Settled Population of Afghanistan (1975), vol. I, tables IV.1 and V.3, pp. 67 and 118.

Bangladesh: Current use and ever-use from Gary Lewis and Ann Evans, "An introduction to contraceptive prevalence surveys and an illustrative analysis of data from countries in the ESCAP region", paper presented at the Third Asian and Pacific Population Conference, 20-29 September, 1982, Colombo, Sri Lanka; knowledge from Bangladesh National Institute for Population Research and Training, Bangladesh Contraceptive Prevalence Survey Report 1979 (Dacca, 1981), table 4.2, p. 36.

Barbados: Neal Kar Nair, Fertility and Family Planning in Barbados (Bridgetown, the Barbados Family Planning Association, 1982), tables 4.4, 5.2 and 5.10, pp. 56, 61 and 74.

Benin: R.P. Benin, Bureau Central de Recensement, Enquête Fecondité au Benin: Rapport Preliminaire (Mai 1983), tables 22-24, pp. 28 and 30-33.

China: Qiu Shuhua, Wu Shutao and Wang Meizeng, "Birth control of women of reproductive age" in An Analysis of a National One-Per-Thousand-Population Sample Survey in Birth Rate; Population and Economics (Beijing, Institute of Population and Economic Research, 1983), special issue, pp. 130-136.

Table 1 (Continued)

Sources (continued):

Colombia: Knowledge of method and ever-use from Ann A. Way and Tessa M. Wardlaw, "Comparative data from contraceptive prevalence surveys: knowledge, use, and availability of family planning in eight countries" Contraceptive Prevalence Survey Reprint Series No. 6 (Columbia, Md., Westinghouse Health Systems, 1982), tables 3 and 4, pp. 9 and 11; knowledge of outlet and current use from Corporación Centro Regional de Población, Second Contraceptive Prevalence Survey, Colombia 1980, General Results (Bogota, Ministerio de Salud, 1982), tables 4.3 and 7.2, pp. 44 and 85.

Costa Rica: Luis Rosero B., Fecundidad y Anticoncepción en Costa Rica 1981 (San José, Asociación Demográfica Costarricense, 1981), tables 27, 34 and 35, pp. 52 and 58.

Dominican Republic: John Hobcraft and Gérman Rodríguez, The Analysis of Repeat Fertility Surveys: Examples from the Dominican Republic, World Fertility Survey Scientific Reports No. 29, (Voorburg, the Hague, International Statistical Institute, 1982), tables 12 and 13, pp. 20-21,.

Ecuador: Ministerio de Salud Pública, Encuesta Nacional de Salud Materno Infantil y Variables Demográficas, Ecuador 1982 (Quito, 1984), tables 5.1 and 6.2, pp. 66 and 89.

Egypt: Current use from Hussein Abdel-Aziz Sayed, "The population and family planning program in Egypt: structure and performance", paper presented at the Seminar on Egyptian Population Policy, Cairo, 16-17 October 1983, table 7; knowledge of method, knowledge of family planning source and ever-use of method tabulated from WFS data.

El Salvador: Leo Morris et. al., Contraceptive Prevalence Surveys: a new source of family planning data, Population Reports, Series M, No. 5 (May-June 1981), table 3, p. M-167.

Guadeloupe: Yves Charbit and Henri Leridon, Transition Démographique et Modernisation en Guadeloupe et en Martinique, Travaux et Documents, Cahier No. 89 (Paris, Institut National d'Etudes Démographiques, 1980), tables 4.5 and 5.8, pp. 115 and 160.

Guatemala: Leo Morris et. al., op. cit., table 3, p. M-167.

Honduras: Margarita Suazo et. al., Honduras Encuesta Nacional de Prevalencia del Uso de Anticonceptivos (Tegucigalpa, Ministerio de Salud Publica y Asistencia Social, 1983), tables 6.1, 6.3, 7.1 and 7.2, pp. 48, 53, 64 and 67.

Hong Kong: Census and Statistics Department, Hong Kong By-Census 1976: Contribution to the World Fertility Survey (Hong Kong, Government Printer, 1979), tables VII, VIII and X, pp. 68 and 69.

India: Operations Research Group, Family Planning Practices in India (Baroda, India, n.d.), tables 5.1, 7.1 and 7.2, pp. 15, 31 and 32.

Indonesia: Current use and ever-use from Indonesia, Biro Pusat Statistik, Results of the Sub-sample of the 1980 Population Census: Preliminary Tables, Series S, No. 1 (Jakarta, 1982), table 25, p. 88. Knowledge from Indonesia, Biro Pusat Statistik, Fertility and Family Planning in Indonesia: Results of the National Socio Economic Survey 1979 (Jakarta, 1981), vol. I, table 6, p. 27.

Iraq: Iraq, Ministry of Planning, The Use of Contraceptives in Iraq Based on the Fertility Sample for the Year 1974, Report No. 3 (Baghdad, n.d.), table 2, p. 8. Current use recalculated from source in order to exclude breast-feeding.

Jamaica: Current use from Leo Morris et. al., op. cit., table 3; knowledge for 1976 tabulated from WFS data.

Table 1 (Continued)

Sources (continued):

Lebanon: Joseph Chamie, Religious Fertility Differentials in Lebanon (Ann Arbor, Mi., University of Michigan, 1976), unpublished doctoral dissertation, tables 8.19 and 8.20, pp. 249-250.

Martinique: Yves Charbit and Henri Leridon, Transition Démographique et Modernisation en Guadeloupe et en Martinique, Travaux et Documents, Cahier No. 89 (Paris, Institut National d'Etudes Démographiques, 1980), tables 4.5 and 5.8, pp. 115 and 160.

Mauritania: Republique Islamique de Mauritanie, Direction de la Statistique et de la Comptabilite Nationale, Enquête Nationale Sur La Fecondite (E.N.M.F.) 1981, Resultats Provisoires (Nouakchott, 1983).

Mauritius: "Family planning in Mauritius: a national survey", Studies in Family Planning, vol. 8, No. 12 (December 1977), tables 1 and 2, pp. 317-318.

Mexico: Westinghouse Health Systems, Mexico 1979 Contraceptive Prevalence Survey Summary Report (Columbia, Md., 1979), tables 4 and 5, figure 5, pp. 4, 6 and 11.

Nepal: Ever use and current use from Gary Lewis and Ann Evans, "An introduction to contraceptive prevalence surveys and an illustrative analysis of data from countries in the ESCAP region", paper presented at the Third Asian and Pacific Population Conference, 20-29 September, 1982, Colombo, Sri Lanka; knowledge of method and outlet from Nepal Family Planning and Maternal Child Health Project, Nepal Contraceptive Prevalence Survey Report 1981 (Kathamandu, Ministry of Health, 1983), tables 6.1, 7.1 and 8.1, pp. 83, 104, 108 and 136.

Nigeria: Federal Republic of Nigeria, National Population Commission, Nigeria Fertility Survey 1981-1982, Preliminary Report (Lagos, March 1983), tables 5.1 and 5.4, pp. 43-44.

Pakistan: Ghulam Y. Soomro and Syed M. Ali, "Prevalence of knowledge and use of contraception in Pakistan", Studies in Population, Labour Force and Migration, Project report No. 3 (Islamabad, Pakistan Institute of Development Economics, 1983), tables 1, 3 and 5, pp. 4, 10 and 15.

Panama: Richard S. Monteith et. al., "Contraceptive use and fertility in the Republic of Panama", Studies in Family Planning, vol. 12, No. 10 (October 1981), table 5, p. 334; contraceptive knowledge for 1976 tabulated from WFS data.

Peru: Elsa Alcántara, "Concimiento de métodos anticonceptivos" and "Uso de métodos anticonceptivos", in Aspectos Demográficos y Prevalencia de Anticonceptivos en el Peru (Lima, Dirección General de Demografía, 1983), tables 6.1, 7.3 and 7.5, pp. 89, 106 and 110.

Puerto Rico: Jose L. Vazquez Calzada and Judith Carnivali, El Uso de Métodos Anticonceptivos en Puerto Rico: Tendencias Recientes (San Juan, Centro de Investigaciones Demográficas, 1982), table 1, pp. 5 and 6.

Republic of Korea: Use in 1982, Korea Institute for Population and Health, KIPH Bulletin, No. 3 (Seoul, September 1982). Knowledge of method in 1979, Kap Suk Koh, et. al., 1979 Korea Contraceptive Prevalence Survey Report (Seoul, Korean Institute for Family Planning, 1980), table 6-2, p. 80. Knowledge of outlet in 1979, Westinghouse Health Systems, Republic of Korea Contraceptive Prevalence Survey Summary Report (Columbia, Md., May 1979), table 5, p. 8.

Sierra Leone: Thomas E. Dow, "Fertility and family planning in Sierra Leone", Studies in Family Planning, vol. 2, No. 8 (August 1971), table 11, p. 162.

Singapore: A.J. Chen et. al., Report of the Second National Family Planning and Population Survey in Singapore 1977 (Singapore Family Planning and Population Board, n.d.), table 21, pp. 21 and 22.

Table 1 (Continued)

Sources (continued):

South Africa: South Africa Department of Statistics, cited in Peter D. Johnson and Paul R. Campbell, Detailed Statistics on the Population of South Africa, by Race and Urban/Rural Residence: 1950 to 2010 (Washington, D.C., U.S. Bureau of the Census, 1982), table 31.

Sri Lanka: Asian-Pacific Population Programme News, vol. 12, No. 3, (Economic and Social Commission for Asia and the Pacific, 1983), p. 52; knowledge for 1975 tabulated from WFS data.

Thailand: Knowledge of outlet from John Knodel et. al., Fertility in Thailand: Trends, Differentials, and Proximate Determinants, Committee on Population and Demography Report No. 13 (Washington, D.C., National Academy Press, 1982), tables 33-35, pp. 104, 106 and 108; knowledge of method, ever use and current use from Ann A. Way and Tessa M. Wardlaw,"Comparative data from contraceptive prevalence surveys: knowledge, use, and availability of family planning in eight countries", Contraceptive Prevalence Surveys Reprint Series No. 6 (Columbia, Md., Westinghouse Health Systems, 1982), table 4, p. 11.

Tunisia: Current use from tabulations of the Enquête Population Emploi 1980, supplied by the Government of Tunisia; knowledge and ever use from WFS data, 1978.

Turkey: Hacettepe Institute of Population Studies, Turkish Fertility Survey 1978, First Report (Ankara, Turkish Historical Society Press, 1980), vol. II, tables 2.3.1b, 4.2.1a, 4.3.1a and 4.4.1, pp. 139, 274, 291 and 323.

a/ Including consensual unions.
b/ Percentage knowing of the pill (the single most widely-known method).
c/ For ever married women.
d/ For 1980, based on ages 15-49
e/ Including breast-feeding.
f/ For 1978.
g/ Lower figure represents use of clinic or supply methods; upper figure represents use of any method, including breast-feeding. Based on ever married or ever pregnant women.
h/ For currently married women and single women with children.
i/ For all women of ages specified.
j/ For 1976.
k/ Excluding douche, abstinence and folk methods.
l/ Percentage knowing of a source for the pill.
m/ For currently married women.
n/ For 1979.
o/ Percentage knowing of a government clinic.
p/ Percentage knowing of a clinic or supply method.
q/ For ages 15-44.
r/ For 1975.
s/ Excluding the West Bank.

Table 2. Percentage of currently married women currently using contraception, and methods used, for selected countries

Country	Year	Age range to which estimate applies	Percentage using contraception	Of current users, percentage using: Total	Sterilization	Pills and injectables	IUD	Other
India	1981/82	15-44	26 a/	100 a/	81	-	5	15 b/
Iran	1978	15-44	23	100	1	86	9	4
Morocco	1979	15-49	15	100	0	84	9	7
Zimbabwe	1979	15-44	14	100	0	79	0	21

Sources:

India: India, Ministry of Health and Family Welfare, Family Welfare Programme in India Yearbook 1981-82 (New Delhi), table E-1, p. 107.

Morocco: Peter D. Johnson, Morocco, United States Bureau of the Census Country Demographic Profiles, Series ISP-DP-23 (Washington, D.C., 1980), table 14, p. 31.

Other countries: Dorothy Nortman, Population and Family Planning Programs, a Compendium of Data through 1981, 11th ed. (New York, The Population Council, 1982), table 21, pp. 94-96.

Note: Estimates are based on counts of contraceptive acceptors by age and records of services and supplies distributed through the public and private sectors, adjusted where relevant for contraceptive discontinuation. Estimates of users are then divided by the number of currently married women, which is typically estimated from projected or interpolated census data.

a/ Public sector only, provisional.

b/ Including the pill.

Table 3. Percentage of women still in their first marriage currently using contraception, for developed countries
(Recent survey-based estimates)

Country	Year of survey	Age range to which estimate refers	Percentage using contraception
AMERICAS			
United States of America	1982	15-44	76 a/
ASIA			
Japan	1981	15-49	56 b/
EUROPE			
Eastern Europe			
Bulgaria	1976	18-44	76 c/
Czechoslovakia	1977	18-44	95 d/
Hungary	1977	less than 40	74
Poland	1977	less than 45	75 e/
Romania	1977	15-44	58 c/
Northern Europe			
Denmark	1975	18-44	63 f/
Finland	1977	18-44	80
Norway	1978	18-44	71 g/
Sweden	1981	20-44	78 g/, h/
United Kingdom (England and Wales)	1976	16-44	77
Southern Europe			
Italy	1979	18-44	78 i/
Portugal	1979	15-49	66 j/
Spain	1977	15-44	51
Yugoslavia	1976	15-44	55 k/
Western Europe			
Belgium (Flemish population)	1975	16-44	85
France	1978	20-44	79
Netherlands	1975	... l/	75

Sources:

Except as noted below, taken from Jerzy Berent, Family Planning in Europe and USA in the 1970s, World Fertility Survey Comparative Studies No. 20 (Voorburg, the Hague, International Statistical Institute, 1982), table 1, p.11,; and information about questionnaires given in Jerzy Berent et. al., Basic Characteristics, Sample Designs and Questionnaires, World Fertility Survey Comparative Studies No. 18 (Voorburg, the Hague, International Statistical Institute, 1982).

Table 3 (Continued)

Sources (cont'd)

France: Henri Leridon and Jean-Paul Sardon, "La Contraception en France en 1978, une enquête INED-INSEE, Population, vol. 34, Numero Special (December 1979), table 4, p. 1357.

Japan: Tabulations from the 16th National Survey on Family Planning (Tokyo, the Population Problems Research Council and the Mainichi Newspapers), personal communication.

Portugal: Tabulated from WFS data tape.

Sweden: Statistics Sweden, Fertility Survey in Sweden, 1981: a Summary of Findings (Voorburg, the Hague, International Statistical Institute, forthcoming), p. 15.

United States of America: Jacqueline Darroch Forrest and Stanley Henshaw, "What U.S. women think and do about contraception", Family Planning Perspectives, vol. 15, No. 4 (July/August 1983), tables 2 and 3, pp. 161-162.

a/ Based on currently married plus sexually active unmarried women.
b/ 62 per cent for ages under 45.
c/ Excluding sterilization.
d/ Percentage naming a method "most often" used.
e/ Percentage of all currently married women using a method other than sterilization.
f/ Percentage of all currently married women using a method other than sterilization within the last two months.
g/ Used within the last four weeks.
h/ Based on all women who had intercourse within the four preceding weeks.
i/ Percentage who had used contraception since last pregnancy (since marriage if no pregnancy).
j/ Based on all currently married women.
k/ Percentage who used a method other than sterilization within the last six months.
l/ Women who married in 1963-1973 and who were still in the first marriage.

Table 4. Trends in percentage of women using contraception, for developing and developed countries or areas with two or more survey-based estimates

	Marital status and age range to which estimates refer	Earlier date		More recent date		Average annual change a/
		Year	Percentage currently using contraception	Year	Percentage currently using contraception	
	(1)	(2)	(3)	(4)	(5)	((5)-(3))/((4)-(2))
A. Developing countries						
AFRICA						
Egypt	CM 15-44	1974/75	26 b/	1982	34	1.0
Kenya (rural areas)	EM 15-49	1967	6	1977/78	8	0.2
Tunisia	EM 15-49	1978	30	1980	27	-1.7
AMERICAS						
Colombia	CM 15-49	1969	21	1980	49	2.4
Costa Rica	CM 20-49	1976	68 c/	1981	66 c/	-0.4
Dominican Rep.	CM 15-49	1975	32	1980	42	2.2
Ecuador	CM 15-49	1979	34	1982	40	2.1
El Salvador	CM 15-44	1975	22	1978	34	3.7
Jamaica	CM 15-44	1975/76	40 d/	1979	55 d/	4.2
Mexico	CM 15-49	1976	30	1979	39	2.8
Panama	CM 20-44	1976	52 d/	1979	64 d/	3.3
Paraguay	CM 15-44	1977	29 d/	1979	32 d/	2.0
Peru	CM 15-49	1977/78	31	1981	41	2.4
Puerto Rico	e/ 15-49	1968	60	1976	69	1.1 e/
Trinidad & Tobago	CM 15-44	1970	44	1977	54	1.6
ASIA						
Bangladesh	CM 15-49	1976	8	1979	13	1.4
Hong Kong	CM 15-45	1967	42	1977	72 b/	3.0
Indonesia	CM 10-49	1976	18	1980 f/	27	2.1
Jordan g/	CM 15-49	1972	22	1976	25	0.7
Malaysia (Peninsular)	CM 15-44	1966/67	9	1974/75	35	3.4
Nepal	CM 15-49	1976	2	1981	7	0.9
Pakistan	CM 15-49	1968/69	6	1979/80	3	-0.2
Philippines	CM 15-44	1968	15	1978	39	2.4
Republic of Korea	CM 15-44	1971	25	1982	58	3.0
Singapore	CM 15-44	1973	60	1977	71	3.2
Sri Lanka	CM 15-49	1978	32	1982	55	3.6
Thailand	CM 15-44	1969/70	15	1981	59	3.8
Turkey	CM 15-44	1968	32	1978	40	0.8

table continues

Table 4 (Continued)

	Marital status and age range to which estimates refer	Earlier date		More recent date		Average annual change a/
		Year	Percentage currently using contraception	Year	Percentage currently using contraception	
	(1)	(2)	(3)	(4)	(5)	((5)-(3))/((4)-(2)) (6)
B. Developed countries						
AMERICAS						
United States	CM LT 45	1965	65	1976	68	0.4
ASIA						
Japan	CM LT 50	1971	53	1981	56	0.3
EUROPE						
Czechoslovakia	FM LT 45	1970	66 h/i/	1977	95 h/	4.0
Denmark	FM LT 45	1970	67 i/	1975	63 i/,j/	-0.8
Finland	FM LT 45	1971	77	1977	80	0.5
France	FM LT 45	1972	64 i/	1978	79 i/	2.5
Hungary	FM LT 45	1966	67 i/	1977	74	0.7
Netherlands	... k/	1969	59 i/	1975	75	2.7
Poland	CM LT 45	1972	60 i/	1977	75 i/	2.9
United Kingdom (England and Wales)	FM LT 45	1967	69 i/	1976	77	1.0
Yugoslavia	FM LT 45	1970	59 i/	1976	55 i/	-0.7

Sources (listed alphabetically by country):

Bangladesh:
1976: WFS data tape;
1979: Gary Lewis and Ann Evans, "An introduction to contraceptive prevalence surveys and an illustrative analysis of data from countries in the ESCAP region", paper presented at the Third Asian and Pacific Population Conference, 20-29 September 1982, Colombo, Sri Lanka.

Colombia:
1969: Luis Hernando Ochoa, "Measuring the impact of family planning programmes on fertility: Colombia", Studies to Enhance the Evaluation of Family Planning Programmes (United Nations, forthcoming);
1980: Corporación Centro Regional de Población, Second Contraceptive Prevalence Survey, Colombia 1980, General Results (Bogota, Ministerio de Salud, 1982), table 4.3, pp. 8 and 44.

Table 4 (Continued)

Sources (continued)

Costa Rica:
1976: WFS data tape;
1981: Luis Rosero B., Fecundidad y Anticoncepción en Costa Rica 1981 (San José, Asociación Demográfica Costarricense, 1981), table 35, p. 58.

Czechoslovakia, Denmark, Finland, France, Hungary, the Netherlands, Poland, United Kingdom, Yugoslavia: Jerzy Berent, Family Planning in Europe and USA in the 1970s, World Fertility Survey Comparative Studies No. 20 (Voorburg, the Hague, International Statistical Institute, 1982) table 1, p. 11.

Dominican Republic:
1975: WFS data tape;
1980: John Hobcraft and Gérman Rodríguez, The Analysis of Repeat Fertility Surveys: Examples from Dominican Republic, World Fertility Survey Scientific Reports No. 29 (Voorburg, the Hague, International Statistical Institute, 1982), table 13, p. 21.

Ecuador:
1979: WFS data tape.
1982: Ministerio de Salud Pública, Encuesta Nacional de Salud Materno Infantil y Variables Demográficas, Ecuador 82 (Quito, 1984), table 6.2, p. 89.

Egypt, 1974/75 and 1982: Hussein Abdel Aziz Sayed, "The Population and family planning program in Egypt: structure and performance", paper presented at the Seminar on Egyptian Population Policy, Cairo, 16-17 October 1983, table 7.

El Salvador: 1975 and 1978: Leo Morris et. al., Contraceptive Prevalence Surveys: a new source of family planning data, Population Reports, Series M, No. 5 (May/June 1981), figure 1 and table 3, pp. M-163 and 167.

Hong Kong:
1967: R. Freedman et. al., "Hong Kong: the continuing fertility decline, 1967", Studies in Family Planning, vol. 1, No. 44 (August 1969), p. 13;
1977: Census and Statistics Department, Hong Kong By-Census 1976, Contribution to the WFS (Hong Kong, Government Printer, 1979), table X, p. 69.

Indonesia:
1976: Indonesia, Biro Pusat Statistik, Fertility of the Indonesian Population, 1976 Intercensal Population Survey, tabulation series No. 1 (Jakarta, 1978), table 18, p. 101;
1980: Indonesia, Biro Pusat Statistik, Results of the Sub-sample of the 1980 Population Census: Preliminary Tables, Series S, No. 1, (Jakarta, 1982), table 25, p. 83.

Jamaica:
1975/76: WFS data tape.
1979: Leo Morris et al., op. cit., table 3, p. M-167.

Table 4 (Continued)

Sources (continued)

Japan:
1971: Y. Okazaki, "Knowledge, attitudes and practice of family planning", Fertility and Family Planning in Japan (Tokyo, Japanese Organization for International Cooperation in Family Planning, 1977), table 1, p. 120;
1981: Tabulations from the 16th National Survey on Family Planning (Tokyo, The Population Research Council and other Mainichi Newspapers), personal communication.

Jordan:
1972: Department of Statistics, National Fertility Survey in Jordan 1972 (Amman, 1976), table 58, p. 128;
1976: WFS data tape.

Kenya, 1967 and 1977/78: Thomas E. Dow and Linda H. Werner, "Family size and family planning in Kenya: continuity and change in metropolitan and rural attitudes", Studies in Family Planning, vol. 12, No. 6/7 (June/July 1981), table 4, p. 276.

Malaysia:
1966/67: National Family Planning Board, Report on the West Malaysian Family Survey 1966-1967 (Kuala Lumpur, n.d.), table A21, pp. 2 and 84.
1974: WFS data tape.

Mexico:
1976: WFS data tape;
1979: Westinghouse Health Systems, Mexico 1979 Contraceptive Prevalence Survey Summary Report (Columbia, Md., 1979), pp. 2 and 6, table 5.

Nepal:
1976: WFS data tape;
1979: Gary Lewis and Ann Evans op. cit.

Pakistan:
1968: Nasra M. Shah, "Past and current contraceptive use in Pakistan", Studies in Family Planning, vol. 10, No. 5 (May 1979), table 1, p. 166;
1974: WFS data tape.

Panama: 1975/76 and 1979: Richard S. Monteith et al., "Contraceptive use and fertility in the Republic of Panama", Studies in Family Planning, vol. 12, No. 10 (October 1981), table 7, p. 336.

Paraguay:
1977: John E. Anderson and John G. Cleland, "The World Fertility Survey and contraceptive prevalence surveys, a comparison of substantive results", Studies in Family Planning, vol. 15, No. 1 (January/February 1984), table 5, p. 7;
1978: WFS data tape.

Peru:
1977: WFS data tape;
1981: Elsa Alcántara, "Uso de métodos anticonceptivos", in Aspectos Demográficos y Prevalencia de Anticonceptivos en el Peru (Lima, Dirección General de Demografía, 1983), table 7.5, p. 110.

Table 4 (Continued)

Sources (continued)

Puerto Rico:
1968: Harriet B. Presser, "Puerto Rico: recent trends in fertility and sterilization", International Family Planning Perspectives, vol. 6, No. 1 (March 1980), table 6, p. 24;
1976: Jose L. Vazquez Calzada and Judith Carnivali, El Uso de Métodos Anticonceptivos en Puerto Rico: Tendencias Recientes (San Juan, University of Puerto Rico, Centro de Investigaciones Demográficas, 1982), mimeo.

Republic of Korea:
1971: Kap Suk Koh, et.al., 1979 Korea Contraceptive Prevalence Survey Report (Seoul, Korean Institute for Family Planning, 1980), table 6.12, p. 88;
1982: Korean Institute for Population and Health, KIPH Bulletin, No. 3 (Seoul, September 1982).

Singapore, 1973 and 1977: A.J. Chen et al., Report of the Second National Family Planning and Population Survey in Singapore 1977 (Singapore Family Planning and Population Board, n.d.), table 43, p. 77.

Sri Lanka:
1975: WFS data tape;
1982: Asian-Pacific Population Programme News, vol. 12, No. 3 (Economic and Social Commission for Asia and the Pacific, 1983), p. 32.

Thailand, 1969/70 and 1981: John Knodel et. al., Fertility in Thailand: trends, differentials, and proximate determinants, Committee on Population and Demography Report No. 13 (Washington, D.C., National Academy Press, 1982), table 34, p. 106.

Trinidad and Tobago:
1970: Jack Harewood and Norma Abdulah, Family Planning in Trinidad and Tobago in 1970 (St. Augustine, Institute of Social and Economic Research, University of the West Indies, 1971), appendix III, pp. 109-116;
1977: WFS data tape.

Tunisia:
1978: WFS data tape;
1980: Tabulations of the Enquête Population-Emploi 1980, supplied by the Government of Tunisia.

Turkey:
1968: Ferhunde Ozbay and Frederic C. Shorter, "Turkey: Changes in birth control practices, 1963 to 1968", Studies in Family Planning, vol. 1, No 51 (March 1970), table 3, p. 4;
1978: Hacettepe Institute of Population Studies, Turkish Fertility Survey 1978, First Report (Ankara, Turkish Historical Society Press, 1980), vol. II, tables 2.3.1b and 4.4.1, pp. 139 and 323.

Sources (continued)

United States of America, 1965 and 1976: William D. Mosher and Charles F. Westoff, Trends in contraceptive Practice: United States, 1965-1976, Data from the National Survey of Family Growth, Series 23, No. 10 (Hyattsville, Md., Department of Health and Human Services, 1982), table A, p. 8.

Note: Abbreviations for marital status (column 1):

CM = currently married.
EM = ever married.
FM = currently in the first marriage.
LT = less than.

a/ Computed as the difference in percentage using contraception divided by the number of years between surveys. When possible the difference in percentage using contraception was computed before rounding, and note was taken of the timing of the surveys within the year when computing the difference in dates. Where only the year of the survey was reported in the sources cited below, the survey was assumed to have taken place at mid-year.

b/ For ages 15-49.

c/ In order to improve comparability, includes sterilization for health as well as for contraceptive reason.

d/ Excluding use of douche, abstinence and folk methods.

e/ Trend probably overstated because earlier figure is based on ever married and later figure on currently married women.

f/ Based on census (rather than survey). Use may be understated; a 1979 survey showed a level of use of 31 per cent.

g/ Excluding the West Bank.

h/ Percentage named a method "normally" or "most often" used.

i/ Excluding sterilization.

j/ Including remarried women.

k/ In 1969 sample covered women in marriage cohorts of 1958, 1963 and 1968; In 1975, marriage cohorts of 1963-1973.

Table 5. Global estimates of the percentage of reproductive-aged married women currently using contraception, approximately 1980-1981

	Prevalence level, given type of assumption about prevalence in countries without data		
	Low	Medium	High
World total	41	45	50
Total, excluding China	33	38	44
Developing regions			
Total	34	38	42
Total, excluding China	19	24	30
Africa	7	11	17
Asia a/	38	42	46
East Asia	66	69	72
South Asia	21	24	28
Latin America	36	43	50
Developed regions			
Total	62	68	74

Source: Calculated from annex I, tables A.I-1 and A.I-2.

a/ Excluding Japan, which is included with other developed countries.

II. TYPES OF CONTRACEPTION EMPLOYED

A. Use of modern and traditional methods

There is great variation in the specific methods that make up current contraceptive practice, but in most countries the relatively effective clinic and supply methods predominate (column 3, tables 6 and 7). These methods -- including male and female sterilization, intra-uterine devices (IUDs), hormonal pills and injectables, condoms and scientific vaginal methods (diaphragm, cervical cap, spermicidal foams, jellys and creams) -- are those most often stressed by family planning programmes, although few programmes make all of the methods generally available, and some encourage the use of non-supply methods such as rhythm (safe period).

The clinic and supply methods account for a greater proportion of total contraceptive use in most developing countries than in many of the developed countries of Europe. In approximately three fourths of the developing countries at least two thirds of users employ a clinic or supply method; in only half of the developed countries included in table 7 are these methods as predominant.

In Southern and Eastern Europe (with the exception of Hungary) the less-effective traditional methods, chiefly rhythm and withdrawal, account for a high fraction of total use, usually over one half. The most extreme cases are Bulgaria and Romania, where clinic and supply methods make up only 10 per cent of the total. Outside of Southern and Eastern Europe, the traditional methods are also common in Belgium and Ireland, where they account for over 40 per cent of use, and in France, where they make up nearly 40 per cent of the total. By contrast, clinic and supply methods are heavily predominant in the Scandinavian countries, in England and Wales, Japan and the United States.

Among the developing countries, non-supply methods (including abstinence, douche and folk methods as well as rhythm and withdrawal) accounted for over one third of use in 7 of 11 African countries, 2 of 20 countries and areas in Latin America, and 4 of 17 in Asia (see table 6). In most African countries, however, the general prevalence of use was very low, so that the percentages shown in table 6 do not imply that the use of these "traditional" methods was widespread. Except in Benin and South Africa, fewer than 5 per cent of married women or their husbands were using one of these methods in the African countries.

In a few developing countries, the traditional non-supply methods were in wider use. Of all reproductive-aged married women, 10 to 14 per cent in the Republic of Korea, South Africa and Venezuela, 15 to 19 in Benin and Haiti, 20 to 25 in Peru, the Philippines, Sri Lanka and Turkey, and perhaps one third in Lebanon were using these methods. None of these percentages for developing

countries approaches the approximately two thirds of married women using traditional non-supply methods in Bulgaria or the 45 to 55 per cent in Czechoslovakia, Italy, Poland and Romania.

Trends in the percentage distribution of methods used are also shown in tables 6 and 7. Almost everywhere the more effective clinic and supply methods have attracted increasing proportions of users (column 3). In most of the developing countries for which trend information was available, the more effective methods were already heavily predominant at the earlier date shown, but in several European countries the clinic and supply methods greatly increased their share of total use during the 1970's: in Hungary from 25 to 71 per cent, in France from 32 to 62, in Finland from 70 to 97 and in the Netherlands from 71 to 93. Belgium also registered a large increase in the use of the more effective methods. In Yugoslavia, however, there was little modernization of use, and in Poland the change, though fairly large, still left 65 per cent using the traditional methods in 1977.

B. Specific Methods

The pill, IUD and female sterilization are the most widely used methods overall. In most cases no single method accounts for as much as half of all current use, though some exceptions involving the pill or female sterilization and, less often, the condom, withdrawal and IUD, can be seen in tables 6 and 7.

Weighted average method distributions 35/ are shown in table 8 for countries with information available. Method-specific data are available for most of the countries that have a prevalence estimate -- approximately 80 per cent of the developing country and 60 per cent of the developed country population. These countries do not give a completely representative picture of contraceptive practice for the world as a whole; in most regions the general prevalence level is likely to be higher for countries with data than for those without 36/ and, though it is difficult to be certain, traditional methods are probably more common in relation to modern methods in the omitted countries. Annex I discusses the sensitivity of certain features of the average method distribution to differing assumptions about use patterns in the countries without data. In addition, as mentioned in chapter I, the relative importance of methods employed by men may be understated, since most of the information about contraception is derived from interviews with women.

Though caution is required in interpreting the weighted averages in table 8, they reveal several regional regularities that were difficult to pick out from the detail in tables 6 and 7, and panel A also provides a different perspective on the data, by relating the use of specific methods to the number of women rather than to the total number of contraceptive users.

The weighted averages show that the methods accounting for the highest proportions of use worldwide were not necessarily the most widely diffused, in the sense of accounting for a substantial fraction of use in nearly all

countries. Of the reversible methods, the pill was the most widely diffused. It accounted for over 10 per cent of contraceptive use in nearly all countries and for at least one fourth of use in over half the countries for which information was available. The IUD may nevertheless have had more users worldwide, because of the predominance of this method in China. It is not certain that there were genuinely more users of the IUD than of the pill -- this would depend on use patterns in the countries without data (see annex I) and on the number of unmarried users, who have generally been excluded from these statistics. 37/

Because the method distribution for China is very unusual, and because it has such a large effect on world averages, figures are shown separately in table 8 for countries other than China, and with China added in. Method distributions in individual countries do not, generally speaking, correspond closely to the average for all, and the following discussion will consider both the average levels of use of particular methods and the extent to which the methods are practiced in particular countries.

1. Sterilization

There are more users of male and female sterilization worldwide than of any single reversible method. For countries with data, sterilization made up nearly one third of total contraceptive practice and was employed by 15 per cent of married couples with the wife in the reproductive ages.

Remarkably, the data indicate that contraceptive sterilization is employed by a higher percentage of couples in developing than in developed countries -- 17 per cent as opposed to 10 (table 8). The direction of the difference, if not its size, would very likely be the same if data were available for all countries, as is discussed in annex I. This situation may be of quite recent origin; though sterilization has been increasing in prevalence in both developed and developing countries, its growth was especially rapid during the 1970's in developing countries, including some of the largest. While the relatively high prevalence of sterilization in all developing countries combined owes much to the contributions of China and India, this method also makes up a substantial fraction of total contraceptive use in many other developing countries. It is an important method in the Americas and in most of Asia, except Southwestern Asia. However, there are also many countries where it is rare. It makes up under 10 per cent of current contraceptive practice in all the Southwestern Asian countries shown here, in much of Africa, in Eastern, Southern and Western Europe and in some individual countries in other regions.

Among the developed countries, only in the United States of America and in Northern Europe had sterilization become a common method by the time of the surveys covered in table 7. However, other sources indicate that sterilization was widely practised in Australia, Canada and New Zealand, 38/ and the level grew rapidly in the Netherlands after the 1975 survey. By 1982 perhaps 10 per cent of all reproductive-aged women in the Netherlands and an additional 10 per cent of men had been sterilized. 39/

Levels of practice and recent trends differ for male and female sterilization. Female sterilization is the single most important contraceptive method in many countries, particularly in the Americas, and it is increasing its share of total use almost everywhere that trends can be examined (table 6). It should be noted when evaluating the prevalence of this method that, because it is usually irreversible, it is employed only by women who want no more children. In many places where sterilization is common, a substantial fraction of users of any type of contraception want to have more children eventually; in most Latin American countries, for instance, 30 per cent or more of current users want more children.40/ When this is taken into account it is plain that in many countries female sterilization is rapidly becoming the method of choice once couples reach the desired family size. Of the countries and areas shown in table 6, over half of all current contraceptive users employed female sterilization in the Dominican Republic, El Salvador, Panama and Puerto Rico.

In a growing list of countries, most of them developing nations, female sterilization is used by over 15 per cent of married women in the reproductive ages. Though male and female sterilization together protect more than 15 per cent of couples in two of the developed countries shown here -- England and Wales and the United States -- only in the latter is female sterilization employed by as many as 15 per cent. By contrast, among the developing countries, the proportion of married women sterilized was 39 per cent in Puerto Rico and 31 per cent in Panama; over 20 per cent in the Dominican Republic, Republic of Korea and Singapore; and was over 15 per cent in China, Costa Rica, El Salvador, Fiji and Thailand as of the most recent survey. Other evidence suggests that by 1980 at least 15 per cent had been sterilized in Hong Kong, and perhaps in Brazil. 41/ Although a division of current sterilization users according to sex is unavailable for India as a whole, male and female sterilization together protected roughly 20 per cent of reproductive-aged couples by 1981/82, and the relative importance of female sterilization had clearly increased.42/

Male sterilization is much less common than female sterilization in most countries, and the number of vasectomy acceptors failed to grow or even declined during the 1970's in some places. Of the countries included in tables 6 and 7, the number of users of male sterilization approached or exceeded the number of women sterilized only in England and Wales and the United States -- where vasectomy accounted for 11 to 15 per cent of total use (or 8 to 11 per cent of couples with the wife in the reproductive ages), and in Nepal where approximately 40 per cent of users but only 3 per cent of couples employed this method. Vasectomy was the method most heavily emphasized in the Indian family planning programme during an earlier period, but in most years during the 1970's the number of female sterilizations exceeded the number of vasectomies by a large margin.43/ As can be seen in table 6, male sterilization was more common than female sterilization in the mid-1970's in Bangladesh and the Republic of Korea, but by the end of the decade the reverse was true; a similar process appeared to be underway in Nepal. While the absolute number of vasectomy users did increase in the latter countries over the periods shown, family planning acceptor statistics

indicate recent declines in the annual number of new users in several Asian and Latin American countries.44/ Possible reasons for the divergent trends for male and female sterilization are discussed following the description of trends of other methods.

Surgery that results in sterility may be performed for health reasons as well as for contraceptive ones, and for many persons both motives may exist. Most of the statistics presented here treat women who have undergone a solely therapeutic sterilization as non-users of contraception. However, this distinction cannot always be made, and differing ways of dividing sterilized women into "users" and "non-users" of contraception can sometimes have an important effect on the apparent level of contraceptive practice or on the amount of change over time. In some developed and developing countries several per cent of reproductive-aged married women reported that they had been sterilized for non-contraceptive reasons, and as many as 9 per cent in the United States in 1976. Annex II contains information from the World Fertility Survey about contraceptive and non-contraceptive sterilization.

2. Hormonal pills

Hormonal pills account for at least one fourth of current contraceptive use, at the most recent date, in over half the countries included in tables 6 and 7. In six developing countries of Africa and Asia, and in the Netherlands, over one half of all users employed this method. Unlike other methods, the pill accounted for a substantial fraction of use (over 10 per cent) in nearly all countries. However, it was relatively unimportant in the two largest countries, China and India, and as a result accounted for only 12 per cent of total use for all Asian developing countries with data (table 8).45/ The pill also made up under 20 per cent of the total in Eastern and Southern Europe, but in other parts of Europe, in Latin America and in Africa, it averaged one third to more than one half of total practice.

Although the pill increased its share of total contraceptive use in many developed and in some developing countries between the dates shown in tables 6 and 7, in a few others it was becoming less predominant as other modern methods were attractng more users. In most cases in which the pill's share of total use was shrinking, sterilization (particularly female sterilization) was showing a large increase. In Finland, however, the shift was primarily toward greater use of the IUD. Since the general prevalence of contraceptive use was increasing in most countries, decreases in the share of use attributable to the pill usually do not mean that the number of pill users was declining. There were some exceptions: in Finland the percentage of married women using the pill decreased from 20 to 11 between 1971 and 1977, and there was also a small decline (3 to 4 per cent of married women) in Denmark, the Republic of Korea and Singapore between the two dates shown. In the United States between 1965 and 1982 the pill registered a large net increase, but in the latter part of the period there was a small decline in use of this method among all married women.46/

3. Intrauterine devices (IUDs)

In China the IUD accounted for half of all contraceptive practice, in Finland and Norway for 36 to 39 per cent, and in Indonesia, Sweden and Tunisia roughly one fourth. Although the IUD was important in a number of other countries as well, it accounted for under 10 per cent of use in over half the countries included in tables 2, 6 and 7. Its predominance in China was such, though, that for all countries with data the IUD was employed by more women than was the pill. As shown in table 8, the IUD made up only 8 per cent of use, on the average, in countries other than China (as opposed to 23 per cent for the pill), but when China was included the IUD's share was 26 per cent (17 for the pill). China also accounted for a large majority of the world's IUD users.47/ (For the countries with data presented here, it amounted to roughly four fifths.)

In most countries for which trend information is available the IUD has increased its share, or else has maintained approximately the same share, of total contraceptive use. Some of the largest increases are seen in Europe. In several developing countries (including India)48/ the IUD's share of total practice has declined, but in most of these cases the percentage of all married women using the method has either increased or has remained approximately constant.

4. Condom

In Japan four fifths of current contraceptive users employed the condom, in Denmark and Finland about 40 per cent and in Singapore, Trinidad and Tobago, England and Wales, Norway and (probably) Sweden, 20 to 30 per cent. Yet the condom was employed by fewer than 10 per cent of all users, in roughly two thirds of the developing countries and somewhat under half of the developed ones. Table 8 shows that even apart from Japan and Northern Europe, where the condom was especially common, this method tended to be more popular in developed than in developing countries. In Eastern, Southern and Western Europe the condom was employed by 9 to 13 per cent of users, as opposed to 4 to 5 per cent, on the average, in the major developing regions. For all developed countries with data the condom was employed by nearly one fourth of current contraceptive users (largely due to the influence of Japan), approximately as many as were using the pill. In many countries there was little trend shown in the relative prevalence of the condom, but there were a few in which its use decreased sharply (with England and Wales and the United States showing the greatest downward trend) and others in which it increased in relation to other methods (e.g., France, Hungary, Japan and Jordan).

5 Other methods

Injectable hormonal contraceptives are of recent origin and were unavailable in many countries at the time the surveys discussed here were conducted. In only three countries were more than 10 per cent of current users relying on injectables at the time of the most recent survey. In these -- Jamaica, South Africa and Thailand -- the method was employed by 6 to 11 per cent of all reproductive-aged married women.

Vaginal methods, including the diaphragm, cervical cap and spermicides (foam, jelly, cream) accounted for more than 10 per cent of current use only in Ghana (where the overall level of contraceptive practice was, however, low). Among married women, these methods appeared generally to be declining in popularity relative to other methods, in both developed and developing countries.

Levels of and trends in use of all traditional non-supply methods were discussed earlier. The main methods within this broad category are rhythm and withdrawal. Withdrawal is the more common method in most European countries (but not in Ireland or Poland), while rhythm is more frequently practiced than withdrawal, or else the two are nearly equal in number of practitioners, in most non-European countries. However, in Lebanon, Lesotho and Turkey withdrawal accounted for over 40 per cent of use, and it also made up roughly 25 per cent of total use in Haiti and the Philippines.

Most recent surveys have asked specifically about knowledge and use of rhythm and withdrawal, but there has been less consistency in questioning and in tabulation in the cases of abstinence, douche and a variety of folk methods. Often, where women were asked about these methods, they were of minor importance, but abstinence was the method reported by approximately two thirds of users in Benin and Senegal (12 and 3 per cent, respectively, of married women), and one third of users in Ghana (3 per cent of married women). Abstinence was also reported by 3 to 5 per cent of couples in Bulgaria, Haiti, and SriLanka (in 1975). Douching was the chief method employed by 11 per cent of current contraceptive users in Peru and Turkey, but was uncommon in most countries.

The residual "other" category (column 15, tables 6 and 7) often includes methods discussed above, when these were not tabulated separately, but it also includes a variety of folk methods when these were reported. Many of the folk methods are of doubtful efficacy or else probably act as abortifacients. For instance, the chief "other" method reported in Senegal was "magic charms" (currently used, however, by only 10 women of the nearly 4,000 interviewed), while in Paraguay the main other method was use of an herb which is thought to induce abortion.49/ Herbs and massage or manipulation of the uterus were reported in Indonesia and Malaysia, in addition (in Malaysia) to vigorous exercise following intercourse. Methods of massage abortion were practiced in several countries of South and Southeastern Asia,50/ and it was unclear when "massage" was mentioned whether this referred to abortion. The folk methods are often reported substantially more frequently as methods used in the past than at present, a result that would be expected either if the methods were abortifacients or if use had been given up after an accidental pregnancy or experience of side effects.

The definition of what constitutes "contraception" is not always straightforward, as the examples above show. Specifically excluded in most surveys are the practice of extended breast-feeding and post-partum abstinence, although both these factors can have an important effect on the level of fertility. The fact that they affect fertility does not imply that

they are practiced primarily because of their contraceptive effect; plainly, child nutrition is the main reason for breast-feeding. Available evidence indicates that the duration of breast-feeding is usually not significantly shorter if additional children are desired than if no more children are wanted, although the length of lactation may be contingent on intentions for future fertility in a few societies.51/ At the same time, women may be aware that lactation increases the period of sterility following a birth, and take this into account when deciding whether or not they will use contraception to increase the birth interval, and at what point they will start to use it.52/

Although sexual abstinence can be a completely effective contraceptive method, some surveys do not ask about abstinence, largely because it is difficult to distinguish contraceptive from other motives for abstaining. Some cultures, especially in Africa and the South Pacific, dictate an extended period of abstinence after a birth, specifically tied to the age or physical development of the child or to the period of breast-feeding. The decision not to treat this practice as contraception could be debated. In large part this separate classification reflects the interest of many analysts in studying the interrelations between traditional child-spacing practices and the adoption of more modern or "Western" methods of fertility control. However, in most of the countries for which information is discussed here the period of post-partum abstinence is brief, usually shorter than the period of post-partum sterility. Of the countries for which information was presented above, post-partum abstinence probably has a major influence on fertility levels in Benin, Cameroon, Ghana, Lesotho, Nigeria, Sierra Leone and South Africa.53/ The relatively high prevalence of abstinence in Benin may in fact refer mainly to post-partum abstinence, and this practice may also have been counted as contraception in South Africa. In several other cases there were questions designed to separate various traditional reasons for abstaining from "contraceptive" abstinence. But instead of representing a group practising a distinct form of abstinence, the contraceptive abstinence category may in some cases comprise primarily women who misunderstood one of the crucial questions -- in Ghana, the Ivory Coast and Kenya a majority of those classified as abstaining for contraceptive reasons said elsewhere in the interview that they were having sexual relations.54/ However, in all but a few countries mentioned earlier removal of the abstinence category from the count of contraceptive users would have a minor effect on the contraceptive prevalence statistics discussed in chapter I.

C. Some factors influencing method choice

Obviously both differential availability of specific contraceptive methods and individuals' preferences for one method over another must affect the mix of methods employed. Yet the relative importance of these factors as determinants of current practice is often not known at the level of specificity needed for effective implementation of policy, in cases where Governments support family planning programmes.

There is evidence that the methods preferred by women given a free choice often differ from those currently provided at family planning clinics, but it also appears that these preferences differ between societies.55/ For instance, methods that alter menstrual bleeding, either by increasing it (IUD) or by decreasing it (pills, injectables), may be avoided in some cultures but not in others. A study conducted by the World Health Organization found that a majority of women in a variety of cultures said they would reject methods that disturbed menstrual bleeding, but the study also noted that such methods were in wide use in some of the societies.56/ Even if a method is unacceptable to some women, not all couples in a given society attach the same value to the various side effects of particular methods, and the severity of the side effects also varies among individuals.

It is generally considered desirable for family planning programmes to make available a wide variety of methods; this position was recently reaffirmed at the Expert Group Meeting on Fertility and the Family, held at New Delhi in preparation for the 1984 International Conference on Population, and at the International Conference on Family Planning in the 1980s.57/ For one thing, the side effects of the newer methods, or the inconvenience and unreliability of the older ones, mean that many couples need to try several methods before a satisfactory one is found. Where the choice of methods is restricted, some couples may give up attempts to control fertility or else turn to less effective methods. A United Nations investigation found that in 11 of 15 countries studied at least one fourth (and in four countries over one half) the women using traditional non-supply methods had tried a clinic or supply method in the past.58/ And as mentioned earlier, World Fertility Survey data show that discontinuation of contraception by women who say they want no more children is common in many developing countries. Reasons for discontinuation were not ascertained in most of these surveys, but other sources show that experience of or fear of side effects is usually cited as the reason for non-use by a substantial proportion of women at risk of an unwanted or mistimed pregnancy.59/

The most acceptable methods also vary with the stage of family building. Sterilization is a choice only for couples who have achieved their desired family size, while the pill tends to account for a larger fraction of use among young and low-parity women, many of whom want more children eventually, than among older women.60/ This shift to other effective methods at the older ages may be a desirable one, as at least some types of health risk of pill use have been found to increase with age.61/

Some Governments limit the availability of particular methods. The general trend has been towards a liberalization or revocation of laws restricting dissemination of information, supplies and services, but in a substantial number of countries access to contraceptive sterilization is still limited. Even where permitted, formal or informal criteria are often employed to restrict such operations to couples who already have large families or in which the wife has reached a certain age. Of the countries included in table 6, laws and regulations in Peru, Spain, Turkey and Venezuela specifically prohibited sterilization for contraceptive purposes at the time

the surveys were conducted; Italy decriminalized sterilization in 1978 but the Government still regards the use of sterilization for contraceptive purposes as unacceptable.62/ In a number of other countries, including much of Europe, contraceptive sterilization had been interpreted as impermissible under most circumstances (though not specifically outlawed) in the period leading up to the surveys shown. These restrictive policies appear to be changing, and it can be anticipated that sterilization will come to be an important method in many of the countries in which it now accounts for a neglible proportion of contraceptive use. It should also be mentioned, though, that in some countries, such as Costa Rica, sterilization has become common in spite of ambiguities regarding its legal status and the existence of considerable opposition to its practice.63/

Other Governments actively promote sterilization through family planning programmes. Financial subsidies for this method might be expected to have a substantial effect on its use, since it is costly in relation to other methods. Although the cost prorated over the remaining years of reproductive life may be low, depending on the age at which the method is adopted, a relatively large one-time outlay of money is required. The rapid growth in the number of female sterilizations in the Republic of Korea is likely to have resulted in part from an increase in the subsidy for this method starting in 1977.64/ After 1977, the increase in annual number of female sterilizations was accompanied by a decline in the number of vasectomies performed.65/

A major factor contributing to the rapid increase in female sterilization during the 1970's was the introduction of simpler surgical procedures, which lowered the cost and decreased the discomfort of the operation.66/ Nevertheless, male sterilization remains the simpler, safer and less costly procedure.

On grounds of cost and safety alone, then, the number of vasectomy acceptors might be expected to be greater than the number of women sterilized. It is not entirely clear why the use of male sterilization is so much lower than that of female sterilization, in so many countries. It would be premature to rule out a deep-seated resistence to sterilization on the part of men in some cultures. On the other hand when men are asked why they are unwilling to consider vasectomy the reasons often reflect misperceptions, such as a belief that vasectomy causes impotence. It has been argued that the divergent trends for male and female sterilization are due in large part to a neglect of men by family planning programmes.67/

The availability and cost of reversible methods also varies between countries. Many nations do not have domestic manufacturing facilities for contraceptive supplies, and supplies are often controlled through import licensing requirements and import duties, which frequently differ by type of method. This produces considerable variation in the absolute and relative costs of different types of contraception.68/ In many cases part or all of the cost is assumed by the Government or other agencies, for couples obtaining services through organized family planning programmes.69/ It is impossible

at this point to judge the extent to which the use patterns observed in tables 6 and 7 are the result of these policies affecting method cost and availability, but the effect is surely substantial.

Policies of international donors also affect method availability. During the 1970's one of the major donors, the United States, disapproved the use for contraceptive purposes of Depo-Provera, an injectable hormone, because of doubts about its safety. This has limited the availability of injectables in countries other than the United States itself. The decision remains in force as of this writing, even though the Toxicology Review Panel of the World Health Organization concluded in 1981 that injectables, including Depo-Provera, are "acceptable methods of fertility regulation ... [showing] no additional and possibly fewer adverse effects than are found with other hormonal methods of contraception".70/

The controversy regarding the safety of Depo-Provera may recur as other new methods are introduced. The long-term health effects of contraceptives do not become definitively known until the methods have been in use on a large scale for decades. In the meantime decisions must be based on smaller-scale human trials and on tests involving other species.

The case of Depo-Provera has aroused controversy partly because the method appears to be popular in a number of countries where it has been introduced on a small scale, in addition to the few in which it is already in wide use. For example, in Bangladesh, Depo-Provera accounted for almost half the contraceptive use in a rural area that was supplied with a wide choice of methods and intensive family planning and health services. Although the independent role of injectables is unclear in this case, the provision both of more methods and of better services increased the level of contraceptive use from 10 per cent of married women to 34 per cent, a level that has been maintained in succeeding years.71/

It is also important to mention that, though a wide choice of methods may be desirable, it is difficult for Governments of many less developed countries to extend such services to the entire population. Many family planning programmes choose to emphasize the provision of one method or a small number of methods, on the basis of local ability to provide medically trained personnel and to ensure uninterrupted supplies. As shown in table 1, in many of the least developed countries that have organized programmes, a large proportion of reproductive-aged women reported having no access to family planning services.

Table 6. Percentage distribution of current contraceptive users, by method used, for developing countries or areas

(Recent survey-based estimates)

	Year of Survey	Total percentage a/	Clinic and supply total	Clinic and supply methods: Sterilization		Pill	Injectables	Intrauterine device	Diaphragm, foam etc. b/		Rhythm	Withdrawal	Abstinence	Douche	Other or not stated
				Female	Male				Condom						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
AFRICA															
Eastern Africa															
Kenya	1977/78	100	64	13	1	30	8	10	2	1	16	2	16	0	2
Mauritius	1975	100	64	0	0	46	4	3	11	... c/	30	3	-------	2 b/	-----
Middle Africa															
Cameroon	1978	100	24	...c/	...c/	10	--	6	8	0	47	16	...	1	12d/
Northern Africa															
Egypt	1974/75	100	...	...c/	...c/	75	--	10	----------				15 d/		----------
	1980	100	94	3	0	68	68	17	5	1	2	2	0	1	1
Sudan (North)	1978/79	100	83	6	1	68	1	2	3	2	10	2	6	0	1
Tunisia	1978	100	79	24	0	21	0	28	4	2	12	6	...	0	2
Southern Africa															
Lesotho	1977	100	48	15	0	23	4	2	2	1	2	47	...	0	4
South Africa	1975/76	100e/f/	73	14	..g/	28	12	9	---10 h/---		----------		27 e/		----------
Western Africa															
Benin	1982	100	4	0	0	1	--	1	1	0	9	17	67	3	1
Ghana	1979	100	58	5	0	25	1	3	7	17	7	2	32	0	0
Senegal	1978	100	15	1	...	8	1	4	2	0	10	...	67	...	8

table continues

Table 6 (Continued)

	Year of Survey	Total percentage a/	Clinic and supply total	Clinic and supply methods: Sterilization Female	Sterilization Male	Pill	Injectables	Intrauterine device	Condom	Diaphragm, foam etc. b/	Rhythm	Withdrawal	Abstinence	Douche	Other or not stated
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
AMERICAS															
Latin America															
Caribbean															
Barbados	1980/81	100 i/	96	31	1	35	5	9	11	5	---------- 4 ----------				
Dominican Republic	1975	100	82	38	0	25	1	9	5	5	4	12	...	2	1
	1980	100 i/j/	83	50	0	21	0	4	4	4	4	8	...	0	5
Guadeloupe	1976	100 i/	71	27	---	22	---	8	13	1	11	14	...	3	1 k/
Haiti	1977	100	28	1	1	18	---	2	6	1	26	25	18	3	1
Jamaica	1975/76	100	95	19	0	32	17	5	18	4	1	4	1	0	0
	1979	100	99	18	0	43	21	4	12	1	0	1	...	...	...
Martinique	1976	100	75	25	---	33	---	5	8	3	9	12	...	2	3 k/
Puerto Rico	1968	100	84	57	2	19	---	3	3	... c/	3	7	-------	6 b/	----
	1976	100	91	57	4	19	---	5	6	... c/	3	2	-------	5 b/	----
Trinidad and Tobago	1970	100 l/	...	5	0	39	---	7	22	10	6	10	2	2	3
	1977	100	89	8	0	35	2	4	29	10	5	5	1	1	0
Central America															
Costa Rica	1976	100	83	19	2	35	3	8	14	3	8	7	1	0	1
	1981	100 m/	87	27	1	32	3	9	13	2	10	4	...	...	0
El Salvador	1975	100 n/	93	---45---		34	2	10	3	...	--- 5 ---		...	...	2
	1978	100	94	52	1	25	1	10	4	1	5	1	...	...	...
Guatemala	1978	100 o/	84	33	2	30	6	7	4	2	14	2	...	...	...
Honduras	1981	100	88	30	1	44	1	9	1	2	6	6	...	...	0
Mexico	1976	100	77	9	1	36	6	19	2	5	10	12	...	1	0
	1979	100	85	----24---		34	7	16	2	3	---------- 15 ----------				
Panama	1976	100	85	36	1	34	1	7	2	4	5	5	3	1	1
	1979	100 o/	93	50	1	30	1	6	3	2	5	2	...	...	...

table continues

Table 6 (Continued)

	Year of Survey	Total percentage [a]	Clinic and supply methods: Clinic and supply total	Sterilization: Female	Sterilization: Male	Pill	Injectables	Intrauterine device	Condom	Diaphragm, foam etc. [b]	Rhythm	Withdrawal	Abstinence	Douche	Other or not stated
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Tropical South America															
Colombia	1976	100	72	9	0	31	1	20	4	5	12	11	2	1	2
	1980	100	84	22	0	36	...[g]	17	----9 [p]----		10	...[c]	...	...	6 [g]
Ecuador	1979	100	77	23	1	28	3	14	3	5	14	7	1	1	0
	1982	100	83	31	0	26	2	16	3	5	12	4	...	1	1
Guyana	1975	100	90	27	0	29	1	18	9	6	3	4	2	0	1
Paraguay	1977	100 [o]	81	----11---		41	3	14	9	3	7	12	...	...	...
	1979	100	77	5	0	34	5	15	4	2	11	6	...	5	12
Peru	1977	100	36	9	0	13	3	4	3	3	35	10	7	11	2
	1981	100 [j]	41	10	0	12	5	10	2	2	41	10	...	...	7
Venezuela	1977	100	76	15	0	31	0	17	10	2	8	10	...	5	1
ASIA															
East Asia															
China	1982	100	96	25	10	8	...	50	2	---------- 4----------					
Hong Kong	1977	100	...	----26---		32	3	4	18	6	11	...	...	...	1
Republic of Korea	1974	100	77	5	8	24	1	23	15	1	13	8	1	1	0
	1982	100	82	40	9	9	...[c]	12	12	----------18 [p]----------					

table continues

Table 6 (Continued)

	Year of Survey	Total percentage a/	Clinic and supply methods: Clinic and supply total	Sterilization: Female	Sterilization: Male	Pill	Injectables	Intrauterine device	Condom	Diaphragm, foam etc. b/	Rhythm	Withdrawal	Abstinence	Douche	Other or not stated
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
South Asia															
Southeastern Asia															
Indonesia	1976	100	94	1	0	63	--	22	8	...	4	0	1	...	6
	1980	100	...	...c/	...c/	53	--	25	3	----------	----------	18	----------	----------	----------
Malaysia	1966/67	100	...	...c/	...c/	46	--	2	9	2	----------	----------	40 d/j/	----------	----------
(Peninsular)	1974	100	73	10	1	51	1	2	8	0	11	6	4	...	7
Philippines	1968	100	17	----1----		9	--	3	3	1	32	47	...	2	2
	1978	100 m/	45	13	2	13	0	6	10	0	24	26	5	0	0
Singapore	1973	100	...	----18----		36	--	5	28	----------	----------	----------	12	----------	----------
	1977	100	...	29	1	24	--	4	29	----------	----------	----------	12	----------	----------
Thailand	1969/70	100	95	35	14	26	3	15	1	...	...	...	...	...	5
	1981	100	95	32	7	35	12	7	3	...	...	...	...	...	5
Southern Asia															
Bangladesh	1976	100	62	4	6	36	--	5	10	0	13	7	15	1	2
	1979	100	77	19	7	29	2	2	11	1	17	1	...	...	11
India	1970	100	71	19	26	2	--	5	18	--	----------	----------	29	----------	----------
Nepal	1976	100	98	4	67	15	--	2	9	...	...	...	2	...	0
	1981	100	100	34	42	16	1	1	6	...	...	...	...	...	0
Pakistan	1975	100	72	18	1	18	--	12	19	3	2	2	22	---	2
Sri Lanka	1975	100	59	29	2	5	1	15	7	0	25	5	11	0	0
	1982	100	55	31	7	5	..	5	6	3 p/	----------	----------	45	----------	----------
Western Asia															
Iraq	1974	100 r/	89	4	--	60	4	4	10	7	5	3	...	...	3
Jordan s/	1972	100 l/	...	-----4----		63	--	4	5	2	10	14	3	5	6 t/
	1976	100	69	7	0	47	--	8	6	1	8	13	1	0	8

table continues

Table 7 (Continued)

	Year of Survey	Total percentage a/	Clinic and supply methods: Clinic and supply total	Sterilization: Female	Sterilization: Male	Pill	Injectables	Intrauterine device	Condom	Diaphragm, foam etc. b/	Rhythm	Withdrawal	Abstinence	Douche	Other or not stated
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Northern Europe (cont'd)															
United Kingdom (England and Wales)	1967	100 f/	...	...	...	19	--	2	41	6	5	25	...	...	2
(Great Britain)	1976	100	92	10	11	36	--	9	23	3	1	6	0	...	...
Southern Europe															
Italy	1979	100	42	1	...	18	--	3	17	3	11	46	0	...	1
Portugal	1980	100	49	1	0	29	2	5	8	3	6	39	...	1	5
Spain	1977	100	39	0	...	26	--	1	10	2	12	44	3	...	2
Yugoslavia	1970	100 f/	17	...	...	9	--	2	6	0	3	73	...	...	8
	1976	100 f/	22	...	...	9	--	3	4	6	8	65	...	...	5
Western Europe															
Belgium															
Total	1966	100 f/	...	...	...	8	--	0	6	...	26	51	...	...	8
Flemish pop.	1975	100	57	6	0	38	--	4	8	1	15	27	0	...	0
France	1972	100	32	0	0	17	--	2	12	1	14	52	...	...	2
	1978	100	62	5	...	34	--	13	8	2	9	29	...	...	..
Netherlands	1969	100 f/	71	...	...	45	--	1	23	2	19	9	...	...	1
	1975	100	93	3	3	66	--	6	14	1	4	3	0	...	1

Sources:

Except as noted separately below, Jerzy Berent, Family Planning in Europe and USA in the 1970s, World Fertility Survey Comparative Studies No. 20 (Voorburg, the Hague, International Statistical Institute, 1982), tables 6 and 15, pp. 18 and 27.

Belgium, 1966:
Fertility and Family Planning in Europe around 1970: a Comparative Study of Twelve National Surveys (United Nations publication, Sales No. E.76.XIII.2), table 124, p. 151.

Table 6 (Continued)

Sources (cont.)

Colombia, 1980: Corporación Centro Regional de Población, Second Contraceptive Prevalence Survey, Colombia, 1980, General Results (Bogota, Ministerio de Salud, 1982), table 4.5, p. 47.

Costa Rica, 1981: Luis Rosero B., Fecundidad y Anticoncepción en Costa Rica, 1981 (San José, Asociación Demográfica Costarricense, 1981), table 35, p. 58.

Dominican Republic, 1980: John Hobcraft and Germán Rodríguez, The Analysis of Repeat Fertility Surveys: Examples from Dominican Republic, World Fertility Survey Scientific Reports No. 29 (Voorburg, the Netherlands, International Statistical Institute, 1982), table 12, p. 20.

Ecuador, 1982: Ministerio de Salud Pública, Encuesta Nacional de Salud Materno Infantil y Variables Demográficas, Ecuador 82 (Quito, 1984), table 6.8, p. 100.

Egypt, 1974/75: "Regional pattern of differentials in contraceptive use in Egypt", Determinants of Fertility in Some African and Asian countries, Research Monograph Series No. 10 (Cairo, Cairo Demographic Centre, 1982), table 1, p. 68.

El Salvador,
1975: Leo Morris et. al., "Contraceptive use and demographic trends in El Salvador", Studies in Family Planning, vol. 10, No. 2 (February 1979), table 5, p. 47;
1978: Leo Morris et. al., Contraceptive Prevalence Surveys: a new source of family planning data, Population Reports, Series M, No. 5 (May/June 1981), table 3, p. M-167.

Guadeloupe: Yves Charbit and Henri Leridon, Transition Démographique et Modernisation en Guadeloupe et en Martinique, Travaux et Documents Cahier No. 89 (Paris, INED, 1980), table 4.5, p. 115.

Guatemala: Leo Morris et. al., op. cit., table 3, p. M-167.

Honduras, 1981: Margarita Suazo et. al., Honduras Encuesta Nacional de Prevalencia del Uso de Anticonceptivos, (Tegucigalpa, Ministerio de Salud Pública y Asistencia Social, 1983), table 7.3, p. 67.

Hong Kong: Census and Statistics Department, Hong Kong By-Census 1976: Contribution to the World Fertility Survey (Hong Kong, Government Printer, March 1979), table XII, p. 70.

India, 1970: Operations Research Group, Family Planning Practices in India (Baroda, India, n.d.), table 7.2, p. 32.

Indonesia:
1976: Indonesia, Biro Pusat Statistik, Fertility of the Indonesian Population, 1976 Intercensal Population Survey, tabulation series No. 1 (Jakarta, 1978), table 25, p. 122;
1980: Indonesia, Biro Pusat Statistik, Results of the Sub-Sample of the 1980 Population Census: Preliminary Tables, Series S, No. 1 (Jakarta, 1982), table 26.3, p. 91.

Iraq: Iraq, Ministry of Planning, The Use of Contraceptives in Iraq based on the Fertility Sample for the Year 1974, Report No. 3 (Baghdad, n.d.), calculated from table 7, p. 17.

Jamaica, 1979: Leo Morris et. al., op. cit., table 3, p. M-167.

Jordan, 1972: Department of Statistics, National Fertility Survey in Jordan 1972 (Amman, 1976), tables 56 and 58, pp. 123 and 128.

Table 6 (Continued)

Sources (cont.)

Lebanon: Joseph Chamie, Religious Fertility Differentials in Lebanon (Ann Arbor, Mi., University of Michigan, 1976), unpublished doctoral dissertation, calculated from tables 8.20 and 8.29, pp. 250 and 269.

Malaysia, 1966/1967: National Family Planning Board, Report on the West Malaysian Family Survey 1966-1967 (Kuala Lumpur, n.d.), table 21, p. 84.

Martinique: Yves Charbit and Henri Leridon, Transition Démographique et Modernisation en Guadeloupe et en Martinique, Travaux et Documents Cahier No. 89 (Paris, INED, 1980), table 4.5, p. 115.

Mexico, 1979: Westinghouse Health Systems, Mexico 1979 Contraceptive Prevalence Survey Summary Report (Colombia, Md., December 1979), table 6, p. 8.

Nepal, 1981: Gary Lewis and Ann Evans, op. cit.

Panama, 1979: John E. Anderson and John G. Cleland, "The World Fertility Survey and contraceptive prevalence surveys, a comparison of substantive results", Studies in Family Planning, vol. 15, No. 1 (January/February 1984), table 5, p. 7.

Paraguay, 1977: John E. Anderson and John G. Cleland, Ibid.

Peru, 1981: Elsa Alcántrara, "Uso de métodos anticonceptivos", in Aspectos Demográficos y Prevalencia de Anticonceptivos en el Peru (Lima, Dirección General de Demografía, 1983), table 7.5, p. 110.

Philippines, 1968: tabulated from data supplied by the Government of the Philippines.

Puerto Rico, 1968 and 1976: José L. Vazquez Calzada and Judith Carnivali, El Uso de Métodos Anticonceptivos en Puerto Rico: Tendencias Recientes (San Juan, University of Puerto Rico, April 1982), table 5, p. 12.

Republic of Korea, 1982: Korea Institute for Population and Health, KIPH Bulletin, No. 3 (Seoul, September 1982).

Singapore, 1973 and 1977: A.J. Chen et al., Report of the Second National Family Planning and Population Survey in Singapore 1977 (Singapore Family Planning and Population Board, n.d.), tables 21 and 43, pp. 55 and 77.

South Africa, 1975/76: South Africa Department of Statistics, cited in Peter D. Johnson and Paul R. Campbell, Detailed Statistics on the Population of South Africa, by Race and Urban/Rural Residence: 1950-2010 (Washington, D.C., U.S. Bureau of the Census, 1982), table 31.

Sri Lanka, 1982: Asian-Pacific Population Programme News, vol. 12, No. 3 (Economic and Social Commission for Asia and the Pacific, 1983), p. 52.

Thailand, 1969/70 and 1981: John Knodel et. al., Fertility in Thailand: trends, differentials and proximate determinants, Committee on Population and Demography Report No. 13 (Washington, D.C., National Academy Press, 1982), table 36, p. 110.

Trinidad & Tobago, 1970: Jack Harewood and Norma Abdulah, "Family planning in Trinidad and Tobago in 1970 (St. Augustine, University of the West Indies, 1971), draft version, mimeo.

Turkey, 1968: Fertility and Family Planning in Europe Around 1970, (United Nations publication, Sales No. E.76.XIII.2), table 124, p. 151.

1978: Turkish Fertility Survey 1978, First Report, Hacettepe Institute of Population Studies, n.d.), vol II, table 4.4.1, p. 323.

Table 6 (Continued)

Notes:

Many surveys did not ask specifically about use of abstinence or douche, and some did not ask about sterilization. These methods may have been included in the "other" category if they were mentioned by the respondent. When the source showed fewer than 0.5 per cent to be using a specific method a zero (0) is shown in this table.

a/ Except as noted separately, figures are based on current contraceptive users among married women of the ages shown for each country and date in table 4 (if two dates are shown) or table 1 (if one date is shown). Numbers may not add to 100 per cent because of rounding.

b/ Including scientific vaginal methods: spermicides (foam, jelly, cream) used alone or in combination with diaphragm, cervical cap.

c/ Combined with "other".

d/ Including sterilization.

e/ Including breast-feeding.

f/ Based on users among ever-married or ever-pregnant women.

g/ Combined with condom and vaginal methods.

h/ Including male sterilization.

i/ Users among all women aged 15-49.

j/ Figures are approximate.

k/ Including women using a combination of methods.

l/ Figures do not add to 100 because women using a combination of methods are shown under each method.

m/ Currently married users aged 15-49.

n/ Users among ever-married women aged 15-49.

o/ Excluding abstinence, douche and folk methods.

p/ Including injection.

q/ Including withdrawal.

r/ Recalculated from source in order to exclude breast-feeding.

s/ Excluding the West Bank.

t/ Including suppositories.

Table 7. Percentage distribution of current contraceptive users, by method used, for developed countries
(Recent survey-based estimates)

	Year of Survey	Total percentage a/	Clinic and supply total	Clinic and supply methods: Sterilization		Pill	Injectables	Intrauterine device	Condom	Diaphragm, foam etc. b/	Rhythm	Withdrawal	Abstinence	Douche	Other or not stated
				Female	Male										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
AMERICAS															
United States of America	1965	100	73	7	5	24	--	1	22	13	11	6	...	5	6
	1982	100 c/	95	20	15	30	--	7	13	10	2	3	...	--- 0 ---	
ASIA															
Japan	1971	100 d/	...	--- 4 ---		2	--	8	73	... e/	33	6	-------	4	------
	1979	100 d/	...	3	1	3	--	8	81	... e/	23	5	...	2	1
EUROPE															
Eastern Europe															
Bulgaria	1976	100	10	1	1	3	--	2	3	0	5	79	7	...	1
Czechoslovakia	1970	100	...	0	0	4	--	14	19	...	3	52	...	...	8
	1977	100	52	3	0	15	--	19	14	1	7	31	1	...	9
Hungary	1966	100	25	0	0	0	--	0	18	7	4	64	...	...	7
	1977	100	71	2	...	49	--	13	5	2	5	23	0	...	1
Poland	1972	100 f/	22	...	...	4	--	1	17	0	33	38	...	...	8
	1977	100 f/	35	...	...	10	--	2	19	4	41	25	...	...	0
Romania	1977	100 f/	9	...	...	1	--	...	6	2	41	44	0	...	6
Northern Europe															
Denmark	1970	100 f/	...	...	...	37	--	4	30	9	2	7	...	...	11
	1975	100 f/	95	...	...	35	--	14	39	7	1	2	...	...	3
Ireland	1973	100 g/	...	...	...	16	--	1	5	1	55	10	4	...	9 h/
Finland	1971	100	70	0	0	26	--	4	40	0	1	21	...	...	8
	1977	100	97	5	1	14	--	36	40	1	1	3	0	...	...
Norway	1978	100	92	6	3	18	--	39	23	3	4	5	...	...	0
Sweden	1981	100	92	--- 4 ---		30	--	26	--- 32 ---		---------- 9 ----------				

table continues

Table 6 (Continued)

	Year of Survey	Total percentage a/	Clinic and supply total	Sterilization		Pill	Injectables	Intra-uterine device	Condom	Diaphragm, foam etc. b/	Rhythm	Withdrawal	Abstinence	Douche	Other or not stated
				Female	Male										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Western Asia (cont'd)															
Lebanon	1971	100 1/	...	2	0	26	--	2	13	...	13	53	...	...	...
Syrian Arab Republic	1978	100	76	2	0	59	2	3	3	7	14	8	0	1	1
Turkey	1968	100	23	...	...	5	--	5	13	0	...	54	...	...	23
	1978	100 m/	35	1	0	16	1	8	8	1	3	44	0	11	7
OCEANIA															
Fiji	1974	100	86	39	0	20	1	12	15	0	6	7	1	...	1

Sources:

For the following countries and dates, tabulated from World Fertility Survey data tapes, for Africa: Cameroon (1978), Egypt (1980), Ghana (1979), Kenya (1977/78), Lesotho (1977), Senegal (1978), Sudan (1978/79), Tunisia (1978); for the Americas: Colombia (1976), Costa Rica (1976), Dominican Republic (1975), Ecuador (1979), Guyana (1975), Jamaica (1975/76), Mexico(1976), Panama(1976), Paraguay (1979), Peru (1978/79), Trinidad and Tobago (1977), Venezuela (1977); for Asia: Bangladesh (1976), Jordan (1976), Malaysia (1974/75), Nepal (1976), Pakistan (1975), Philippines (1978), Republic of Korea (1974), Sri Lanka (1975), Syrian Arab Republic (1978); for Oceania: Fiji (1974).

Other countries and dates (listed alphabetically by country name):

Bangladesh, 1979: Gary Lewis and Ann Evans, "An introduction to contraceptive prevalence surveys and an illustrative analysis of data from countries in the ESCAP region", paper presented at the Third Asian and Pacific Population Conference, 20-29 September 1982, Colombo, Sri Lanka.

Barbados, 1980/81: Neal Kar Nair, Fertility and Family Planning in Barbados (Bridgetown, the Barbados Family Planning Association, 1982), table 5.12, p. 78.

Benin, 1982: R.P. Benin, Bureau Central de Recensement, Enquête Fecondité au Benin: Rapport Preliminaire (Mai 1983), table 24, p. 34.

China: Qiu Shuhua, Wu Shutao, and Wang Meizeng, "Birth control of women of reproductive age" in An Analysis of a National One-Per-Thousand-Population Sample Survey in Birth Rate (Quan Guo Qian Fen Zhi Yi Ren Kou Sheng Yo Lu Chou Yang Diao Cha Fen Xi), Population and Economics (Beijing, Institute of Population and Economic Research, 1983), special issue, pp. 130-136.

Table 7 (Continued)

Sources (cont'd)

Japan, 1971:
Y. Okazaki, "Knowledge, attitudes and practice of family planning", Fertility and Family Planning in Japan (Tokyo, Japanese Organization for International Cooperation in Family Planning, 1977), table 12, p. 135.
1979: Tabulations from the 15th National Survey on Family Planning (Tokyo, the Population Problems Research Council and the Mainichi Newspapers), personal communication.

Portugal:
Tabulated from WFS survey data.

Ireland:
Keith Wilson-Davis, "Some results of an Irish family planning survey", Journal of Biosocial Science, vol. 7, No. 4 (1975), pp. 435-444.

Sweden:
Statistics Sweden, Fertility Survey in Sweden, 1981: a Summary of Findings (Voorburg, the Hague, International Statistical Institute, forthcoming), p. 15.

United States of America, 1965 and 1976:
William D. Mosher and Charles F. Westoff, Trends in Contraceptive Practice: United States, 1965-76, Data from the National Survey of Family Growth, Series 23, No. 10 (Hyattsville, Md., Department of Health and Human Services, 1982), table A, p. 8.

Note:

Many surveys did not ask specifically about use of abstinence or douche, and some did not ask about sterilization. These methods may have been included in the "other" category if they were mentioned by the respondent. When the source showed fewer than 0.5 per cent to be using a specific method a zero (0) is shown in this table.

a/ Except as noted separately, figures are based on current contraceptive users among women of the ages and marital status shown for each country and date in table 4 (if two dates are shown) or table 3 (if one date is shown). Numbers may not add to 100 per cent because of rounding.

b/ Including scientific vaginal methods: spermicides (foam, jelly, cream) used alone or in combination with diaphragm.

c/ Based on users among all women.

d/ Figures do not add to 100 because women using a combination of methods are shown under each method.

e/ In all, for 1971: 6 per cent using foam, 5 per cent using jelly and 3 per cent using diaphragm; in 1979: 2 per cent foam, 2 per cent jelly and 1 per cent diaphragm; it is not known whether these are being used in combination.

f/ Excluding sterilization.

g/ Current or last method used. Based on currently married women aged 15-44 years who ever used family planning.

h/ Two or more methods in combination.

Table 8. Prevalence of specific contraceptive methods: weighted averages for groups of countries for which method-specific data were available, approximately 1980-1981

	Number of countries or areas included	Percentage currently using						
		Total	Sterilization	Pills and injectables	IUD	Condoms	Other supply Methods	Traditional methods
	A. Percentages based on currently married women in the reproductive ages							
All developed and developing countries with data	70	47	15	8	12	4	7	
All, except China	69	38	12	9	3	6	9	
Developing countries								
All countries with data	51 a/	42	17	6	14	2	4	
All, except China	50	27	12	6	2	2	4	
Africa	12	20	2	11	3	1	3	
Asia - total	19	43	18	5	15	2	3	
East Asia	3	70	25	6	34	2	3	
South Asia	16	25	13	5	2	1	3	
Southeastern Asia	5	34	5	15	5	2	7	
Southern Asia	6	22	16	2	1	1	1	1
Southwestern Asia	5	30	1	7	2	2	1	17
Latin America	20	41	10	14	6	2	1	9
Developed countries								
All countries with data	19 b/	70	10	16	5	16	22	
Europe - total	17	71	4	18	5	15	2	33
Eastern Europe	5	70	1	9	4	9	2	46
Northern Europe	5	76	13	25	11	19	2	6
Southern Europe	4	65	0	13	2	8	2	40
Western Europe	3	79	4	32	8	7	1	26

table continues

Table 8 (Continued)

	Number of countries or areas included	Percentage currently using						
		Total	Sterilization	Pills and injectables	IUD	Condoms	Other supply methods	Traditional methods
	B. Percentage based on current contraceptive users among married women							
All developed and developing countries with data	70	100	32	17	26	9	--------15 --------	
All, except China	69	100	31	23	8	15	--------23 --------	
Developing countries:								
All countries with data	51[a]	100	40	14	33	4	-------- 9 --------	
All, except China	50	100	47	23	9	6	--------15 --------	
Africa	12	100	8	55	14	5	--------17 --------	
Asia - total	19	100	42	12	35	4	-------- 7 --------	
East Asia	3	100	36	8	49	2	-------- 4 --------	
South Asia	16	100	54	19	7	6	--------13 --------	
Southeastern Asia	5	100	14	44	15	5	--------22 --------	
Southern Asia	6	100	73	10	5	6	3	3
Southwestern Asia	5	100	2	25	7	8	2	56
Latin America	20	100	24	34	14	4	3	21
Developed countries:								
All countries with data	19[b]	100	14	23	7	24	---------32 --------	
Europe - total	17	100	5	25	7	14	3	46
Eastern Europe	5	100	1	13	6	12	2	66
Northern Europe	5	100	17	33	14	26	3	8
Southern Europe	4	100	1	19	3	13	3	61
Western Europe	3	100	5	40	10	9	2	33

table continues

Table 8 (Continued)

Source: Tables 1 to 7.

Note: Several assumptions were required in order to derive the average method distributions. In cases where women using a combination of methods are shown in tables 6 and 7 under each method (so that the total for all methods is more than 100 per cent), it was assumed that modern methods may have been used in combination with traditional methods, but not in combination with other modern methods. The usual coding convention in cases of combined method use is to show the most effective of the methods used, and this convention was followed here. Thus the percentage using traditional methods alone or in combination with other traditional methods was taken to be the residual between 100 per cent and the sum of the percentages using the various modern methods. In a few other countries two or more of the methods shown separately in this table are not shown separately in tables 2, 6 and 7. In these cases the percentage for the combined category was divided among the specific methods in accordance with the relative prevalence of the methods in question in other countries of the region. This has little effect on the averages, since methods that account for a large fraction of use in a particular country are almost always shown separately in the source tables. See annex I for a discussion of the weighting factors employed to combine the country estimates.

a/ Including Fiji in Oceania.

b/ Including USA and Japan.

III. CONTRACEPTIVE USE IN URBAN AND RURAL AREAS

Cross-cultural studies -- most recently those based on World Fertility Survey (WFS) data -- have documented the existence of rural-urban differences in contraceptive practice in developing countries. 72/ This section first reviews the magnitude of differences in use between rural and urban areas for a larger number of countries than included in earlier studies and then considers some of the factors that are thought to contribute to these differentials in the degree of fertility control. The main factors considered are differences by type of area in the desire to limit fertility and differences in knowledge of an outlet for family planning services. The separate influence of differential educational attainment in rural and urban areas is also discussed.

In some cases the surveys cited earlier in table 1 are more recent than the WFS survey data employed in the present section. Though the WFS survey is not in every case the most recent, the WFS data are particularly well suited for comparative analysis. New tabulations were produced for this report, in order to ensure a high degree of comparability. However, although the questionnaires and coding procedures for the various surveys were similar in many respects, the division between "urban" and "rural" is based on country-specific criteria rather than on an invariant size or density of settlement. Similarly, places classed as "large cities" in one country might be regarded as "small cities" in another.

A. Level of contraceptive use, and relationship of use to achievement of desired family size

Table 9 shows that in most developing countries for which WFS information is available, contraceptive practice is substantially more common in urban than in rural areas. Also, it is nearly always true that the level of use is higher in large cities than in smaller ones. On the average for all 31 countries included in the table, 38 per cent of married women in large cities, 32 per cent of those in smaller urban areas and 21 per cent of those in rural areas were using contraception at the time of the survey (unweighted averages).

Most of the countries with very large rural-urban differences in contraceptive use were located in the Americas. At least 25 per cent more of large city than of rural women were using contraception in Colombia, Ecuador, Mexico, Paraguay, Peru and Venezuela. The only others with rural-urban differences of this magnitude were the two Southwest Asian countries, Jordan and the Syrian Arab Republic. On the other hand, there were a few countries with essentially no rural-urban difference in contraceptive practice - Indonesia, Lesotho, Senegal, and Trinidad and Tobago - and a number of others where the differential could be regarded as small - between 5 and 10

percentage points. Although many of the African countries had small rural-urban differentials, the reason in these cases was that few women in any type of area use contraception.

Differential contraceptive use in rural and urban areas may reflect both differences in the desire or need for contraception and differences in contraceptive knowledge or availability of services. Most of the countries included in table 9 support organized family planning programmes. The only ones that did not support such programmes in the years leading up to the WFS survey were Cameroon, Guyana, Jordan, Peru, Senegal and the Syrian Arab Republic; 73/ in Peru, the Government has since adopted a role of active support for family planning. The absence of direct government support does not necessarily mean that modern contraception is unavailable, nor does the existence of organized programmes guarantee access throughout the country. Especially in their early years, programmes have often concentrated their services in and around cities. It is difficult to identify in a precise fashion the separate influence of differential access to services as opposed to other factors that might contribute to different levels of family planning practice in rural and urban areas, especially since measures of the location of family planning outlets in relation to survey respondents' homes are rarely available. However, a number of the WFS surveys did ask whether women were aware of an outlet, and this information is discussed below, after an examination of rural-urban differences in the fraction of women who have reached the desired family size.

When considering the possible effect of differential motivation to practice family planning, it should be noted that many women use contraception before reaching their desired family size, in order to increase the spacing between births. Thus, there is no clear-cut relationship between desired family size and the maximum level of contraceptive practice that can be expected in a population. However, as discussed below, women who have at least as many children as desired are more likely to be current users of contraception than are others, and it is reasonable to ask whether differences in the attainment of desired family size might be responsible for most of the rural-urban differential in contraceptive practice.

The World Fertility Survey data provided two types of measure of the relationship between current family size and that desired. One was a direct question about whether additional children were wanted, and the other was a question about the total number of children preferred; this could be compared with the current family size. The comparison between desired and current family size is used in this discussion, although broadly similar results would be obtained if the direct question were employed instead. 74/ In some countries a sizeable proportion of women did not report desired family size, giving instead answers such as "as God wills", "don't know" or "as many as possible". Such women are counted here as wanting to have more children.

Table 9 shows the proportion of all currently married women of reproductive age who had equalled or exceeded their desired family size. Between 40 and 50 per cent had already reached the desired family size in 12

the 31 countries; in 6, the percentage was in the 30s, and it was below 30 i 8. Most of the latter were in Africa where fewer than 20 per cent of the)men had as many as the desired number of children. At the other extreme, ver half the women had as many children as desired in 5 countries, 4 of these ı Asia.

Even without turning to a more detailed investigation of the data, the igures in table 9 make it appear unlikely that differences in fertility esires by place of residence are the main cause of rural-urban differentials n current contraception. The fraction of women who have reached the desired family size is often not very different in rural and urban areas, and the differential is sometimes opposite in direction to the differential in contraceptive practice. More specifically, in 23 of the 31 countries the percentage who had achieved the desired family size was less than 10 points different between large cities and rural areas; differentials in contraceptive practice were this small in only nine countries. Furthermore, in three of the countries with larger rural-urban differences in the attainment of desired family size - the Dominican Republic, Guyana and Trinidad and Tobago - it was the rural women who were the most likely to want no more children. Only in Jordan, Nepal, Pakistan, Sudan and the Syrian Arab Republic were urban women much more likely than rural women to have achieved the desired family size. It should be noted that, although it is fairly common, especially in Latin America, for rural areas to contain higher proportions who have equalled or exceeded the desired family size, this does not imply that the total number of children desired is higher in the urban areas. On the contrary, rural women usually prefer somewhat larger families, but they also tend already to have more children than urban women do. 75/

Figure I shows contraceptive prevalence in urban and rural areas for exposed women who had and who had not yet achieved the family size desired. 76/ (It also shows the percentage who knew of a family planning outlet. This information is discussed later.) As was suspected on the basis of table 9, there were in most countries substantial rural-urban differences in contraceptive practice that were not attributable to differences in the extent to which rural and urban women had reached the preferred size of family. The differences in the level of use were nearly always similar in form and in general magnitude for women who had fewer than the number of children desired as for those who had at least the desired number. The level of use was higher for the women who had reached the desired family size, as would be expected; some women probably do not desire longer birth intervals than they experience in the absence of contraceptive practice, and others are likely to have already experienced a long enough wait and desire to become pregnant immediately.

It is sometimes convenient to concentrate attention on the level of contraceptive use among women who want no more children. The point of this is not that these are the only women who benefit from family planning services; on the contrary, over half the women currently using contraception had yet to achieve the desired family size in most African and several American countries, and in most others at least one third of users had fewer than the

desired number of children. However, for women who want more children it is usually not clear, at least from information gathered in the WFS, whether non-use represents a desire to become pregnant immediately or is due instead to factors such as lack of access to family planning services, which limits use regardless of whether more children are wanted eventually. Non-use by women who want no more children more clearly represents a discrepancy between stated fertility desires and behaviour, if factors such as pregnancy, involuntary infecundity and other reasons for absence of current risk can be ruled out. The base population of "exposed" women used for figure I excludes those who were pregnant or who believed themselves to be infecund for reasons other than contraceptive sterilization. It is likely that there are other women who are not at risk of pregnancy for reasons that cannot be identified from the questions asked. Nonetheless, as shown later, 85 to 95 per cent of exposed women who had reached the desired family size were observed to be current users, within the upper socio-economic groups of some countries. Levels of use below 85 per cent within the subgroup of women who are exposed and have achieved the desired family size will therefore be taken to indicate a discrepancy between apparent motivation to control fertility and current contraceptive practice. It is likely, given the similarity of rural-urban differentials in use for women who have and those who have not achieved the desired family size, that whatever factors act to constrain use among women who want no more children also operate to limit use among those who would prefer greater spacing between births.

Even in the larger cities current contraceptive use among exposed women who had as many children as desired did not reach the 85 per cent level except in Costa Rica. At least two thirds of women in large cities were using contraception in many other countries. However, in the African countries and in Bangladesh, Haiti and Pakistan, fewer than half the urban women at risk of unwanted fertility were using contraception. In the rural areas levels of use below 50 per cent were observed in two thirds of the countries, and the level was above 60 per cent only in Costa Rica, Fiji and Trinidad and Tobago.

B. Availability of family planning services and contraceptive use in urban and rural areas

Some of the WFS surveys, as well as a number of other surveys, have asked women whether they knew of a source of family planning services and how accessible were the sources known. It was hoped that investigation of the relationship betwen perceived accessibility and contraceptive practice would yield information about the density of clinics or other service outlets that are needed to serve the population effectively, and at as low a cost as possible. It would be preferable to have information about the objective as well as the perceived accessibility of services, but there is some basis for thinking that women are able to supply reasonably accurate estimates of the travel time to outlets they know about or would use. 77/ These are not necessarily the nearest outlets, though.

In addition to the information about perceived availability of services, a few studies have obtained an objective measure of distance from an outlet and have examined the relationship between distance and current contraceptive practice. 78/ Substantially higher levels of contraceptive practice have usually been found in communities that are closer to services, or that are near to several outlets, though not all studies have obtained this result. The analytic techniques employed as well as the way in which accessibility has been measured make it difficult to compare results cross-culturally. However, in most of the studies, contraceptive use has been taken to include practice of methods such as rhythm and withdrawal, so that an association between contraceptive availability and contraceptive use is not automatic; at least in theory couples could substitute non-supply methods where modern methods are unavailable.

The survey information dealing with perceived accessibility, though available for more countries, has proved more difficult to interpret than has the information about objective presence of services. For one thing, many women are unaware of services that exist. In rural Malaysia in 1974, 20 per cent of the women living in communities where services were available did not know any outlet. 79/ In 1976, 30 per cent of urban and 70 per cent of rural Mexican women knew of no outlet, although services were judged to be genuinely unavailable within 5 km. for only 5 per cent of urban and 59 per cent of rural women. 80/ Few studies, however, have obtained both types of information.

Initial attempts to relate perceived accessibility of services to contraceptive practice found that, although women who knew of no outlet at all were much less likely than others to use contraception, there was little association between contraceptive practice and perceived travel time required to reach the outlet among those knowing of services. 81/ In some of these cases, objective measures of service availability had indicated a larger and more consistent relationship between distance from services and contraceptive practice. 82/ It may be that distance exerts its main influence by decreasing the likelihood that women will be aware that services exist. In rural Malaysia, where an independent measure of the distance from a family planning outlet was available, the percentage knowing of an outlet dropped from roughly 80 where the nearest source was within the community or within one mile to 65 for women in communities 10 or more miles from a source. 83/ In most countries with data available through the World Fertility Survey, the proportion of women knowing an outlet was substantially lower for communities judged to be far from services (according to the reports of women in the community who knew of an outlet), than for communities with a source nearby. 84/ These results suggest a need for better publicity of existing services in many countries. There is also a need for more detailed examination of the types of service provided; outlets that keep short or irregular hours or otherwise provide inconvenient service may not be reported because some women would not consider using them.

While objective distance from services undoubtedly influences perceptions of service availability, motivation may be important as well. That is, some women may have sought information about services, precisely because they

wished to control their fertility; for this reason, the consistent finding of higher contraceptive practice among women knowing about services cannot be assumed to represent simply the effect of greater accessibility on the level of contraceptive use. Though this is not shown in the tables given here, in most countries, women who have reached the desired family size (and are thus presumably relatively highly motivated to control fertility) are more likely than others to report knowledge of an outlet. There are also some cases, such as Costa Rica, Paraguay and Trinidad and Tobago in which such knowledge is nearly universal regardless of whether the desired family size has been attained. 85/ Figure I shows the percentage knowing of a family planning outlet, based on exposed women who had reached the desired family size.

In most countries the pattern of rural-urban differences was similar for perceived availability of family planning services and for current use (figure I). There were a few countries for which both differentials were small - Costa Rica, Indonesia, Republic of Korea, Trinidad and Tobago - and some in which both perceived availability and contraceptive practice were substantially higher in urban than in rural areas - Colombia, Kenya, Mexico, Pakistan, the Philippines and Sudan. There were, however, a few cases in which the rural-urban difference in contraceptive use was larger than the difference in knowledge of services - Malaysia, Paraguay and Venezuela. In at least these latter cases, the rural-urban difference in contraceptive practice was evidently not simply the result of differing service availability, though it is unclear from this what other factors were important, and whether they were amenable to influence through increased or redirected efforts of the family planning programme. Usually, for the countries shown in figure I, where the rural-urban difference in contraceptive use was sizeable, statistical control for differences in the percentage knowing an outlet is able to account for some but not for all of the difference in use. 86/ At least part of the remaining difference may be attributable to differences in the range of methods available in rural and urban areas. Among women who know of a family planning outlet at all, urban women are consistently more likely than rural women to know where to obtain several different methods, 87/ and therefore are better able to find a method that suits their own needs.

It can also be seen from figure I that there are usually many more women who know of a place to obtain family planning services than are currently using contraception, among those who are exposed and have achieved the desired family size. However, in large cities of Costa Rica and Venezuela small cities of Panama, the level of current use equaled or slightly exceeded the percentage who knew of a family planning outlet. Since users of methods such as rhythm and withdrawal do not need to know of an outlet, this does not necessarily indicate inconsistent responses, although it is possible that the level of knowledge was somewhat understated. 88/

C Contraceptive methods used in urban and rural areas

Another factor that must be considered in a discussion of relationships between accessibility of services and contraceptive practice is that women appear willing to travel greater distances for clinic methods such as sterilization or the IUD than for methods that require frequent re-supply, such as the pill or condom. 89/ In urban areas sources of both clinic and supply methods are likely to be available nearby, and relative distance may thus be unimportant in determining which method is chosen. In rural areas of many countries, though, a large proportion of women live far from any sort of outlet. The nearest clinic may be farther than the nearest source of supply methods 90/ because clinic methods require the services of highly trained personnel, who are relatively scarce. None the less, rural women may be willing to make the longer trip for an IUD or sterilization, expecting that the journey will not have to be repeated, when they would not be willing to travel to a nearer, but still inconvenient, supply source which would have to be visited again for re-supply. Rural women thus can be expected to be especially likely to use clinic methods, if these are available at all, or else to rely on traditional methods which require neither supplies nor medical attention.

According to WFS data, differences between rural and urban areas in the types of method employed correspond, at least roughly, to these expectations (table 10). The average for all 30 countries, shown at the end of the table, might be considered the typical pattern: sterilization and the IUD account for nearly the same percentage of total contraceptive practice in rural and urban areas, while supply methods make up a notably higher, and traditional methods a lower, fraction of the total in cities. Some countries show no marked difference in method distribution between urban and rural areas, but in others the contrasts are striking.

Traditional methods accounted for a much larger share of use in rural than in urban areas in most of the African countries, and also in Bangladesh, Haiti, Peru and the Philippines. In all these countries traditional methods accounted for a relatively high fraction of total contraceptive practice, and except in the last three named, the overall prevalence of contraceptive practice in these countries was below 10 per cent of married women (table 9). Nepal and Pakistan, which also have low prevalence levels, do not share this pattern, but this may simply reflect departures from the usual method of questioning: the names of the traditional methods were not mentioned to respondents in either country, and the use of traditional methods was probably understated as a result. 91/ Where traditional methods make up a disproportionate share of use in rural areas, this is usually offset chiefly by a lesser reliance on supply methods in these areas, rather than by differences in the extent of use of sterilization or of the IUD.

In 12 of the 30 countries supply methods accounted for at least 10 per cent more of total use in urban than in rural areas; only in Indonesia was there such a large difference in the opposite direction. The family planning

programme of Indonesia is notable for its stress on reaching rural women and it is possible that supply methods are genuinely more readily available in the rural than in the urban areas. 92/

Although supply methods are usually more widely used in the cities, this does not mean that they are unimportant in rural areas. Indeed supply methods usually account for at least one third of all contraceptive use in rural areas, and in many cases over one half.

There are some countries where sterilization or the IUD accounted for a markedly larger proportion of use in the urban areas, but this was much less frequently the case than for supply methods, and there were several countries where sterilization, the IUD or both made up at least 10 per cent more of total use in the rural areas. For instance, rural couples in Guyana and Jamaica were relatively likely to rely upon sterilization, and in Guyana, Pakistan, Sri Lanka and Thailand the IUD was responsible for substantially more of total contraceptive practice in the countryside than in urban areas.

The relatively high use of sterilization and the IUD in rural areas of some countries is likely to reflect efforts of family planning programmes to provide these methods. As discussed earlier, policies with regard to provision of sterilization vary from complete prohibition to active promotion. Some of the countries in which medically trained personnel are in the shortest supply have stressed sterilization, often increasing the staff by providing paramedics with special training, and employing mobile teams to increase geographic coverage. In areas that do not yet have a reliable source of contraceptive supplies, mobile teams may represent the only option for use of a modern method. IUDs can also be provided in this way, but the frequent need for follow-up treatment to deal with side effects and complications of IUD use, often long after the IUD insertion, probably limits the acceptability of this method for women to whom modern medical services are not accessible on a year-round basis. Where these conditions can be met, though, the IUD may also be an attractive method for rural women, especially if no reliable source of supply methods exists in the community.

When examined in relation to the total number of married women rather than in relation to the number of contraceptive users, each of the classes of method shown in table 10 usually shows higher levels of practice in urban than in rural areas. In Guyana and Jamaica, however, sterilization protected a larger percentage of rural than of urban married women (10 per cent as opposed to 5-6 per cent in both countries). There were also several countries in which the proportions sterilized were approximately equal in rural and urban areas. In some cases, too, the proportion of rural married women using traditional methods was roughly the same as in urban areas, but usually the use even of these methods was slightly higher in the urban areas. 93/

These rural-urban use patterns contrast with those seen in developed countries. In all but a few of the latter, the level of contraceptive use in rural areas was nearly as high as in urban areas, but the fraction of married couples using rhythm or withdrawal tended to be higher in the rural areas. 94/

The difference appears, once again, to reflect the fact that the methods traditional in Europe are relatively unknown in most developing countries (or if known, are for some reason not readily accepted), and these methods are thus not usually treated as the logical alternative to the use of modern methods, should the latter be unavailable. Even in Peru and the Philippines, where rhythm and withdrawal accounted for over half of current contraceptive practice, at least one third of ever-married women said they did not know of these methods. 95/

D. Contraceptive practice according to education and residence

The most fundamental rationale for government support of family planning programmes is the perception that the right of couples to choose the number and spacing of their children is limited de facto by poor access to effective means of controlling fertility. The least advantaged social groups are the most likely to need subsidized services, and their apparent need for and use of contraception is thus of particular concern.

Of the women included in table 11 - exposed women who had reached the desired family size - over half both lived in rural areas and had completed zero years of schooling in Bangladesh, Haiti, Indonesia and Pakistan, and in five more countries (Ghana, Kenya, Malaysia, Sudan and the Syrian Arab Republic) such women made up at least one fourth of the total at the time of the WFS survey. 96/ In some other cases rural uneducated women constituted only a few per cent of the total. Table 11 was in fact divided into two panels in order to accommodate the differing numbers of uneducated women in the various samples.

Education and place of residence each have an independent effect on contraceptive practice, such that uneducated women living in rural areas almost always show the lowest level of use. Fewer than one fourth of rural women with no schooling, and at risk of unwanted fertility, were using contraception in 13 of 22 countries (panel B, table 11). Only in Costa Rica, Fiji and Indonesia were at least half contracepting. At the other extreme, in most countries a high percentage of large-city (or urban) women with seven or more years of education were using contraception. Only in Ghana, Kenya and the Sudan were less than half of such women using a method.

Since family planning programmes attempt to speed the diffusion of contraception, it might be expected that countries with strong programmes would exhibit smaller differentials in contraceptive practice as well as higher levels of use overall. However, it is difficult to separate the effects of family planning programmes from those of other factors. For instance, the residential differential in contraceptive use is likely to be greater where much of the population lives in areas remote from an urban center than where shorter distances are involved, as in small island nations. Physical distance from cities is also likely to present less of an obstacle in more economically developed countries, whose transportation networks make it

easier for rural women to visit urban areas, or for public or private suppliers of family planning services to reach into rural areas. Most of the countries with strong family planning programmes are relatively highly developed. Figure II shows the countries included in table 11, cross-classified by strength of family planning effort and by a crude composite index of socio-economic and mortality conditions. The classification of programme effort is based on that presented by Mauldin and Lapham for approximately 1972, modified in a few cases to reflect increases in programme effort between that date and the WFS survey. 97/ A judgement of whether services were available throughout the country was one of 15 criteria used to rank programmes, although the level of practice in rural or urban areas did not enter into the calculation of the index. 98/ The classification of socio-economic and health conditions is based on 1975 gross domestic product per capita, educational attainment of women, and life expectancy at birth.

Figure III shows the urban-rural and education differentials in contraceptive use among exposed women who had reached the desired family size, for groups of countries classed by strength of family planning effort (panel A) and by the index of socio-economic and mortality conditions (panel B). All the groups of countries showed fairly marked differential contraceptive use according to rural-urban residence and education. The differentials were, however, smallest and the absolute levels of use highest for the seven countries with strong family planning programmes and the seven ranking high on the index of socio-economic and health conditions. Part of the similarity between these groups of countries is due, of course, to overlap in membership, with three countries falling in both groups. Use levels tended to be lowest in the countries with weak family planning programmes and in those with the least favourable social conditions; again, there was a substantial overlap between these groups. The countries with weak family planning programmes averaged slightly lower levels of use than observed in the countries with no government-supported programme, but it should be noted that only one of the latter was ranked low on the index of socio-economic and mortality conditions (figure III).

The countries with strong programmes, or more favourable social conditions, differed from the others more with respect to the level of use among the least advantaged women than with respect to the level of use among more advantaged groups. The average level of use for rural women with zero to three years of education, and exposed to the risk of excess fertility, was under 25 per cent for the countries with weak family planning programmes or no programme, and for countries with the lowest socio-economic and mortality ranking; it was over 50 per cent for the countries with strong programmes or favourable social conditions.

No attempt will be made here to separate the independent effects of family planning programmes on the differentials shown in table 11 and figure III from the effects of the social setting, though this general problem receives further discussion elsewhere. The case of Indonesia deserves special notice, however, as it is the chief example of a country which has mounted a

strong programme despite a relatively low level of economic development and despite high mortality. There has been considerable debate about how, and whether, the experience of Indonesia can be transferred to other countries. The existence of an apparent gap between desired fertility and contraceptive practice does not seem sufficient to ensure the success of family planning programmes, as shown by the much slower growth of contraceptive practice, and the persistence of high levels of non-use among women who have reached the desired family size, in countries such as Bangladesh and Pakistan. As is often the case with other government initiatives as well, the Indonesian family planning programme has been successful partly because it was able to take advantage of pre-existing administrative hierarchies and partly because it engaged the support of local organizations in rural areas. 99/

Table 9. Percentage of currently married women who have reached the family size desired, and percentage using contraception, by type of place of residence, for developing countries

	Year of Survey	Number of women a/				Percent with at least as many children as desired				Per cent currently using contraception			
		Total b/	Large cities	Small cities	Rural	Total b/	Large cities	Small cities	Rural	Total b/	Large cities	Small cities	Rural
AFRICA													
Cameroon	1978	6590	574	578	5438	7 c/	6 c/	6 c/	8 c/	2	9	1	2
Ghana	1979/80	4436	722	702	3012	12	20	14	11	10	15	12	8
Kenya d/	1977/78	5769	271	376	5122	17	16	15	17	7	16	9	6
Lesotho	1977	3159	—224—		2921	11	—13—		10	5	—7—		5
Senegal	1978	3299	493	487	2319	6	12	10	4	4	3	4	4
Sudan d/	1978/79	2859	310	458	2091	18	29	20	16	5	16	9	2
Unweighted average	...	...	...	...	...	12	16 e/	13 e/	11	6	11 e/	7 e/	5
AMERICAS													
Colombia	1976	2827	496	1291	1039	49	50	46	52	43	57	49	27
Costa Rica f/	1976	2684	825	525	1334	38	38	34	39	64	69	65	61
Dominican Rep.	1975	1808	519	426	863	38	30	39	43	33	43	38	22
Ecuador	1979	3915	1202	892	1821	49	48	48	51	34	47	44	20
Guyana	1975	3219	905	247	2067	43	33	36	47	31	37	25	30
Haiti d/	1977	1903	—549—		1354	43	—39—		45	19	—27—		16
Jamaica	1975/76	2286	754	350	1182	40	37	40	43	38	47	36	33
Mexico	1976	5640	1517	1708	2415	48	46	47	51	30	47	38	14
Panama f/	1975/76	2723	1186	335	1202	47	42	43	52	54	60	61	46
Paraguay	1979	2610	697	426	1487	24	19	20	19	36	53	43	27
Peru	1977	5060	1334	1891	1835	54	51	56	52	31	49	38	11
Trinidad & Tobago	1977	3112	1111	752	1249	39	31	41	45	52	54	50	50
Venezuela g/	1977	2280	616	1247	417	42	38	42	46	49	61	51	29
Unweighted average	...	...	...	...	...	43	39 e/	41 e/	45	40	50 e/	43 e/	30
ASIA AND OCEANIA													
Bangladesh	1976	5759	—449—		5310	29	—36—		29	8	—18—		7
Fiji	1974	4650	737	910	2985	50 h/	52 h/	56 h/	48 h/	41	45	47	38
Indonesia	1976	7879	691	562	6626	36	40	41	35	26	30	29	26
Jordan	1976	3458	1218	1205	1035	42	47	46	31	25	37	28	8
Malaysia d/	1974	5807	947	868	3992	45	46	50	43	33	47	41	27
Nepal	1976	5498	—119—		5212	37	—62—		11	2	—20—		2
Pakistan	1975	4667	428	815	3424	44	54	50	42	5	19	8	3
Philippines	1978	8860	1115	1717	6028	58	56	59	58	36	50	46	31
Republic of Korea	1974	5062	1520	1508	2034	64	61	61	68	35	40	35	31
Sri Lanka	1975	6159	380	758	5021	62	64	63	62	32	45	35	30
Syrian Arab Republic	1978	4312	722	1476	2114	38	54	46	27	20	46	28	5
Thailand	1975	3517	269	240	3007	54	49	49	55	33	49	42	31
Unweighted average	..	...	...	...	...	47	52 e/	52 e/	45	25	37 e/	31 e/	20
Total Unweighted average	..	...	...	...	...	38	39 e/	40 e/	38	27	38 e/	32 e/	21

table continues

Table 9 (continued)

Source: Tabulated from World Fertility Survey data.

a/ Currently married women aged less than 50 (or 15-49), except as noted separately.

b/ Including women for whom type of place of residence was not available.

c/ For currently married fecund women. Some women with small families were not asked about desired family size; these women were assumed here to want more children.

d/ Including women aged 50.

e/ In computing averages, percentages for large and small cities were assumed equal for Bangladesh, Haiti, Lesotho and Nepal.

f/ For ages 20-49.

g/ For ages 15-44.

h/ For currently married fecund women.

Table 10. Percentage distribution of current users of contraception, by type of method, for urban and rural areas, developing countries participating in the World Fertility Survey

	Number of users	Total percentage a/	Sterilization	Intrauterine device	Other clinic and supply methods	Traditional methods
	(1)	(2)	(3)	(4)	(5)	(6)
AFRICA						
Cameroon						
Urban	60	100	...	10	30	60
Rural	99	100	...	5	10	86
Ghana						
Urban	194	100	4	5	61	30
Rural	229	100	6	2	40	52
Kenya						
Urban	78	100	13	17	55	15
Rural	310	100	13	9	36	42
Senegal						
Urban	38	100	3	13	29	55
Rural	86	100	0	0	2	98
Sudan						
Urban	90	100	6	4	80	11
Rural	41	100	9	0	66	25
Average for Africa b/						
Urban	...	100	5	10	51	34
Rural	...	100	6	3	31	61
AMERICAS						
Colombia						
Urban	923	100	10	20	44	26
Rural	279	100	9	19	36	37
Costa Rica						
Urban	912	100	19	8	56	17
Rural	817	100	22	8	52	17
Dominican Republic						
Urban	351	100	39	9	36	15
Rural	223	100	35	8	34	22

table continues

Table 10 (Continued)

	Number of users	Total percentage a/	Sterilization	Intrauterine device	Other clinic and supply methods	Traditional methods
	(1)	(2)	(3)	(4)	(5)	(6)
AMERICAS (continued)						
Ecuador						
Urban	950	100	23	17	39	21
Rural	367	100	27	7	38	29
Guyana						
Urban	392	100	16	10	61	14
Rural	619	100	35	23	35	8
Haiti						
Urban	147	100	1	2	44	53
Rural	212	100	2	2	11	85
Jamaica						
Urban	485	100	13	5	76	6
Rural	390	100	31	6	57	6
Mexico						
Urban	1367	100	10	20	49	21
Rural	339	100	7	13	46	34
Panama						
Urban	920	100	38	8	42	11
Rural	549	100	43	5	32	21
Paraguay						
Urban	552	100	7	20	41	32
Rural	399	100	5	8	47	40
Peru						
Urban	1385	100	9	5	24	62
Rural	205	100	6	1	11	82
Trinidad and Tobago						
Urban	975	100	9	4	75	12
Rural	629	100	8	5	77	11
Venezuela						
Urban	1003	100	16	18	43	23
Rural	120	100	13	12	46	29
Average for Americas b/						
Urban	...	100	16	11	48	24
Rural	...	100	19	9	40	32

table continues

Table 10 (Continued)

	Number of users	Total percentage a/	Sterilization	Intrauterine device	Other clinic and supply methods	Traditional methods
	(1)	(2)	(3)	(4)	(5)	(6)
ASIA AND OCEANIA						
Bangladesh						
Urban	82	100	16	3	64	17
Rural	363	100	9	5	43	43
Fiji						
Urban	765	100	39	10	37	14
Rural	1132	100	39	13	34	14
Indonesia						
Urban	366	100	4	17	51	28
Rural	1707	100	1	22	67	10
Jordan						
Urban	787	100	7	8	54	31
Rural	84	100	15	4	49	32
Malaysia						
Urban	802	100	14	3	54	29
Rural	1092	100	10	1	61	28
Nepal						
Urban	23	100	67	0	33	0
Rural	112	100	71	3	24	2
Pakistan						
Urban	150	100	21	7	44	28
Rural	95	100	17	20	36	28
Philippines						
Urban	1342	100	18	9	26	47
Rural	1845	100	12	4	22	62
Republic of Korea						
Urban	1132	100	16	20	39	25
Rural	633	100	11	28	41	19
Sri Lanka						
Urban	436	100	35	7	19	40
Rural	1517	100	30	17	11	41

table continues

Table 10 (Continued)

	Number of users	Total percentage a/	Sterilization	Intrauterine device	Other clinic and supply methods	Traditional methods
	(1)	(2)	(3)	(4)	(5)	(6)
ASIA AND OCEANIA (cont'd)						
Syrian Arab Republic						
Urban	744	100	2	3	72	23
Rural	110	100	4	2	65	30
Thailand						
Urban	232	100	34	10	49	8
Rural	933	100	23	20	48	8
Average for Asia b/						
Urban	...	100	23	8	45	24
Rural	...	100	20	12	42	26
Average for all countries b/						
Urban	...	100	17	10	48	26
Rural	...	100	17	9	39	36

Source: Tabulated from World Fertility Survey data.

a/ Percentages may not sum to 100 due to rounding.

b/ Unweighted averages.

Table 11. Percentage currently using contraception, for women who have equalled or exceeded the number of children desired, by type of place of residence and respondent's education, developing countries

A. Countries in which few of the women sampled had zero years of education

Countries and type of place of residence	Years of school completed		
	0-6	7-9	10+
AMERICAS			
Guyana			
Urban	43	51	80
Rural	47	46	...
Jamaica			
Large city	61	62	74
Small city	52	58	...
Rural	46	53	...
Panama			
Large city	73	81	89
Small city	76	83	86
Rural	55	78	76
Trinidad and Tobago			
Large city	67	67	84
Small city	52	70	...
Rural	51	69	81
ASIA			
Philippines			
Large city	62	74	75
Small city	60	66	77
Rural	46	59	72

table continues

Table 11 (Continued)

B. Other countries

Countries and type of place of residence	Years of school completed		
	None	1-6	7+
AFRICA			
Ghana			
Urban	22	...	39
Rural	15	12	38
Kenya			
Urban	------ 24 -------		43
Rural	------ 14 -------		39
Sudan			
Urban	17	----- 48 ------	
Rural	3	----- 19 ------	
AMERICAS			
Colombia			
Urban	42	64	82
Rural	23	42	...
Costa Rica			
Large city	...	89	94
Small city	...	76	93
Rural	71	79	90
Dominican Republic			
Urban	55	61	77
Rural	12	39	...
Ecuador			
Urban	29	61	78
Rural	15	33	67
Haiti			
Urban	43	45	54
Rural	22	49	...

table continues

Table 11 (continued)

B. Other countries (cont'd)

Countries and type of place of residence	Years of school completed		
	None	1-6	7+
Mexico			
Large city	61	66	85
Small city	28	56	76
Rural	11	28	75
Paraguay			
Urban	56 a/	63 a/	84
Rural	31 a/	46 a/	...
Peru			
Large city	59	62	75
Small city	31	50	74
Rural	10	28	...
Venezuela			
Large city	76	79	86
Small city	47	69	78
Rural	28	46	...
ASIA AND OCEANIA			
Bangladesh			
Urban	29	41	66
Rural	14	25	42
Fiji			
Large city	67	70	71
Small city	72	78	73
Rural	70	67	59
Indonesia			
Large city	40	61	83
Small city	51	63	72
Rural	51	56	89

table continues

Table 11 (Continued)

B. Other countries (cont'd)

Countries and type of place of residence	Years of school completed		
	None	1-6	7+
Jordan			
Large city	52	78	83
Small city	48	61	83
Rural	19	38	...
Malaysia			
Large city	58	67	84
Small city	51	60	75
Rural	35	50	67
Pakistan			
Large city	31	44	61
Small city	19	23	46
Rural	7	13	...
Republic of Korea			
Large city	58	55	67
Small city	50	51	69
Rural	46	49	52
Sri Lanka			
Large city	...	60	71
Small city	34	51	77
Rural	38	50	65
Syrian Arab Republic			
Large city	67	78	88
Small city	49	71	76
Rural	14	49	...
Thailand			
Urban	64	76	79
Rural	40	53	85

Source: Tabulated from World Fertility Survey data.

Note: Percentage not shown when sample base population is less than 20.

a/ Categories are 0-3 years and 4-6 years.

Figure I. Percentage of exposed women currently contracepting, and percentage knowing of a family planning outlet, by urban-rural residence and whether current family size is at least as large as that desired, for developing countries

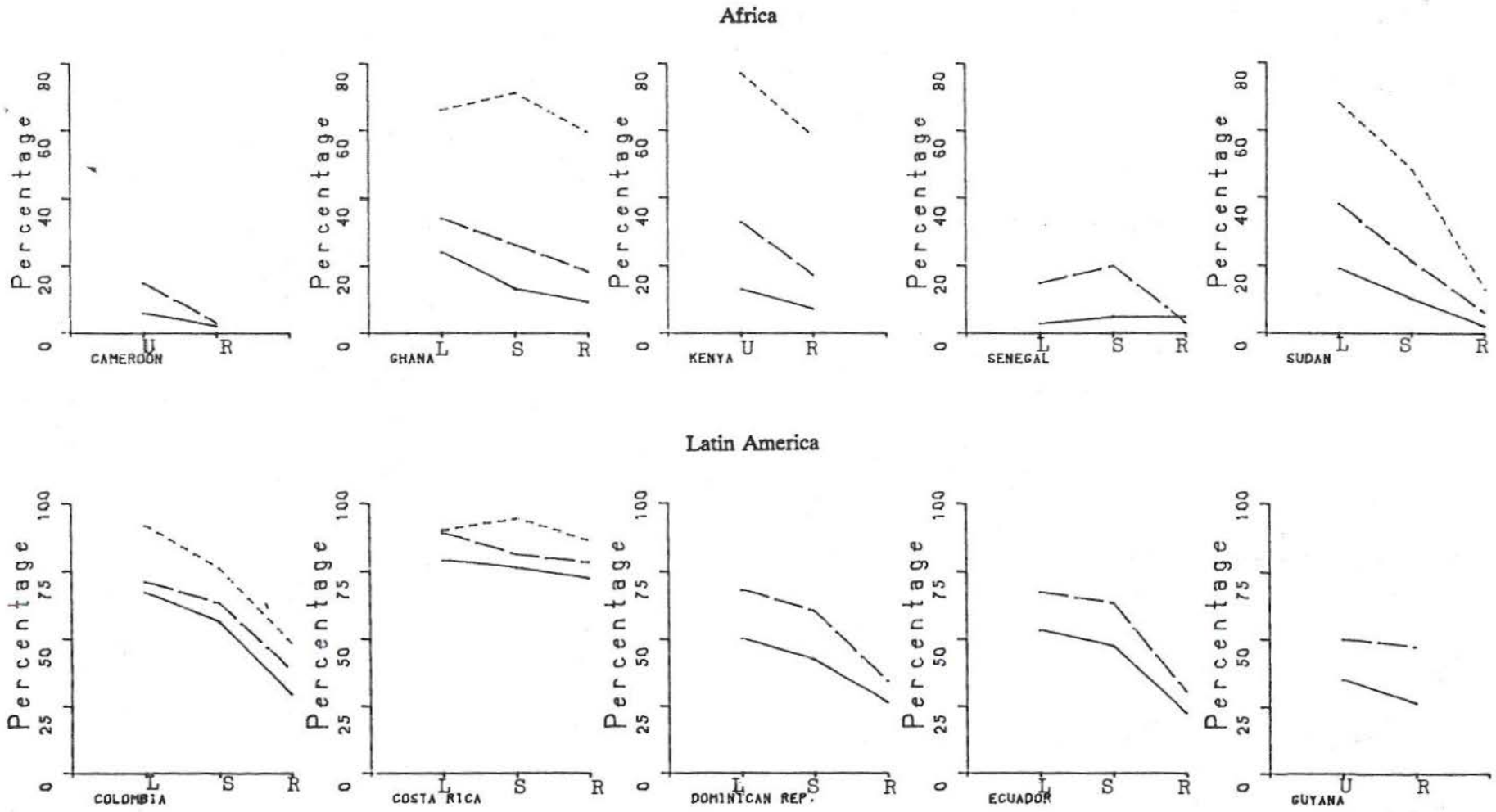
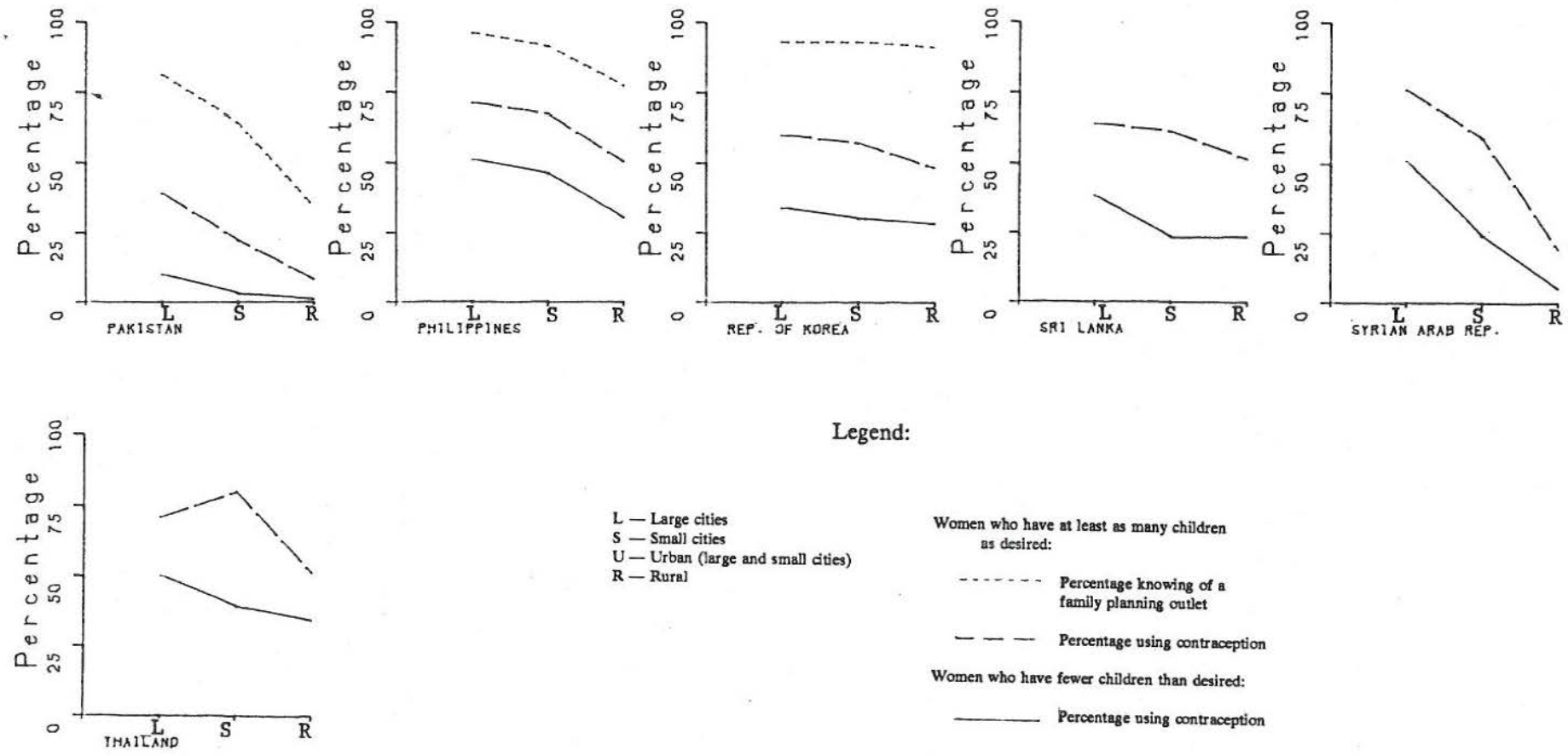


Figure I. (cont'd.)

Figure I. (cont'd.)



Source: Tabulated from World Fertility Survey individual-interview data.

Figure II. Selected countries classified according to strength of family planning effort and socio-economic and mortality conditions

Strength of family planning effort

Index of socio-economic and mortality conditions	Strong	Moderate	Weak	No programme
High	Costa Rica Jamaica Fiji	Panama Trinidad and Tobago	Venezuela	Guyana
Medium	Philippines Republic of Korea Thailand	Colombia Dominican Republic Malaysia Mexico Sri Lanka	Ecuador Paraguay	Peru Syrian Arab Republic
Low	Indonesia		Bangladesh Ghana Haiti Kenya Pakistan Sudan	Jordan

Sources:

Percentage of women with zero years of education taken from UNESCO, Statistical Yearbook, 1981, table 1.4; Mexico, Republic of Korea and Venezuela were classed as having between 20 and 50 per cent with no education by the mid-1970's.

Gross domestic product per capita for 1975 taken from Yearbook of National Account Statistics, 1979 (United Nations publication, Sales No. E.80.XVII.11), vol. II, table 1, pp. 3-9.

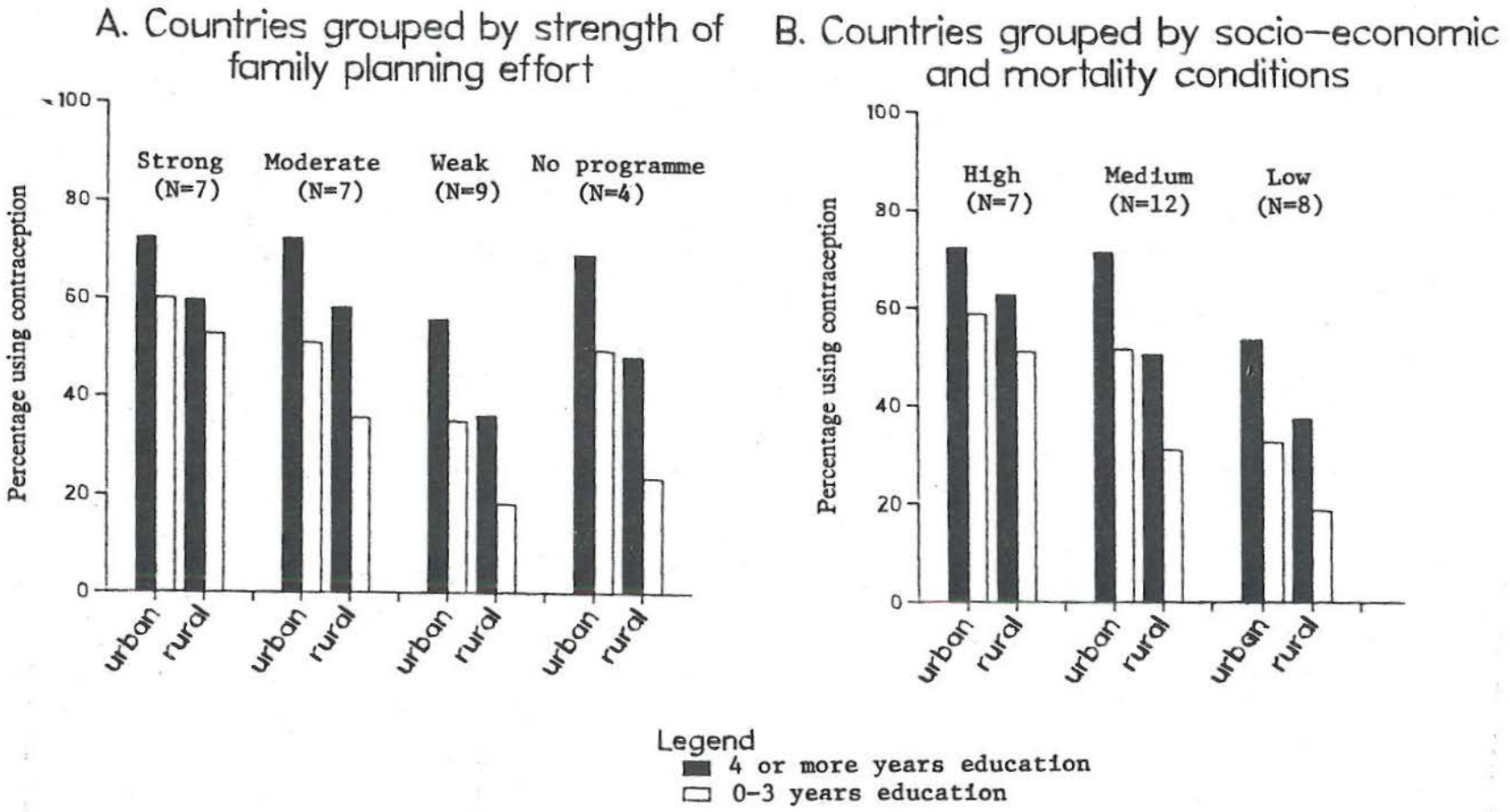
Life expectancy at birth taken from World Population Trends and Policies - 1981 Monitoring Report, vol. I (United Nations publication, Sales No. E.82.XIII.2), table 39, except for the following: Dominican Republic, Malaysia, Panama, Peru and Sudan taken from Levels and Trends of Mortality Since 1950 (United Nations publication, Sales No. E.81.XIII.3); estimates for early 1970's for Guyana, Fiji, Jordan, Pakistan, Paraguay and the Syrian Arab Republic taken from World Population Prospects as Assessed in 1980 (United Nations publication, Sales No. E.81.XIII.8).

Strength of family planning programme effort taken from W. Parker Mauldin et al., "Conditions of fertility decline in developing countries, 1965-75", Studies in Family Planning, vol. 9, No. 5 (May 1978), table 8, p. 103. On the basis of comments in the text, Mexico was classed as "moderate" and Indonesia, the Philippines and Thailand as "strong".

Note:

Index of socio-economic and mortality conditions: Countries were classed as "high" if they had at least two of the following characteristics: gross domestic product per capita $US 1000 (1975) or above; percentage of women aged 25 or more with no schooling less than 20; life expectancy at birth 65 years or more. Countries were classed as "low" if they had at least two of the following characteristics: gross domestic product per capita less than $US 500; percentage of women aged 25 or more with no schooling over 50; life expectancy at birth less than 55 years. Remaining countries were classed as "medium".

Figure III. Urban-rural and education differentials in contraceptive use among exposed women with at least as many children as desired, for countries grouped by strength of family planning effort and socio-economic and mortality conditions



Source: Tabulated from World Fertility Survey individual-interview data.

SUMMARY AND CONCLUSIONS

The present report discusses contraceptive prevalence and use of various contraceptive methods for countries containing more than 80 per cent of the population of developing and 60 per cent of that of developed regions. The evidence indicates rapid growth of contraceptive practice during the 1970's in Asia and Latin America. In many cases, prevalence increased between successive surveys by over 2 per cent, and in a few countries by over 3 per cent of married women per year.

By 1980/1981 at least one third, and possibly over 40 per cent of reproductive-aged married women in developing countries were estimated to have been practicing contraception. This compares to two thirds to four fifths of women currently using in most developed countries. The average for all developing countries combined was heavily influenced by the high prevalence -- 71 per cent -- in China (1982); the average level of contraceptive use for all other developing countries combined was estimated to be 19 to 30 per cent. Several developing countries besides China had already achieved prevalence levels exceeding 60 per cent, and a larger number fell in the range of 50 to 60 per cent. However, use levels remained very low in most of sub-Sahara Africa and in some parts of Asia.

Perhaps the most remarkable feature of changes in contraceptive practice during the 1970's was the rapid increase in use of sterilization, especially female sterilization, in the developing countries. The estimates presented here indicate that male and female contraceptive sterilization together now protect a larger fraction of couples in developing than in developed countries from the risk of pregnancy. Few couples are contraceptively sterilized in most countries of Eastern, Southern and Western Europe, and this is reportedly also true of the Union of Soviet Socialist Republics. Although sterilization has become common in several developed countries -- including Australia, Canada, New Zealand, the United Kingdom and the United States and, very recently, the Netherlands - the proportions using sterilization even in these nations are equalled or exceeded by levels observed in some developing countries. Male and female sterilization together protect over 30 per cent of couples with the wife in the reproductive ages in Panama and Puerto Rico, and over 20 per cent in China, India and at least five smaller developing countries. There are at the same time many developing countries where contraceptive sterilization is nearly absent -- including Southwestern Asia, much of Africa, and some countries in other regions.

A list of reasons for the rapid growth of sterilization must include changes in policy; in many cases contraceptive sterilization is forbidden or allowed only under restrictive circumstances, but there has been a tendency to relax these restrictions. In some countries family planning programmes have recently incorporated sterilization services, or have expanded such services. This trend has been encouraged by the development and diffusion of less traumatic and less expensive procedures for performing female sterilization, a

development that has doubtless also made sterilization more attractive to women who want no more children. Yet despite recent medical advances, male sterilization remains a simpler and less expensive procedure, and it is a matter of concern that the growth of female sterilization appears to have been accomplished partly by attracting couples away from male sterilization.

The popularity of sterilization provides indirect evidence that many couples find the reversible methods to be unsatisfactory. More direct evidence comes from responses gathered in surveys, where women frequently cite experience of side effects or fears about method safety as reasons for discontinuing use. Side effects are common with modern methods, particularly the pill and IUD, but traditional methods also have drawbacks: they interfere with intercourse, and rates of accidental pregnancy are higher than for the pill or IUD. Of course it is also true that many couples use a single method for years without experiencing problems, and the high prevalence of modern reversible methods attests to their acceptability to many couples in a wide variety of cultural settings. Nevertheless, side effects, inconvenience of use and method failure lead many couples to try several methods. Thus, when a new or improved method becomes available on a wide scale, the composition of current contraceptive practice can change rapidly.

Besides the increase in use of sterilization, there have also been major changes in the relative importance of the various reversible methods. These changes are especially pronounced in developed countries, where traditional methods, chiefly withdrawal (backed up by induced abortion in many cases), until recently provided the main means of birth control. Much of Eastern and Southern Europe continues to rely on withdrawal, but in Western Europe the older methods are rapidly being displaced by the pill and the IUD, and in most of Northern Europe, in the United States and in several other developed countries the process of change to the newer methods is nearly complete. In developing countries the pattern has been different; in only a few of these has there ever been a tradition of widespread use of withdrawal, though rhythm has become common in several societies. In most developing countries, though, modern methods, principally the pill, IUD and sterilization, have been responsible for most of the recent increase in contraceptive prevalence. In most countries the pill is employed by more women than the IUD, but there are some exceptions, including China. In that country the IUD accounts for half of all contraceptive use. The pill, the IUD, or both, have usually attracted increasing proportions of users over time, except where the growth in sterilization has been very large.

This report has concentrated mainly on describing national average levels of contraceptive practice, but within countries the disparities in use levels between different geographic and social groups may be as large as the differences that occur between countries. Data presented here for 31 developing countries participating in the World Fertility Survey indicated that, on the average, 15 to 20 per cent more of married women in large cities than in rural areas were practicing contraception. A variety of evidence suggests that the gap in use levels is due much more to greater ease of access to family planning services in urban areas, than to differences in the number

f children that urban and rural couples desire. Differential access to ervices may also be the major reason why methods requiring regular supplies, uch as the pill, usually make up a larger proportion of contraceptive ractice in cities than in rural areas. Countries that are relatively dvanced economically or that have strong family planning programmes tend to ave higher levels of contraceptive practice overall, and also to have smaller contrasts in use levels between rural and urban areas, or between persons with high and low amounts of education.

In the near future it is likely that the trends already firmly established will continue: contraceptive prevalence will grow in developing countries, modern contraceptives will become increasingly predominant, and the use of voluntary sterilization will increase. Maintenance of these trends is, however, contingent upon the ability and willingness of Governments, voluntary organizations and international donors to support the growth of family planning and other health services in rural areas of developing countries, and upon continued liberalization of laws and policies that currently restrict access to particular contraceptive methods in some countries. Because the number of married women in the reproductive ages will continue to grow, expanded services will be needed even to maintain current prevalence levels.

Over the longer term, there are major uncertainties. Will contraceptive prevalence level off in many of the developing countries, before reaching the values seen in developed countries? When will the level of use rise substantially in those countries of Africa and Asia where contraceptive practice is still rare? How much further change can be anticipated in the types of contraceptive methods employed?

Very high levels of contraceptive prevalence -- current use by two thirds or more of couples with the wife in the reproductive ages -- probably are not compatible with desired family sizes of four or more children, which have been reported in many developing countries, and particularly in the least developed. Yet even without changed fertility goals there is considerable potential for increased contraceptive use in most developing countries, according to data reviewed in chapter III. And, though the timing of such change remains poorly understood, declines in desired family size are to be expected in the course of development and have actually been observed in some countries. Fertility desires as reported in recent surveys thus do not provide a firm basis for thinking that the growth in contraceptive prevalence will stop in most developing countries once moderate prevalence levels are attained.

Recent trends for developing countries certainly give no sign that a general stagnation is imminent. There are a few cases in which growth in contraceptive prevalence appears to have stalled, but the predominant impression is one of continuing increase once prevalence has reached a moderate level. The rate of increase is likely to drop in some particular countries, since it is difficult to believe that annual growth in prevalence of 2 or 3 per cent of married women can be sustained for long.

There are many countries of Africa and Asia where contraceptive practice is still rare, and it is not clear when this will change. While there is general agreement that social and economic development will eventually lead to adoption of birth control, social scientists and other observers have been unsuccessful in predicting the timing of such changes. Governments of many of the least developed countries perceive current rates of population growth as detrimental to economic development, and they support family planning programmes partly out of hope that the transition to lower fertility will begin earlier and proceed faster than it would otherwise. However, the social and economic conditions inherent to underdevelopment have frequently meant slow progress in extending family planning services, or for that matter, other sorts of social services, beyond the major cities. When contraceptive prevalence remains low in such countries despite the existence of a family planning programme, it is usually not clear that this is due to a lack of demand for modern contraceptives, given the low levels of services that have actually been provided. Increasing attention is now being devoted to problems of programme organization and management. There are signs of modest growth in contraceptive prevalence in a few countries, including Bangladesh, where the programme had appeared earlier to be having a negligible impact.

In developed countries the major uncertainties concern changes in the specific contraceptive methods employed, since in only a few of these places can prevalence be expected to increase markedly. The trend away from traditional methods is likely to continue, but this does not necessarily mean that method distributions will converge to a common pattern. Up to the present, the particular modern methods that have attracted the most users have varied considerably between countries. Beyond the next 10 years or so, method distributions in both developed and developing countries will depend on the speed with which new and improved methods are developed and made available, an inherently unpredictable process.

Notes

1/ Ann Larson, Patterns of Contraceptive Use Around the World, (Washington, D.C., Population Reference Bureau, 1981).

2/ The increase in number of national-level estimates of prevalence is actually somewhat greater than suggested in the text, since several countries or areas covered in Larson, op. cit., are not shown here. (These statistics did not pertain to the national population, or else did not appear to give a measure of prevalence comparable to that for the other countries.)

3/ World Population Trends and Policies, 1981 Monitoring Report, vol. II (United Nations publication, Sales No. E.82.XIII.3).

4/ The terms "developing countries" and "less developed countries (or regions)" are used interchangeably in the present report -- similarly "developed countries" and "more developed countries (or regions)". The classification of countries as developing or developed follows that employed in World Population Prospects: Estimates and Projections as Assessed in 1982 (United Nations publication, forthcoming), as does the classification of countries according to region. Briefly, the more developed countries include all of Europe and Northern America, plus Australia, Japan, New Zealand and the Union of Soviet Socialist Republics. Different developmental classifications are employed in some other United Nations publications.

5/ In Spain, 7 per cent of ever-married women knew of no method, and about 20 per cent among illiterate women. It is possible, however, that departures from the usual method of questioning, necessary to ensure compliance with a law prohibiting dissemination of information about contraception, resulted in an underestimate of the degree of familiarity with some methods. Spain, National Institute of Statistics, Fertility Survey in Spain 1977, A Summary of Findings, World Fertility Survey Summaries No. 23 (Madrid, 1980), pp. 22 and 23.

6/ In a few countries women were simply asked what methods they knew, and the methods were not named or described by the interviewer.

7/ This paragraph summarizes information shown in World Population Trends and Policies, 1981 Monitoring Report (United Nations publication, Sales No. E.82.XIII.2), vol. I, pp. 66-68.

8/ Ghulam Y. Soomro and Syed M. Ali, "Prevalence of knowledge and use of contraception in Pakistan", Studies in Population, Labour Force and Migration, project report No. 3 (Pakistan Institute of Development Economics, 1983). Both the 1975 and the 1979/80 surveys asked women to name any methods they knew, but interviewers did not read to the respondents a list of method names or descriptions. An earlier survey, conducted in 1968/69, found even higher levels of "knowledge" than did the 1975 survey, but in this case the apparent decrease may have been due to a change in the method of questioning; probe questions naming specific methods were used in 1968/69.

9/ Ibid.

10/ World Population Trends and Policies, 1983 Monitoring Report, vol. II (United Nations publication, Sales No. E.82.XIII.3), Chap. XXII and annex.

11/ M. Vaessen, "Knowledge of contraceptives: an assessment of World Fertility Survey data collection procedures", Population Studies, vol. 35, No. 3 (November 1981), pp. 357-373.

12/ There are signs that a non-negligible part of the current contraceptive use reported may be sporadic use. For instance in several surveys a substantial proportion of users of supply methods such as the pill also said that they had no supplies in the house. Elise F. Jones, The Availability of Contraceptive Services, World Fertility Survey Comparative Studies No. 37 (Voorburg, the Netherlands, International Statistical Institute, 1984). Such findings suggest a need for methodological studies designed specifically to clarify the precise nature of current contraceptive use as it is reported in response to commonly-posed survey questions.

13/ J. Laing, "Measurement of contraceptive protection for fertility analysis", paper prepared for the Seminar on Integrating Proximate into the Analysis of Fertility Levels and Trends, IUSSP and World Fertility Survey, London, 29 April to 1 May 1984.

14/ Ibid.

15/ Contraceptive prevalence figures from a 1980 national survey in India became available as the present report was going to press. The survey revealed a higher level of current use than that estimated for 1980 from acceptor statistics of the Family Welfare Programme: 32 per cent as opposed to 24 per cent, for ages 15 to 44. (The 26 per cent shown in table 2 reflects growth in the percentage of couples served by the Family Welfare Programme after 1980.) The difference between the two sources was primarily attributable to the survey's inclusion of traditional contraceptive methods not requiring programme services. Such methods were employed by 6 per cent of couples with the wife aged 15 to 44. The sources were in approximate agreement regarding the level of use of sterilization (20 per cent) but agreed less well for supply methods (5.6 per cent of couples according to the survey, 3.3 per cent estimated from programme records), at least in part because condoms can be obtained from non-programme sources. The survey showed only 0.5 per cent of married women to be using the IUD (1.0 per cent according to the programme). M. E. Khan and C. V. S. Prasad, Family Planning Practices in India - Second All India Survey (Baroda, India, Operations Research Group, 1983), table 7.4, p. 116.

16/ L. Morris and J. E. Anderson, "The use of contraceptive prevalence survey data to evaluate family planning programme service statistics", in Albert I. Hermalin and Barbara Entwisle, eds., The Role of Surveys in the Analysis of Family Planning Programs (Liège, Belgium, Ordina Editions, 1982), pp. 149-170; Jerald Bailey and Alan Keller, "Post family planning acceptance experience in the Caribbean: St. Kitts-Nevis and St. Vincent", Studies in Family Planning, vol. 13, No. 2 (February 1982), pp. 44-58.

17/ Dorothy Nortman, Population and Family Planning Programs: A Compendium of Data through 1981, 11th. ed. (New York, The Population Council, 1982), table 21, p. 94.

18/ Walter Rodrigues and Márcio Ruis Schiavo, eds., Pesquisa Sobre Saúde Materno-Infantil e Planejamento Familiar, Paraíba 1980 (Rio de Janeiro, Sociedade Civil Bem-Estar Familiar no Brasil, n.d.); Walter Rodrigues and Márcio Ruis Schiavo, eds., Pesquiso Sobre Saúde Materno-Infantil e Planejamento Familiar, Pernambuco, 1980 (Rio de Janeiro, Sociedade Civil Bem-Estar Familiar no Brasil, n.d.); Walter Rodrigues et. al., eds, Pesquisa Sobre Saúde Materno-Infantil e Planejamento Familiar, Rio Grande do Norte 1980 (Rio de Janeiro, Sociedade Civil Bem-Estar Familiar no Brasil, n.d.); Walter Rodrigues, et al., "Maternal-child health/family planning survey, Bahia State, Brazil - 1980" (Atlanta, Georgia, Centers for Disease Control, January 1982), mimeo; Sociedade Civil Bem Estar Familiar no Brazil, "Maternal-child health/family planning survey, Southern region, Brazil - 1981" (Atlanta Georgia, Centers for Disease Control, January 1983), mimeo; Leo Morris, et al., Contraceptive Prevalence Surveys: A New Source of Family Planning Data, Population Reports, Series M, No. 5 (Bethesda, Md., Population Information Program, the Johns Hopkins University, May/June 1981).

19/ Robert Lightbourne and Susheela Singh, "The World Fertility Survey: Charting global childbearing", Population Bulletin, vol. 37, No. 1 (Washington, D.C., Population Reference Bureau, March 1982), table 14, p. 41.

20/ World Population Trends and Policies, 1981 Monitoring Report (United Nations publication, Sales No. E. 82.XIII.2).

21/ In order to improve the comparison, the Economic Commission for Europe restricted tabulations for most countries to women in the first marriage, as some of the developed country samples did not cover remarried women. However, the inclusion or exclusion of women in later unions probably has a very minor effect on the level of contraceptive practice observed. Differences in the age range covered also limit comparability in some cases. Women in their late twenties through thirties typically have the highest levels of current use, so that a sample based on these ages will, other things being equal, have higher levels of use than one based on the entire reproductive span. However, most developed and developing country figures are based either on ages 15-44 or on ages 15-49, and this difference usually does not affect the level of use by more than 1-3 percentage points. Japan is an unusual case: as noted in table 3, the prevalence figure based on ages under 45 is 6 points higher than for ages under 50. Not only is the decline at higher ages unusually rapid in Japan but, largely because of late marriage, women aged 45 to 49 constitute an atypically large fraction of all married women aged 15 to 49.

22/ Henri Leridon and Jean-Paul Sardon, "La contraception en France en 1978, une enquête INED-INSEE", Population, vol. 34, special number (December 1979), table 4, p. 1357.

23/ Hungarian Central Statistical Office, Main Results of the 1977 Hungarian Fertility, Family Planning and Birth Control Study, TCS-77 (Budapest, n.d.), table 18.2, p. 103; Karen Dunnell, Family Formation 1976 (London, Office of Population Censuses and Surveys, 1979), table 8.1, p. 41.

24/ Jerzy Berent, Family Planning in Europe and USA in the 1970s, World Fertility Survey Comparative Studies No. 20 (Voorburg, The Hague, International Statistical Institute, 1982) table 16, p. 31.

25/ There was, however, no systematic association between the level of contraceptive use or the type of method employed and the proportion of pregnancies that were unwanted. Jerzy Berent, op. cit., pp. 29 and 31.

26/ Christopher Tietze, Induced Abortion, A World Review, 1983, 5th ed. (New York, the Population Council, 1983).

27/ The 1982 estimate was not published for the base population of currently married women as for earlier surveys, and differences in survey procedures may also weaken comparability over time. Results of another 1982 survey, designed to maintain comparability with the earlier series, are not yet available.

28/ Jerzy Berent, op. cit., table 1, p. 11.

29/ The surveys mentioned in the text were part of a long series conducted by the Mainichi newspapers. In additon, a 1974 survey conducted as part of the World Fertility Survey found a prevalence level of 67 per cent. This survey employed more detailed questions and probably achieved a more complete count of users.

30/ D. Nortman, op. cit., table 21, pp. 94-96.

31/ India, Ministry of Health and Family Welfare, Family Welfare Programme in India Year Book 1981-82 (New Delhi), table E-1, p. 107.

32/ Nortman, op. cit.

33/ Responses to the Fifth Population Inquiry, discussed in World Population Trends and Polices, 1983 Monitoring Report (United Nations publication, forthcoming).

34/ Weighted by the number of reproductive-aged married women in each country.

35/ Using the number of married women aged 15 to 49 in each country as the weighting factor.

36/ It should be noted that the average for developing countries with data is higher than the "medium" estimate of table 5, except in Latin America. Method-specific data were also unavailable for a few countries for which an estimate of overall prevalence is shown in table 1, and these countries had low prevalence levels.

37/ Women in consensual unions have been counted as "married" in most of the developing countries, but there are still some contraceptive users in Latin America and in many of the developed countries who were not included.

38/ Sub-national surveys conducted in Australia and Canada and reports from New Zealand indicate that sterilization is common in those countries. In Canada sterilization may be more widely practiced than in the United States of America. Population of Australia, Country Monograph Series No. 9 (United Nations publication, ST/ESCAP/210, 1982), pp. 230-258; Nicole Marcil-Gratton and Evelyne Lapierre Adamcyk, "Sterilization in Quebec", Family Planning Perspectives, vol. 15, No. 2 (March/April 1983), pp. 73-78; John A. Ross and Sawon Hong, Voluntary Sterilization: A Factbook of International Data from Surveys and Service Statistics (New York, Association for Voluntary Sterilization, forthcoming).

39/ Evert Ketting, "Contraception and fertility in the Netherlands", International Family Planning Perspectives, vol. 8, No. 4 (December 1982), pp. 141-147.

40/ Between 29 per cent (Dominican Republic) and 44 per cent (Costa Rica) of current users said that they wanted more children eventually in eight Latin American countries included in a United Nations study. The other Latin American countries were Colombia, Guyana, Jamaica, Mexico, Panama and Peru. Variations in the Incidence of Knowledge and Use of Contraception (United Nations publication, ST/ESA/SER.R/40), table 13, p. 70.

41/ John A. Ross and Douglas H. Huber, "Acceptance and prevalence of vasectomy in developing countries", Studies in Family Planning, vol. 14, No. 3 (March 1983), pp. 67-73.

42/ Ibid.

43/ Ibid.

44/ Ibid.

45/ In table 8 the pill is combined with injectable hormones, but the latter are important in only a few countries.

46/ William D. Mosher and Charles F. Westoff, Trends in Contraceptive Practice: United States, 1965-76 (Hyattsville, Md., National Center for Health Statistics, February 1982), table A, p. 8; Jacqueline Darroch Forrest and Stanley K. Henshaw, "What U.S. women think and do about contraception", Family Planning Perspectives, vol. 15, No. 4 (July/August 1983), pp. 157-166.

47/ Laurie Liskin, IUDs: An Appropriate Contraceptive for Many Women, Population Reports Series B (Baltimore, Md., Population Information Program, July 1982), table 3, p. B-108.

48/ D. Nortman, op. cit., tables 17 and 21, pp. 75-77 and 94.

49/ República de Paraguay, Encuesta Nacional de Fecundidad (Dirección General de Estadística, 1981), p. 91.

50/ Moira Gallen, "Abortion in the Philippines: a study of clients and practitioners", Studies in Family Planning, vol. 13, No. 2 (February 1982), pp. 35-44; T. Narkavonnakit, "Abortion in rural Thailand: a survey of practitioners", Studies in Family Planning, vol. 10, No. 8/9 (August/September 1979), pp. 223-229.

51/ David P. Smith and Benoît Ferry, Correlates of Breastfeeding, World Fertility Survey Comparative Studies (Voorburg, the Netherlands, International Statistical Institute, forthcoming).

52/ Where the duration of breast-feeding is short, rates of contraceptive use for women who want more children are relatively high in comparison with rates for women who have reached the desired family size. See World Population Trends and Policies, 1981 Monitoring Report, vol. I (United Nations publication, Sales No. E.82.XIII.2), pp. 83-86; Variations in the Incidence of Knowledge and Use of Contraception (United Nations publication, ST/ESA/SER.R/40), pp. 51-56, 81.

53/ See R. Schoenmaechers et. al., "The child-spacing tradition and the postpartum taboo in tropical Africa: anthropological evidence", in Hilary Page and Ron Lestaeghe, eds., Child-Spacing in Tropical Africa: Traditions and Change (London, Academic Press, 1981), pp. 25-71. For a number of countries included in tables 1 to 7 contemporary evidence about practice of abstinence was also available through the World Fertility Survey data tapes and reports.

54/ J. G. Cleland and I. Kalule-Sabiti, "Sexual activity within marriage: the analytic utility of World Fertility Survey data", WFS/TECH.2265 (London, World Fertility Survey, 1984).

55/ World Health Organization Task Force on Psychosocial Research in Family Planning and Task Force of Service Research in Family Planning, "User preferences for contraceptive methods in India, Korea, the Philippines and Turkey", Studies in Family Planning, vol. 11, No. 9/10 (September/October 1980), pp. 267-273.

56/ World Health Organization Task Force on Phychosocial Research in Family Planning, "A cross-cultural study of menstruation: implications for contraceptive development and use", Studies in Family Planning, vol. 12, No. 1 (January 1981), pp. 3-16.

57/ "Family planning in the 1980s: challenges and opportunities" (Recommendations of the International Conference on Family Planning in the 1980s, Jakarta, Indonesia, 26-30 April 1981), Studies in Family Planning, vol. 12, No. 1 (January 1981), pp. 3-16.

58/ Variations in the Incidence of Knowledge and Use of Contraception (United Nations publication, ST/ESA/SER.R/40), p. 91.

59/ Leo Morris et. al., Contraceptive Prevalence Surveys: A New Source of Family Planning Data, Population Reports, Series M, No. 5 (Baltimore, Md., Population Information Program, the Johns Hopkins University, May-June 1981), table 10, p. M-176. In the 11 surveys for which the information was shown in this source, women citing experience of or fear of side effects as the reason for non-use amounted to between 9 and 60 per cent (with an average value of about 25 per cent) of those who were not using contraception in spite of apparent risk of an unwanted or mistimed pregnancy. Over one third of former users in the Philippines said they gave up the last method because of side effects (32 per cent) or fears about the method (4 per cent). Another 22 per cent experienced an accidental pregnancy. Thomas W. Pullum et. al., "Fertility preferences and contraceptive orientation in the Philippines", paper presented at the IUSSP Seminar on the Analysis of the WFS Family Planning Module, 1-4 December, Malaysia, p. 35.

60/ Maria Mamlouk, Knowledge and Use of Contraception in Twenty Developing Countries, Population Reference Bureau Reports on the World Fertility Survey, No. 3 (Washington, D.C.), figure 7, p. 18; Dorothy Nortman, Population and Family Planning Programs, A Compendium of Data through 1981, 11th ed.(New York, The Population Council, 1982), table 18, pp. 80-83.

61/ Howard W. Ory, "Mortality associated with fertility and fertility control: 1983", Family Planning Perspectives, vol. 15, No. 2 (March/April 1983), pp. 7-63. However, evidence about long-term effects of pill use by young women is still accumulating. Richard Lincoln, "The pill, breast and cervical cancer, and the role of progestogens in arterial disease", Family Planning Perspectives, vol. 16, No. 2 (March/April 1984) pp. 55-63.

62/ Survey of Laws on Fertility Control (New York, United Nations Fund for Population Activities, 1979); Annual Review of Population Law, 1977-1980 editions (New York, United Nations Fund for Population Activities); for Italy, also response to the Fifth Population Inquiry, discussed in World Population Trends and Policies - 1983 Monitoring Report (United Nations publication, forthcoming).

63/ Miguel Gomez Barrantes and James McCarthy, "Female sterilization in Costa Rica", Studies in Family Planning, vol, 13, No. 1 (January 1982), pp. 3-11.

64/ Charles F. Westoff, et. al., "The recent demographic history of sterilization in Korea", International Family Planning Perspectives, vol. 6, No. 4 (December 1980), pp. 136-145.

65/ D. Nortman, op. cit., table 17, p. 78.

66/ Margaret F. McCann and Lynda Painter Cole, "Laparoscopy and minilaparotomy: two major advances in female sterilization", Studies in Family Planning, vol. 11, No. 4 (April 1980), pp. 119-127.

67/ Beth S. Atkins and Terrence W. Jezowski, "Report on the first international conference on vasectomy", Studies in Family Planning, vol. 14, No. 3 (March 1983), pp. 89-95.

68/ D. Nortman, op. cit., table 8, pp. 55-57.

69/ Ibid.

70/ "Facts about injectable contraceptives: memorandum from a WHO meeting", Bulletin of the World Health Organization, vol. 60, No. 2, (1982), p. 206.

71/ James F. Phillips et. al., "The demographic impact of the family planning-health services project in Matlab, Bangladesh", Studies in Family Planning, vol. 13, No. 5 (May 1982), pp. 131-140.

72/ Variations in the Incidence of Knowledge and Use of Contraception (United Nations publication, ST/ESA/SER.R/40); Robert E. Lightbourne, Urban-Rural Differentials in Contraceptive Use, World Fertility Survey Comparative Studies No. 10 (Voorburg, the Netherlands, International Statistical Institute, May 1980); Maria Mamlouk, op. cit.

73/ W. Parker Mauldin, Bernard Berelson and Zenas Sykes, "Conditions of fertility decline in developing countries, 1965-75", Studies in Family Planning, vol. 9, No. 5 (May 1978); D. Nortman, op. cit., table 6, pp. 24-54; Guyana, Ministry of Economic Development, Statistical Bureau, Guyana Fertility Survey 1975 - Country Report, vol. I (1979), p. 11.

74/ There are several countries for which the direct question about wanting no more children was not asked, or was reworded in a way that changed its meaning. In most countries the two approaches to measurement yielded roughly similar proportions of women who were apparently motivated to limit fertility, although there were some cases, particularly in Latin America, in which the proportion wanting no more children was higher by over 10 percentage points according to the direct question than according to the comparision of actual with desired family size. See, Robert E. Lightbourne and Alphonse L. MacDonald, Family Size Preferences, World Fertility Survey Comparative Studies No. 14 (Voorburg, The Hague, International Statistical Institute, 1982). Women who are classed as wanting no more children according to one measure but not the other typically show levels of contraceptive use intermediate between those classified consistently as wanting more children and those classified as wanting no more children by both measures.

75/ There are a few exceptions. In Bangladesh, Nepal and Pakistan the average number of living children is very similar between rural and urban areas, and in Indonesia, rural women appear to have slightly smaller families - 4.4 living children in rural areas as opposed to 4.8 and 4.9 in small and large cities, respectively.

76/ Lesotho, Nepal and Senegal are excluded from figure I because the sample base for one or more of the categories shown was very small (N less than 20).

77/ Germán Rodriguez, Assessing the Availability of Fertility Regulation Methods: Report on a Methodological Study, World Fertility Survey Scientific Reports No. 1 (Voorburg, the Netherlands, International Statistical Institute, 1977); Peerasit Kamnuansilpa and Aphichat Chamratrithirong, "Accessibility and availability of family planning in Thailand", paper presented at the IUSSP Seminar on the Analysis of the WFS Family Planning Module, 1-4 December 1981, Malaysia.

78/ Amy Ong Tsui, et. al., "Contraceptive availability differentials in use and fertility", Studies in Family Planning, vol. 12, No. 11 (November 1981), pp. 381-393; Kamnuansilpa and Chamratrithirong, op. cit.; Amy Ong Tsui, "Community effects on contraceptive use", paper presented at the Seminar on Collection and Analysis of Data on Community and Instutitonal Factors, London, 20-23 June 1983.

79/ Noor Laily Aziz, et. al., "Perception of family planning service availability in rural Malaysia", paper presented at the IUSSP Seminar on the Analysis of the WFS Family Planning Module, 1-4 December 1981, Malaysia, table 5.

80/ Tsui, et. al., op. cit. (1981).

81/ German Rodriguez, "Family planning availability and contraceptive practice", Family Planning Perspectives, vol. 11, No. 1 (January/February 1979), pp. 55-71; Anne R. Pebley and James W. Brackett, "The relationship of contraceptive availability to contraceptive use", International Family Planning Perspectives, vol. 8, No. 3 (September 1982).

82/ Tsui, et. al., op. cit. (1981).

83/ Aziz, et. al., op. cit., table 5.

84/ Elise Jones, "A new perspective on the role of contraceptive accessibility based on the WFS surveys", presentation at the annual meeting of the Population Association of America, 14-16 April 1983.

85/ See Elise F. Jones, The Availability of Contraceptive Services, World Fertility Survey Comparative Studies No. 37 (Voorburg, the Netherlands, International Statistical Institute, 1984)

86/ Based on unpublished tabulations.

87/ Jones, The availability of Contraceptive Services, op. cit., table 12.

88/ Some women who did not know an outlet were using modern methods, but the numbers were usually small. Anne R. Pebley and James W. Brackett, "The relationship of contraceptive availability to contraceptive use", International Family Planning Perspectives, vol. 8, No. 3 (September 1982), pp. 84-92.

89/ Richard M. Cornelius and John A. Novak, "Contraceptive availability and use in five developing countries", Studies in Family Planning, vol. 14, No. 2 (December 1983), pp. 302-317.

90/ Cornelius and Novak, op. cit.; Anne A. Way and Tessa M. Wardlaw, "Comparative data from contraceptive prevalence surveys: knowledge, use and availability of family planning in eight countries", Contraceptive Prevalence Surveys Reprint Series No. 6 (Columbia, Md. Westinghouse Health Systems, 1982); Kamnuansilpa and Chamratrithirong, op. cit.).

91/ M. Vaessen, "Knowledge of contraceptives: an assessment of World Fertility Survey data collection procedures", Population Studies, vol. 35, No. 3 (November 1981), pp. 357-373.

92/ Family planning services were reported to be available in nearly all the rural communities of Java and Bali. Ronald Freedman, et. al., Modern Contraceptive Use in Indonesia: a Challenge to Conventional Wisdom, World Fertility Survey Scientific Reports, No. 20 (Voorburg, the Netherlands, International Statistical Institute, 1981).

93/ Robert E. Lightbourne, Urban-Rural Differentials in Contraceptive Use, World Fertility Survey Comparative Studies, No. 10 (Voorburg, the Netherlands, International Statistical Institute, 1980).

94/ Jerzy Berent, Family Planning in Europe and USA in the 1970s, World Fertility Survey Comparative Studies, No. 20 (Voorburg, the Netherlands, International Statistical Institute, 1982).

95/ World Population Trends and Policies - 1981 Monitoring Report, vol. I (United Nations publication, Sales No. E.82.XIII.2), table 21, p. 67.

96/ Several countries were excluded from table 11 because the small numbers of urban women who had reached the desired family size precluded the presentation of the detail required for the table: Cameroon, Lesotho, Nepal, Senegal.

97/ See notes to figure 2.

98/ W. Parker Mauldin, et. al., "Conditions of fertility decline in developing countries, 1965-75", Studies in Family Planning, vol. 9, No. 5 (May 1978), p. 102.

99/ For a detailed discussion, see Geoffrey McNicoll and Masri Singarimbun, Fertility Decline in Indonesia: Analysis and Interpretation, Committee on Population and Demography Report No. 20 (Washington, D.C., National Academy Press,,1983).

Annex I

DERIVING ESTIMATES OF WORLD CONTRACEPTIVE PREVALENCE

The most serious difficulties in estimating world contraceptive prevalence concern the need to supply assumptions about contraceptive use in countries for which no national survey is available and the problem of obtaining an estimate for a particular year, given that the surveys used as sources were conducted at various times. These are formidable problems, and it is plain that any global estimate will be very approximate.

The estimation problem appears more serious for developing than for developed countries, because the range of variation between countries is wider -- hence the uncertainty about countries with missing data is greater -- and also because prevalence is changing more rapidly in developing countries. However, prevalence data are available for a larger proportion of the developing than of the developed world. The derivation of estimates for developing countries is discussed first, although the same general considerations apply to developed countries as well.

Developing countries

Table 1 (main text) shows estimates of current contraceptive practice for 54 developing countries and areas for dates in the 1970's and early 1980's. All but six surveys were conducted in 1975 or later. These 54 countries contain an estimated 81 per cent of the population of developing regions. For a few additional countries, estimates of contraceptive prevalence have been derived from acceptor statistics of family planning programmes or from data about volume of contraceptive supplies distributed. Prevalence estimates for three additional countries are shown in table 2, along with a more recent estimate for India, which is employed in place of the 1970 survey estimate reported in table 1. The addition of these countries increases coverage to 83 per cent of the population of developing regions.

Coverage is uneven according to region, being most complete - 94 per cent - for Asia (table A.I-1). Only about one half of the population of Africa and Latin America is covered by national-level estimates. Although only Fiji is represented within Oceania, estimates for this region can have little effect on the average for all countries, as Oceania contains only 0.1 per cent of the population of developing countries.

In many of the remaining countries there is some information about contraceptive practice from local or regional surveys. One way of proceeding would be to attempt estimates for individual countries, based on assumptions about how the subnational estimates relate to use levels for areas that were

not covered. This would still not yield estimates for all countries, and contraceptive prevalence often differs substantially according to region within countries, and betweeen rural and urban areas, making the problem of deriving national-level estimates from subnational data far from a trivial one.

Instead, a cruder procedure is employed here. First, regional prevalence levels are calculated, based only on those countries for which a national estimate is available. Next, for each major region a high, a medium and a low assumption about prevalence for the omitted population is made, the intent being to bracket the probable true level of use. These estimates are informed to some extent by the level of development of the omitted countries, the Governments' policies towards and degree of support of family planning, and in some cases by information from subnational surveys, but no strong claim can be made for the accuracy of the estimates. The assumptions are set forth in some detail below, primarily to aid other researchers, should they so desire, to employ different assumptions, and also to aid in updating the estimates as new information becomes available. The specific assumptions are given after a discussion of other data problems.

A second major difficulty is that the prevalence estimates pertain to a variety of dates. The choice of reference date can make a large difference. For the countries with two or more surveys covered in table 4, plus separate trend estimates for India and Iran,a/ the average population-weighted increase in prevalence was about 1.5 per cent of married women per year in Asia and 2.4 per cent in Latin America. If these rates were typical of these regions for the late 1970's, prevalence would have grown by 8 per cent of married women in Asia and by 12 per cent in Latin America between 1975 and 1980.

Two ways of approaching the reference-date problem were considered. First and most simply, one might calculate the average date of the most recent prevalence estimate for the various countries, and regard this as the date to which the global estimate pertains. Second, the estimates might be adjusted individually to pertain to a chosen reference date before the regional averages were formed. The difficulty with the latter procedure is that trend estimates exist for only some of the countries, and depending on the reference date chosen, for many countries that have trend data the adjustment might require extrapolation beyond the period over which trends have actually been observed. Because of these problems, the first approach is adopted here.

Although the median date of the surveys and other estimates covered in tables 1 and 2 is 1979, the estimates for the largest countries mainly pertain to more recent dates. The population-weighted mean is 1980/81, and this will be the period to which the global estimate is considered to apply.

An additional problem is the need to derive weighting factors for combining the country prevalence estimates. The weights should ideally be the number of reproductive-aged married women in each country, since the prevalence estimates are based on this group. If differences between countries in the proportion married could be ignored, the approximate total

numbers of women aged 15-49 in 1980, readily available through population estimates and projections prepared by the United Nations Population Division, could be employed as weights. Information about marital status is also available for most countries, but these data are not conveniently summarized and do not all pertain to a single date. However, because contraceptive use tends to be low where proportions married are highest, it was considered desirable to make at least a crude adjustment for the percentage currently married.

Estimates of proportions married (or in a consensual union) among all reproductive-aged married women were taken either from the survey that supplied the prevalence estimate, if the sources cited in table 1 supplied such a figure, from another survey, or from the most recent available census. For a few countries no estimate of the proportion married was available; in these cases the regional average for countries with data was attributed. The average proportions currently married (or in a consensual union) computed in this way were, for the world as a whole, 69 per cent; for developing countries 72 per cent; and for developed countries 63 per cent. For the developing regions (excluding developed countries in Asia and Oceania), the averages were: Africa 76 per cent; Latin America 59 per cent; East Asia 67 per cent; Southeastern Asia 67 per cent; Southern Asia 83 per cent; Western Asia 70 per cent; and Oceania 61 per cent. For each country, the proportion married was multiplied by the estimated total number of women aged 15 to 49 in 1980, and the resulting approximate numbers of married women were used as weighting factors.

There are some further data problems for which no adjustment is made here. One difficulty is that not all the surveys shown in table 1 were genuinely national in scope. For instance the survey in Mauritania covered only the sedentary population, in Sudan only the northern part was surveyed, and in Malaysia only West Malaysia was included. Many other surveys omitted small portions of the total population, usually because of the difficulty and expense of covering sparsely settled areas. In most if not all of these cases contraceptive prevalence in the omitted areas was probably lower than for the country as a whole. However, this is a comparatively minor problem, since most surveys did sample all or nearly all the population, and no adjustment for coverage within countries is attempted here. To some extent the likelihood of upward bias due to restricted coverage within some countries is counterbalanced by the probable underestimation of use in India (1981/82) and a few other countries, where estimates were taken from table 2. The latter estimates of necessity exclude traditional non-supply methods and, at least in the case of India, the estimate excludes contraceptives supplied through the private sector.

Another comparatively minor problem is that the age range to which the prevalence estimates pertain varies. For the developing countries, most estimates in table 1 are based on married women aged 15 to 49 (or under 50), but a substantial number are based on ages 15 to 44. Contraceptive prevalence typically falls with increasing age, after age 35 or 40. In most countries, prevalence estimates based on age 15 to 44 would be higher by 1 to 3

percentage points than those based on ages 15 to 49. No adjustment is made here for the small effect of differing age ranges. In effect, the global estimates pertain to an age range somewhere between 15 to 44 and 15 to 49.

Assumptions about use levels for countries with missing data

Table A.I-2 summarizes the data and assumptions used to derive global estimates of contraceptive prevalence. Separate assumptions are made for each of the major less developed regions and for all developed countries combined.

Africa

Coverage is very uneven according to subregion within Africa (table A.I-1), with 72 to 91 per cent of the population covered by a prevalence estimate in North Africa and the Southern and Western subregions, and under 20 per cent in the Eastern and Middle subregions. Of the remaining population, about 70 per cent live in the Eastern and Middle subregions, 10 per cent in Northern Africa, 18 per cent in Western Africa and only 1 per cent in Southern Africa.

For the countries with data, the Southern subregion shows by far the highest level of use, due to the estimate of 40 per cent employed here for the largest country of the subregion, South Africa. This is itself an approximate figure; a prevalence level of 50 per cent was reported from a national survey in South Africa, but this included breast-feeding and possibly post-partum abstinence, practices which have not been counted as contraception in this report. The rough estimate of 40 per cent is slightly higher than the reported 37 per cent of reproductive-aged married women using modern clinic or supply methods.

North Africa also shows somewhat higher levels of use than observed in the remaining areas. The weighted average contraceptive prevalence level for the other countries with data (excluding South Africa and Northern Africa) is about 7 per cent.

It is quite possible that the average level of use in the countries without prevalence estimates is even lower than 7 per cent. Many of the countries are currently at very low levels of economic development, and many Governments provide no support for family planning activities. It is probably safe to conclude at least that the average prevalence for the countries without data is no higher than the weighted average of 15 per cent for the African countries with an estimate, and this is therefore used as the "high" assumption in table A.I-2. The low estimate is taken to be 1 per cent, and the medium estimate is 7 per cent, which is equal to the observed weighted average for countries outside the Northern and Southern subregions.

Latin America

National prevalence data exist for only about half of the Latin American population. Of the omitted population, roughly 90 per cent live in the relatively highly developed Temperate subregion (consisting chiefly of Argentina, Chile and Uruguay) or in Brazil. Although a national-level estimate was unavailable for Brazil, surveys conducted in various Brazilian states in 1978-1980 give grounds for believing that contraceptive prevalence is at least as high as the average for Latin America of 41 per cent, shown in column 3 of table A.I-2.b/ In view of this, and assuming that prevalence in Temperate South America is above the regional average, it seems reasonable to regard the average of 41 per cent, observed for countries with national surveys, as a lower-bound prevalence estimate for the remaining population. (Consistent with this assumption, United Nations estimates indicate somewhat lower fertility for the omitted countries, weighted by population size, than for those with an estimate of contraceptive prevalence.)c/ However, to be safe, the lower bound shown in table A.I-2 is 35 per cent. The high assumption is 55 per cent; this is near the low end of the range observed for developed countries, and is substantially below the levels already attained in some Latin American countries and areas. The medium level is halfway between the low and high estimates.

It should be noted that the prevalence estimates for Guadeloupe and Martinique in table 1 are based on all women aged 15-49, and are thus not comparable to the figures for other countries. In computing the average for Latin America, the prevalence for married women in these areas was assumed to be 40 per cent. This appears approximately consistent with the levels of ever use reported for ever-married women in Guadeloupe and Martinique and is somewhat lower than the number obtained by dividing the prevalence level for all women by the proportion currently married (46 per cent using contraception for Guadeloupe and 54 for Martinique). The latter estimates would be correct if it could be assumed that only women classed as being married (i.e. in a legal or consensual union) were using contraception, but it is not clear that this assumption is justified. In any case prevalence in these areas has only a small effect on the average for the entire region.

Asia and Oceania

A prevalence estimate was available for 94 per cent of the population of Asia. Most (72 per cent) of the remaining people live in Southeastern Asia and 13 to 14 per cent in each of East and Western Asia. For the countries with data, the weighted average prevalence is 43 per cent (column 3, table A.I-2). This figure is heavily influenced by the high prevalence level in China; without China the average is 26 per cent (25 per cent in South Asia alone). Although prevalence is probably fairly high in some of the omitted countries, overall the countries without data are likely to have lower levels of contraceptive practice than the average for countries with data. Some of the missing countries are at very low levels of economic development, and countries with organized family planning programmes are more heavily represented in the group with a prevalence estimate than in the group for

which contraceptive prevalence has not been assessed: 5 per cent is taken as the low estimate, and 30 per cent - somewhat above the observed average for countries other than China - as the high estimate. The medium estimate, 17 per cent, is approximately halfway between the low and high figures. The same estimates are applied to Oceania, which in table A.I-2 has been combined with Asia.

The average prevalence levels resulting from these assumptions are shown in table A.I-3. The only source of difference between the low and high estimates in this table is the assumption about the level of use in countries for which no national survey or other estimate was available. The range is narrow for Asia, because an estimate existed for 94 per cent of the Asia population, and alternate assumptions about the remaining countries do not have a large effect on the average.

An extra margin of uncertainty should perhaps be added to these estimates, to allow for doubts about the accuracy of the prevalence figures in tables 1 to 3. Heavy reliance has been placed on survey estimates in this report, because these are considered to give the most accurate available representation of current practice of all methods combined. None the less survey estimates of prevalence are affected by the wording of questions -- for instance by whether methods are described by the interviewer before the respondent is queried about her own contraceptive practice -- and it is not always obvious what practices should be, or in fact have been, included as "contraception". Even the idea of "current" practice is ambiguous with regard to some methods; rhythm, for instance, is inherently periodic in application. In addition to biases that may arise from problems of sample design, variations in questions, and errors in recording answers, it has sometimes been suggested that respondents may deliberately under-report or over-report contraceptive practice. In countries where the Government favours lowered fertility, respondents might identify the interviewer with the official family planning programme and give answers that would be expected to please such a programme representative. Conversely, contraceptive practice might be under-reported in communities where leaders or most residents disapprove of family planning. These problems are not necessarily unimportant, but there is no definite information about their net effect on estimates of the level of current contraceptive practice.

In table 5 (of the main text) it has been assumed, for the low estimate, that the observed prevalence estimates for countries with data have overstated the level of use in each region for 1980 to 1981 by 3 percentage points and, for the high estimate, that the observed data understated the true level by 3 points. This produces a wider range between the low and high estimates in table 5 than in table A.I-3; the difference is greatest for Asia.

Developed countries

National survey-based prevalence estimates were available for countries comprising 62 per cent of the developed world population (table A.I-1),d/ a substantially lower fraction than that the developing countries. The Union of Soviet Socialist Republics accounts for about 60 per cent of the population of the remaining developed countries, and Europe contains another 30 per cent. For developed countries with data, the weighted average prevalence level is 70 per cent, and for individual countries (excluding Czechoslovakia, where the data are not comparable), the values range from 51 per cent in Spain to 85 in Belgium.

There is information from subnational surveys indicating that prevalence is high in some of the remaining countries, but there are no reliable data for the USSR. Fertility levels in the USSR somewhat exceed the average for all developed countries, which may indicate that contraceptive prevalence is toward the low end of the range observed in developed countries. However, fertility is determined not just by the level of contraceptive use, but also by marriage patterns, the amount of induced abortion, the types of contraception employed and a number of other factors. In particular, high levels of induced abortion have been reported for the USSR. Logically speaking, it would be possible for marital fertility to be brought to low levels by induced abortion alone. In order to arrive at a reasonable estimate of contraceptive prevalence for all developed countries combined, it is thus worth considering the available information about abortion, to see whether this gives reason to suppose low levels of contraceptive prevalence in the USSR.

Widely varying estimates of the incidence of induced abortion have been published for the USSR. The only available report from a Soviet source that is both recent and national in scope is that "there are slightly more abortions than births in the Soviet Union each year".e/ Comparatively speaking, this is a high rate, though it does not approach the level recorded for Romania in the 1960's, before the imposition of restrictions on grounds for abortion. Given the current level of fertility in the USSR, "slightly more abortions than births" would imply a total abortion rate of approximately 2.6, comparable to the highest levels reached in Hungary during the 1960's.f/ Such rates are compatible with extensive contraceptive practice, especially if traditional methods predominate. In Hungary in 1966, for instance, a survey showed contraceptive prevalence to be 67 per cent (table 3). Fertility was lower in Hungary during that period (TFR of 1.9 in 1966) than in the USSR for the late 1970's (2.4). This suggests that contraceptive prevalence may be lower in the USSR, but it is unclear how low.

The figure of slightly more abortions than births is substantially lower than other recently published estimates for the USSR. Some of the latter rest on extrapolation to the whole country of reports for individual cities, which is likely to produce a large overestimate. The basis of some estimates is unclear.g/

Given several strong assumptions, a fertility model proposed by JohnBongaarts can be used to help decide what levels of contraceptive practice would be roughly compatible with abortion figures that have been advanced for the USSR.h/ Application of this model suggests that the highest abortion estimates for the USSR would not be consistent with contraceptive prevalence levels as high as observed in other developed countries. The Soviet report of slightly more abortions than births, on the other hand, appears consistent with a prevalence level towards the lower end of the range observed in developed countries, and it is assumed here that prevalence is in this range. Favouring this conclusion is the observation that, for countries where contraceptive prevalence has been measured, fertility -- at least marital fertility -- as low as in the USSR has been observed only when over one half of reproductive-aged married women have been using contraception.i/ But on such indirect evidence it is impossible to be certain.

In order to derive contraceptive prevalence estimates for all developed countries combined, a 20-point range of uncertainty has been allowed between the low and the high estimates for countries without data. The high point of the range, 75 per cent, is 5 points above the average for countries with data, and the low point, 55 per cent, is near the lowest values observed for developed countries. The medium estimate is halfway between the low and high figures. The implied prevalence levels are shown in table A.I-3, and, as was done for the developing countries, is shown with an allowance for possible error in the observed data, in table 5.

The median date for the developed-country estimates shown in table 3 is 1977, and the mean date, weighted by the country population, is 1979. This is about one and one half years earlier than for the developing country estimates, but given the high prevalence levels already attained in most developed countries the range of estimates given here is very likely to encompass the true level of use in 1980/81 as well.

The age range for the developed country estimates is also more variable than for the developing countries, and few of the surveys included women aged over 45. This tends to make the developed country prevalence estimates higher than if the age range had been 15-49 years. As noted in the main text and in table 3, the definition of "current" use was also somewhat variable, as were the methods counted in the definition of contraception. No adjustment has been made for these factors in the estimates presented here.

Specific contraceptive methods

The main text of this report discusses specific contraceptive methods for countries with available data. Averages for these countries (table 8) are surprising in a number of ways, and it is of interest to inquire whether the impressions gained from countries with data are true for the world as a whole. In particular, is it true that a larger fraction of married women (or their husbands) use sterilization in all developing countries combined than in

developed countries? And is the IUD really employed by more women than is use of the pill? While it is not possible to make precise statements about the number of users of each method for the world as a whole, some insight can be gained regarding the sensitivity of the results to alternate assumptions about use patterns in the populations not covered in table 8.

As a first approximation, the averages observed for countries with data might be assumed to apply to the remaining countries in each geographic region. It is clear from inspection of tables 6 and 7 that such an assumption is not particularly firmly grounded: for countries with data there are sharp differences within regions in the percentage distribution of methods used, and there is no guarantee that distributions for countries without data will resemble those included in the averages of table 8. Still, there is some patterning according to region in the types of contraceptive methods that are most common. For instance sterilization accounts for over 20 per cent of contraceptive practice in 14 of 20 Latin American countries (table 6), but it is uncommon in Southwestern Asia and in most of Europe. Table A.I-4 shows method distributions for all countries, based on the following assumptions:

(a) Within each region, the "medium" estimate of prevalence (from table5) is assumed;

(b) For developing countries, the percentage distribution of specific methods for countries with data (table 8) is assumed to apply to the countries without data, in each major region (minor region for Asia);

(c) For subregions of Europe, the percentage distribution of specific methods from table 8 is assumed to apply to other countries in the subregion;

(d) For the USSR, the method distribution of Eastern Europe (table 8) is assumed to apply;

(e) For other developed countries (North America and Oceania) the method distribution of the United States is assumed.

Assumptions about use patterns in the USSR have a substantial effect on the average for all developed countries, and for this reason deserve special comment. In effect, by attributing the average pattern for Eastern Europe to the USSR, it has been assumed that contraceptive sterilization is rare. This is broadly consistent with reports that sterilization is performed in the USSR only for therapeutic reasons.j/ There is less information about the other aspects of the method distribution. Attribution of the pattern observed in a neighbouring developed region seems at least as reasonable as any other particular set of assumptions, in the absence of more definite information.

Table A.I-4, like table 8, shows contraceptive sterilization to be more prevalent in developing than in developed countries. Though the size of the difference between the two groups may not be correct, depending as it does upon assumptions for the countries without data, it should be recalled that method-specific data are available for roughly 80 per cent of the population

of developing countries; even if no one in the remaining countries were using sterilization, the average for all developing countries would still be 13 per cent of couples with the wife in the reproductive ages -- 4 per cent greater than the average for developed countries with data (table 8) and 6 per cent greater if the assumptions underlying table A.I-4 are accepted as reasonable. It thus seems likely that sterilization has indeed become more prevalent in developing than in developed countries on the average.k/

The only other method that shows higher overall prevalence in developing than in developed countries is the IUD. The difference is sufficiently large that its direction is unlikely to be due to the particular assumptions made in table A.I-4 about the countries without data. The table also shows the importance of China in determining the average figures. Approximately one third of reproductive-aged married women in China use the IUD, even more than in Finland or Norway (28 to 29 per cent). This unusually high prevalence level, and China's large population, mean that this country contains over half -- probably considerably over half -- the world's IUD users.

Also because of the influence of China, the IUD appears, given the assumptions underlying table A.I-4, to have more users worldwide than does the pill. The difference is small, and given other assumptions the pill might appear to have more users. Apart from China, the pill is approximately three times as common as the IUD, on the average.

The average method distributions of table A.I-4 and table 8 (shown in the main text) can be compared with estimates derived earlier by Speidel and Ravenholt:l/

	1970		1977	
	Millions of users	Per-centage	Millions of users	Per-centage
Voluntary sterilization	20	14	80	32
Pill	30	20	55	22
Condom	25	17	35	14
IUD	12	8	15	6
Other (diaphragm, spermicides, rhythm, withdrawal etc.)	60	41	65	26
Total	147	100	250	100

The percentage distribution of particular methods estimated by Speidel and Ravenholt for 1977 corresponds closely to the average distribution shown in table 8 for countries with data, excluding China. Discrepancies with the distribution in table A.I-4 (countries other than China) are somewhat greater. With China included, though, the overall average method distribution is much different, as remarked earlier. It seems likely that discrepancies

between the Speidel and Ravenholt estimates and those given here are primarily the result of the new data for China that have been incorporated into the present report. These differences cannot be taken as a measure of trends.

A final cautionary note is in order. As is clear from tables 6 and 7, there is no sign that the relative importance of different contraceptive methods has reached a constant state in any region. Even if the averages shown here are reasonable approximations for the late 1970's and early 1980's, rapid change in the types of methods, as well as in the overall level of contraceptive use, is likely to continue.

Notes

a/ Estimates derived from family planning services and supplies distributed indicate that prevalence of contraception increased between 1969 and 1978 by 2.2 per cent of married women per year in Iran, and in India prevalence of methods supplied through the public sector increased by 1.2 per cent of women per year between 1976 and 1981. Nortman, op. cit., cited in footnote 12 above, table 21, pp. 94-96.

b/ Rodrigues, Schiavo, et. al., cited in footnote 13 above.

c/ Estimates for 1980-1985, United Nations Population Division, World Population Prospects as Assessed in 1982, to be published.

d/ Excluding Czechoslovakia.

e/ Alexander I. Smirnov, Deputy Chief of the Social Planning and Population Department of the State Planning Committee, reported by United Press International, 3 June 1981, cited in C. Tietze, Induced Abortion, A World Review, 1983, 5th ed. (New York, The Population Council, 1983), p.24. It is not known whether this figure is confined to induced abortions; women treated for complications of spontaneous abortion are sometimes combined, in medical records, with numbers of induced abortions.

f/ This total abortion rate was derived by assuming that there were 1.05 times as many abortions as births in the USSR in the period 1975-1980 and that the age pattern of age-specific abortion rates reported for Hungary in the late 1960's could be applied to the USSR. Fertility rates for the USSR were taken from United Nations Population Division estimates; age-specific abortion rates for Hungary were taken from Tietze, op. cit.

g/ A discussion of estimates and references to their sources can be found in Tietze, op. cit.

h/ John Bongaarts has proposed a simple model for analysing population differences in fertility levels as a function of their major proximate determinants:

$$TFR = TF \times C_m \times C_c \times C_a \times C_i$$

where TFR is the observed total fertility rate, TF is a hypothetical maximum level of fertility, and the other terms are indices with values between 0 and 1, representing the fertility-reducing effects of the major proximate determinants of fertility. The values of the indices are calculated from data pertaining to proportions married (C_m), contraceptive prevalence and methods employed (C_c), induced abortion (C_a) and length of post-partum infecundity or its main determinant, breast-feeding (C_i). In fact, the model is a little more complicated, since the level or age pattern of fertility influences some of the indices, and information about contraception is also used to calculate the index of abortion. The rationale for the model and details of index construction are set forth in John Bongaarts and Robert G. Potter, Fertility, Biology and Behavior (New York, Academic Press, 1982). The hypothetical maximum level of fertility, TF, cannot be measured directly, but Bongaarts has reported that if TF is set at 15.3 children per woman, most of the variance in TFR between countries is explained by the model. Values of TF in the range of 13 to 17 would reproduce the TFR exactly, in most countries studied. For the USSR in 1975-1980 the TFR was roughly 2.4, and C_m was 0.53. The latter value is derived from proportions married as reported in the 1970 census and the most recent available data about the age pattern of fertility. Data are not available to estimate C_i, but a value of 0.93 has been employed by Bongaarts for a number of developed countries. Given this combination of data and assumptions, including the assumption that TF is in the range of 13 to 17, the model can be used to see what combinations of contraceptive prevalence and use-effectiveness would be roughly consistent with the various reported levels of induced abortion in the USSR.

It should be remarked first that the model has been tested primarily on countries where the level of abortion is either known to be, or has been assumed to be, lower than the levels suggested recently for the USSR. More generally, while this model makes fewer data demands than many other reproductive models, empirical testing of the Bongaarts model's ability to account for fertility variations has been hindered by absence or poor quality of information about some of the crucial variables. Assumptions about abortion and use-effectiveness of some or all contraceptive methods have usually been necessary in empirical applications. None the less, this model provides the best way currently available of deciding whether reported rates of induced abortion are inconsistent with high levels of contraceptive prevalence in the USSR.

Using the values specified above for the USSR (TFR= 2.4, C_m= 0.53, C_i= 0.93, TF between 13 and 17), and a total abortion rate of 2.6, the Bongaarts model indicates a contraceptive prevalence level of approximately 45 to 60 per cent if the level of contraceptive use-effectiveness is 80 per cent. If the level of use-effectiveness is 90 per cent, the model implies a contraceptive prevalence level approximately in the range of 40 to 55 per cent. Both of these levels of use-effectiveness are within the range employed by Bongaarts for other countries. For developed countries Bongaarts has generally employed higher estimates of use-effectiveness, but in a separate

analysis Frejka assumed effectiveness levels of about 80 per cent for some European countries with heavy reliance on traditional methods. (These levels of use-effectiveness are not shown by Frejka but are implied by the values of C_c and the levels of contraceptive prevalence shown. Thomas Frejka, "Induced abortion and fertility: a quarter century of experience in Eastern Europe", Population and Development Review, vol. 9, No. 3 (September 1983) pp. 494-520.

Although a rather wide range of prevalence estimates results from the assumptions above, the true value could lie outside this range. Not only is the model itself in need of further testing, but it will be noted that measured values of the other indices, C_m and C_i, were not available at all or were unavailable for the period desired. Also, if certain implicit assumptions of the model are untrue (for instance, assumptions about the marital status of women obtaining abortions), then it is unclear whether the model would give good results. Still, despite all these grounds for uncertainty, it can be concluded that the figure of "slightly more abortions than births" is consistent with contraceptive prevalence for the USSR that is within the range observed in other developed countries. Values towards the lower end of that range appear most likely.

Somewhat higher levels of induced abortion than those employed in the preceding paragraph would also be consistent with contraceptive prevalence levels towards the lower end of the range observed in developed countries. However, a round-figure estimate of 10 million abortions in 1970, advanced by the International Planned Parenthood Federation, would imply that the level of contraceptive prevalence in the USSR was probably well under 50 per cent. (The TFR in 1970 was approximately 2.5. The estimate of 10 million abortions implies a total abortion rate of roughly 5.7, assuming as before that the age-specific abortion rates follow the age pattern for Hungary in the late 1960s. If C_m= 0.53, C_i= 0.93 and use-effectiveness = 0.8, then contraceptive prevalence of roughly 20 to 35 per cent would be consistent with the Bongaarts model.) Even higher levels of abortion have been suggested elsewhere. The evidence supporting the International Planned Parenthood Federation estimate or any of the other very high estimates appears extremely weak, though. These levels of abortion are also far outside the range over which the Bongaarts model has been tested.

i/ In Japan, contraceptive prevalence, for married women aged under 50, was below 50 per cent until about 1965, according to surveys conducted by the Mainichi newspapers. Although the TFR in Japan had, before 1965, fallen below the level observed in the USSR in the late 1970's, marital fertility in Japan remained above the level for the USSR.

j/ World Population Trends and Policies, 1981 Monitoring Report, vol. II (United Nations publication, Sales No. E.82.XIII.3), table 44, pp. 146-177.

k/ J. J. Speidel and Ravenholt cited in Cynthia P. Green, Voluntary Sterilization: World's Leading Contraceptive Method, Population Reports, Special Topics Monographs No. 2 (March 1978), p. M-38.

l/ Several developed country surveys did not inquire about contraceptive sterilization. In these, sterilization is probably an important method only in Denmark. As shown in annex II, those contraceptively sterilized could not exceed 12 per cent of interviewed women; this is the percentage reported as infecund for any reason. Allowance for the undercount of sterilization in Denmark would not affect the conclusion above.

Table A.I-1. Percentage of population for which a recent estimate of contraceptive prevalence is available, and average contraceptive prevalence for countries or areas with data, by region

	Estimated total population in 1980 (thousands)	Population of countries with prevalence estimate, as a percentage of 1980 total population	Weighted a/ mean regional contraceptive prevalence for countries with data	Countries with an estimate of contraceptive prevalence
World	4,453,158	78	...	
		A. Less developed regions		
Total	3,317,251	83	...	
Africa	475,983	53	15	
Eastern Africa	136,658	18	11	Kenya, Mauritius, Zimbabwe
Middle Africa	54,614	16	2	Cameroon
North Africa	108,150	80	22	Egypt, Morocco, Sudan, Tunisia
Southern Africa	32,766	91	38	Lesotho, South Africa
Western Africa	143,796	72	6	Benin, Ghana, Mauritania, Nigeria, Senegal
Latin America	362,130	49	41	
Caribbean	29,548	63	42	Barbados, Dominican Republic, Guadeloupe, Haiti, Jamaica, Martinique, Puerto Rico, Trinidad and Tobaago
Central America	92,294	97	38	Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Panama
Temperate South America	42,252	0	...	
Tropical South America	198,036	36	45	Colombia, Ecuador, Guyana, Paraguay, Peru, Venezuela
Asia	2,473,996	94	42	
East Asia	1,065,809	98	70	China, Hong Kong, Republic of Korea
South Asia	1,408,187	91	25	
Southeastern Asia	361,683	72	34	Indonesia, Malaysia, Philippines, Singapore, Thailand
Southern Asia	948,665	99.8	22	Afghanistan, Bangladesh, India, Iran, Nepal, Pakistan, Sri Lanka
Western Asia	97,838	80	30	Iraq, Jordan, Lebanon, Syrian Arab Republic, Turkey Yemen Arab Republic
Oceania	5,142	12	41	Fiji

table continues

Table A.I-1 (Continued)

	Estimated total population in 1980 (thousands)	Population of countries with prevalence estimate, as a percentage of 1980 total population	Weighted a/ mean regional contraceptive prevalence for countries with data	Countries with an estimate of contraceptive prevalence
		B. More Developed Regions		
Total	1,135,907	62	...	
Americas	251,887	90	76	United States of America
Asia	116,701	100	56	Japan
Europe	483,938	74	70	
Eastern Europe	109,784	71	70	Bulgaria, Hungary, Poland, Romania
Northern Europe	81,821	95	76	Denmark, Finland, Norway, Sweden, United Kingdom
Southern Europe	138,512	91	65	Italy, Portugal, Spain, Yugoslavia
Western Europe	153,820	51	79	Belgium, France, Netherlands
Oceania	17,888	0	...	
USSR	265,493	0	...	

Sources: tables 1, 2 and 3; population estimates from United Nations Population Division, World Population Prospects as Assessed in 1982, to be published.

a/ Estimated number of currently married women, ages 15 to 49, used as weights.

Table A.I-2. Data and assumptions for estimates of world contraceptive prevalence

Region	Currently married women aged 15-49: number for region as a proportion of world total (1)	Women in countries with prevalence data, as a proportion of all currently married reproductive-aged women in the region (2)	Weighted a/ mean prevalence level for countries with data (3)	Countries with missing data: Assumed prevalence level		
				low (4)	medium (5)	high (6)
Developing countries						
Africa	.110	.51	15	1	7	15
Latin America	.070	.48	41	35	45	55
Asia and Oceania	.575	.95	43	5	17	30
Developed countries	.246	.59	70	55	65	75

Sources: table A.I-1, and assumptions explained in text.

a/ Weighted by the estimated number of currently married women aged 15 to 49 in each country.

Table A.I-3 Estimates of the percentage currently using contraception, for currently married women in the reproductive ages, with no allowance for errors of measurement

	Assumption about prevalence in countries for which no estimate was available		
	Low	Medium	High
World			
Total	43	45	47
Total, excluding China	35	38	41
Developing countries			
Total a/	36	38	39
Total a/, excluding China	23	24	27
Africa	8	11	15
Asia	41	42	43
East Asia	69	69	69
South Asia	23	24	25
Latin America	38	43	48
Developed countries			
Total	64	68	72

Source: Calculated from table A.I-2.

a/ Including developing countries in Oceania.

Table A.I-4. Percentage of reproductive-aged married women using specific contraceptive methods, for groups of countries: regional average use pattern attributed to countries lacking data.

	Any method	Sterili-zation	Pills or injectables	IUD	Condom	Other
	A. Based on all currently married women					
World total	45	13	8	10	4	10
Total, excluding China	38	9	9	3	5	12
Developing countries	38	14	6	12	1	4
Total, excluding China	24	10	6	2	1	5
Developed countries	68	7	15	5	13	28
	B. Based on current users					
World total	100	28	18	22	10	22
Total, excluding China	100	24	23	8	13	31
Developing countries	100	38	16	31	4	11
Total, excluding China	100	40	25	10	6	19
Developed countries	100	11	22	7	19	41

Sources: Tables 5 and 8.

Note: Within each region, the "medium" estimate of overall contraceptive prevalence has been assumed (table 5). See text for explanation of assumptions about method distributions for countries lacking data.

Annex II

CONTRACEPTIVE AND NON-CONTRACEPTIVE STERILIZATION

As sterilization becomes more common, the way it is measured increasingly affects the apparent overall level of contraceptive practice. Surgical sterilization is performed for health reasons as well as contraceptive ones, and it is often difficult to separate these motivations. This measurement problem is discussed below. Because female sterilization is in most countries much more common than male sterilization, the discussion focuses on measurement of the former. Information from the World Fertility Survey (WFS) about the prevalence of contraceptive and non-contraceptive sterilization is also presented.

There have been three basic approaches to the classification of sterilization in discussions of contraceptive use. Probably the most common has been to treat sterilization as a contraceptive method if the operation was reportedly performed partly or entirely to avoid having more children but not if it was performed for health reasons only. A second approach is to count all surgical sterilization as contraceptive use, and the third is to ignore sterilization and focus solely on the use of reversible methods.

The statistics in the main text of this report represent a mixture of analytic approaches, depending on the source from which the data were obtained. Most often, contraceptive sterilization is included in the contraceptive prevalence figures, but surgical sterilization solely for health reasons is not. Where sterilization was excluded, this is noted in the tables, but it is not in every case clear from the data source how non-contraceptive sterilization was treated.

Differences in the purpose of the analysis are one reason for the variety of treatments of sterilization. In particular, some analysts desiring to model the fertility effects of contraception have preferred to include all surgical sterilization in the measure of contraception because both therapeutic and contraceptive sterilization affect fertility. a/

The data source, rather than interests of the analyst, frequently determines the type of sterilization data published. If information comes from medical records there may be no way of telling how many of the total number of sterilizations were performed partly or entirely for contraceptive reasons, and the records may not cover all sterilizations performed. Surveys have usually inquired specifically about contraceptive sterilization but have not always asked about sterilization performed for health reasons. Some surveys failed to inquire about sterilization at all, though in most such cases there was reason to think that contraceptive sterilization was rare.

The classification of sterilizations according to contraceptive intent may be sensitive to nuances of question phrasing in surveys, and the questions have varied considerably. Recent "contraceptive prevalence" surveys have contained questions about knowledge and use of sterilization, and it seems

likely from the context of the questions -- they appeared alongside questions about reversible methods -- that respondents would report only sterilization for contraceptive purposes. However, in many of the surveys women were not explicitly asked the reason for sterilization. Most WFS and some other surveys have included separate questions about sterilization for any reason and (usually only for female sterilization) about the purpose of the operation. More specifically, in the WFS the usual questions about female sterilization were: "Have you had an operation that makes it impossible for you to have any (more) children?" and, if the answer was "yes": "Was one purpose of that operation to prevent you having any (more) children?" b/ The latter question may tend to classify more operations as contraceptive in intent than would one asking whether the woman had been sterilized because she had all the children she wanted; some sterilizations are performed because of a belief that continued childbearing would be dangerous to the woman's health, and thus are done "to prevent having more children", even though the woman might have preferred a larger family, had her health been better. A wording difference of this sort was in fact one cause of incomparability in a time series in the United States. c/

Women may be reluctant to report contraceptive sterilization in countries where the practice is illegal or officially disapproved. In most cases there is no way to tell whether contraceptive sterilization is under-reported, but there is evidence suggesting this for Costa Rica, where sterilization is officially approved for therapeutic reasons only. Following a period of heightened public debate about sterilization in the late 1970's, the annual increase in the proportion of women sterilized apparently slowed, but there was a more pronounced effect on the reported reason for sterilization. Survey respondents were much more likely in 1981 than in 1976 to say that the operation had been performed solely for health reasons, even when comparison was restricted to sterilizations performed before the earlier survey. d/ (The reporting difference may be due instead to differences in question phrasing, though these differences appear on their face to be innocuous.) Members of religious groups that disapprove of sterilization, such as the Roman Catholic Church, might also tend to under-report contraceptive, and presumably, to over-report non-contraceptive sterilization. In that case the true amount of contraceptive sterilization would lie between the total amount of surgical sterilization, and that reported as done for contraceptive reasons.

Table A.II-1 provides information from the WFS about contraceptive and non-contraceptive sterilization and about non-surgical sources of infecundity. This information may prove helpful in studying the proximate determinants of fertility, for comparisons with data sources which combine contraceptive and non-contraceptive sterilization, and for study of trends in cases where, as in Costa Rica, there is reason to suspect the reliability of reported trends in contraceptive sterilization.

By far the highest prevalence of therapeutic sterilization is reported for the United States -- 9 per cent of reproductive-aged married women, or their husbands, in 1976. In the other developed countries shown, approximately 1 to 4 per cent were sterilized for health reasons. Among the

developing countries, Panama and Costa Rica had the highest prevalence of non-contraceptive sterilization (4.4 and 3.6 per cent, respectively). Of the remaining 29 developing countries with this information available, the level of non-contraceptive sterilization was less than 0.5 per cent in 12; in 9, it was between 0.5 and 1.4 per cent; and in 8, between 1.5 and 2.4 per cent.

Thus, in an appreciable number of developing countries the reported level of therapeutic sterilization, as well as of contraceptive sterilization, is already well within the range seen in the developed world. At least for the countries and dates shown, both contraceptive and non-contraceptive sterilization tend to be more commonly practised in Latin America than in other developing regions. The average prevalence of contraceptive sterilization is somewhat higher in Latin America than in the developed countries, while the average prevalence of non-contraceptive surgical sterilization is somewhat higher in the latter. For all countries considered together, the level of contraceptive sterilization is positively associated with that of non-contraceptive sterilization. A major reason for this is undoubtedly that similar medical facilities are usually required for either type of operation, and in many developing countries access to modern medical facilities is incomplete. This cannot account for the difference among the developed countries, though, notably the unusually high level of therapeutic sterilization in the United States. Differing medical practices as well as the particular questions employed in the various surveys could be involved.

For a few of the WFS surveys, statistics about all sterilization or about non-contraceptive sterilization are unavailable, except as reflected in reports of infecundity. To enable comparison of these with the other countries, the level of non-surgical infecundity is also shown in table A.II-1. Levels of perceived non-surgical infecundity vary from approximately 0 to 15 per cent of married women surveyed, with the levels in developed countries tending to be lowest. These statistics can, however, be misleading. For one thing, most developed country surveys excluded women aged over 45, and this tends to exaggerate the difference between developed and developing countries; many women aged 45 to 49 have reached menopause. In addition, although infecundity often develops many years before menopause its existence may be suspected only after a long period in which pregnancy has not occurred despite an absence of contraceptive practice. In countries where most women use contraception, infecundity will often go unrecognized. Thus, though there are undoubtedly differences in prevalence of infecundity between populations, survey reports of perceived infecundity do not provide a good basis for measuring these objective differences. e/

Notes

a/ For instance, contraceptive prevalence figures for developed countries were increased to reflect all sterilization in John Bongaarts and Robert G. Potter, Fertility Biology and Behavior (New York, Academic Press, 1982), table 4.2, pp. 88-89.

b/ World Fertility Survey, Core Questionnaires, Basic Documentation No. 1 (Voorburg, the Netherlands, International Statistical Institute, 1975).

c/ William D. Mosher and Charles F. Westoff, Trends in Contraceptive Practice, 1965-76, Series 23, No. 10, data from the National Survey of Family Growth (Washington, D.C., U.S. Department of Health and Human Services, 1982).

d/ Miguel Gómez Barrantes, James McCarthy and Nancy Yinger, "Public policy and female sterilization in Costa Rica", Studies in Family Planning, vol. 14, No. 10 (October 1983), pp. 246-252; Luis Rosero B., Fecundidad y Anticoncepción en Costa Rica 1981 (San José, Asociacion Demográfica Costarricense, 1981).

e/ For a detailed discussion, see Martin Vaessen, Childlessness and Infecundity, World Fertility Survey Comparative Studies (Voorburg, the Netherlands, International Statistical Institute, to be published).

Table A.II-1. Percentage using contraception, percentage sterilized for contraceptive and non-contraceptive reasons, and percentage reported to be infecund, for currently married women in the reproductive ages

Country	Year of Survey	Age Range	Percentage				
			Using any contraceptive method a/	Sterilized for contraceptive reasons (husband)	Sterilized for contraceptive reasons (wife)	Sterilized for non-contraceptive reasons (wife)	Infecund, not surgically sterilized
A. Developing countries							
AFRICA							
Cameroon b/	1978	15-49	2.4	--	--	0.1	11.0
Egypt	1980	15-49	24.1	0.1	0.7	0.6	8.4
Ghana	1979	15-49	9.5	0.0	0.5	0.0	9.2
Kenya	1977/78	15-50	6.7	0.0	0.8	0.0	10.8
Lesotho	1977	15-49	5.2	0.0	0.8	0.0	13.1
Senegal c/	1978	15-49	3.8	0.0	0.0	0.0	11.5
Sudan (North)	1978/79	15-50	4.6	0.0	0.3	0.0	12.7
Tunisia	1978	15-49	31.4	0.0	7.5	----------12.8----------	
LATIN AMERICA							
Colombia	1976	15-49	42.6	0.2	4.0	1.6	4.1
Costa Rica	1976	20-49	64.4	1.0	12.3	3.6	5.3
Dominican Republic	1975	15-49	31.7	0.1	11.9	2.2	5.3
Ecuador	1979	15-49	33.6	0.2	7.8	1.7	6.3
Guyana	1975	15-49	31.4	0.1	8.1	0.6	5.1
Haiti	1977	15-50	18.9	0.1	0.2	0.3	7.6
Jamaica	1975/76	15-49	38.3	0.0	8.1	1.8	5.6
Mexico	1976	15-49	30.2	0.2	2.7	1.8	10.8
Panama	1975/76	20-49	54.1	0.4	21.2	4.4	2.9
Paraguay	1979	15-49	36.4	0.1	2.1	1.7	7.4
Peru	1977	15-49	31.4	0.0	2.8	1.9	9.0
Trinidad and Tobago	1977	15-49	51.5	0.2	4.3	1.5	3.8
Venezuela	1977	15-44	49.3	0.1	7.6	0.5	2.8
ASIA							
Bangladesh	1976	LT 50	7.7	0.5	0.3	0.1	6.9
Indonesia	1976	LT 50	26.3	0.0	0.3	0.1	16.5
Jordan d/	1976	15-49	25.2	0.1	1.8	0.9	10.3
Malaysia (Peninsular)	1974	15-50	32.6	0.4	3.4	0.7	10.7
Nepal	1976	15-49	2.5	1.7	0.1	0.3	10.6
Pakistan	1975	15-49	5.2	0.1	0.9	----------11.7----------	
Philippines	1978	15-49	36.0	0.7	4.7	1.0	10.0
Republic of Korea	1974	15-49	34.9	3.3	1.7	0.8	12.2
Sri Lanka	1975	15-49	31.7	0.7	9.2	0.6	12.9
Syrian Arab Republic	1978	15-49	19.8	0.1	0.3	0.3	11.9
Thailand	1975	15-49	33.1	2.1	6.1	1.3	15.3
Yemen Arab Republic	1979	LT 50	1.1	0.1	0.1	0.0	12.7
OCEANIA							
Fiji	1974	15-49	40.8	0.1	15.8	----------10.5----------	

table continues

Table A.II-1 (Continued)

Country	Year of Survey	Age Range	Using any contraceptive method a/	Percentage: Sterilized for contraceptive reasons husband	wife	Sterilized for non-contraceptive reasons (wife)	Infecund, not surgically sterilized
B. Developed countries							
Belgium (Flemish population) e/	1975	16-44	85 f/	0.0	----------	5.6----------	3.9 g/
Czechoslovakia e/	1977	18-44	94 f/	0.0	----------	3.0----------	0.1 h/
Denmark e/	1975	18-44	63 i/	----------		12.8 h/----------	
Finland e/	1977	18-44	80	0.7	3.6	...	4.4 h/
France e/	1978	20-44	77	0.0	4.1	3.6	2.0 h/
Hungary e/	1977	LT 40	74	...	1.1	1.0	1.5 h/
Italy e/	1979	18-44	78	0.0	0.7	1.7	5.4 g/
Netherlands e/	1975	...j/	75	2.0	2.0	1.2	1.6 g/
Poland	1977	LT 45	75 i/	----------4.9----------			
Portugal	1979	15-49	66.3	0.1	0.9	2.7	5.8
Spain d/	1977	15-44	51	---0.3----		1.4	2.2 g/
United Kingdom d/	1976	16-44	77	8.4	7.6	2.8	0.4 h/
United States	1976	15-44	67.9	9.7	9.6	9.0 k/	1.9
Yugoslavia d/	1976	15-44	55 i/	----------10.0 g/ ----------			

Sources:

Developing countries and Portugal: tabulated from World Fertility Survey data tapes.

United States: Kathleen Ford, "Contraceptive use in the United States, 1973-1976", Family Planning Perspectives, vol. 10, No. 5 (September/October 1978), table 1, p. 265.

Other developed countries: tabulations supplied by the United Nations Economic Commission for Europe.

Note: LT = less than.

a/ Percentage may differ from figures for the same date shown elsewhere in the present report, because of differences in age range or base population and because of minor discrepancies between sources. Except as noted separately, the percentage using contraception includes sterilization performed partly or entirely for contraceptive reasons but excludes surgical sterilization for non-contraceptive reasons. For developed countries see also notes to table 3.

b/ Survey did not ask about sterilization, but contraceptive and non- contraceptive sterilization were coded if mentioned. Contraceptive sterilization was coded in the residual category "other methods", which comprises 0.2 per cent of currently married women.

c/ Survey did not ask about sterilization, but sterilization was coded if mentioned spontaneously.

Note (cont'd)

d/ Excluding the West Bank.

e/ Confined to women still in the first marriage.

f/ Including surgical sterilization for non-contraceptive reasons.

g/ May include a small number of women who are not exposed to risk of pregnancy for reasons other than infecundity. However, excluding women who are currently pregnant, women not exposed because of the absence of the husband, and women included in any of the other categories of this table.

h/ May include a small number of women who are not exposed to risk of pregnancy for reasons other than infecundity. However, excluding women who are currently pregnant and women included in any of the other categories of this table.

i/ Excluding sterilization.

j/ Marriage cohorts of 1963-1973.

k/ Including cases of non-contraceptive surgical sterilization of the husband (0.8 per cent).

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