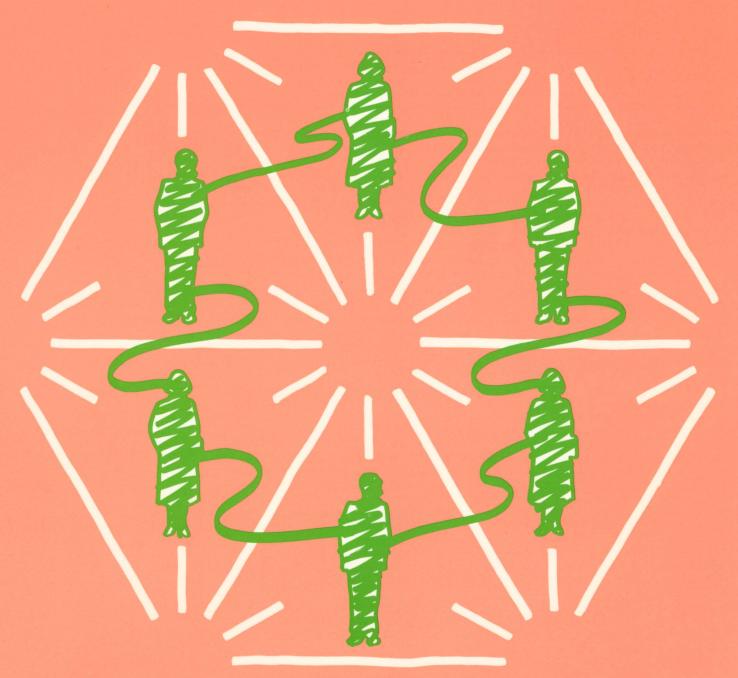
Adolescent Reproductive Behaviour

Evidence from Developed Countries

Volume I





United Nations

Population Studies

No.109

Adolescent Reproductive Behaviour

Evidence from Developed Countries

Volume I



United Nations New York, 1988

NOTE

The designations employed and the presentation of the material in this publication 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.

The term "country" as used in the text of this publication also refers, as appropriate, to territories or areas.

The designations "developed" and "developing" regions 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.

The printing of this volume was made possible by a publications grant from the United Nations Population Fund.

ST/ESA/SER.A/109

UNITED NATIONS PUBLICATION

Sales No. E.88.XIII.8

02200

ISBN 92-1-151173-9

Copyright © United Nations 1988 All rights reserved Printed in the United States of America

PREFACE

At the International Conference on Population held at Mexico City in 1984, the international community expressed its concern over problems related to youth in general and adolescent reproductive behaviour in particular. Of the several recommendations relating to young people that were adopted, the most relevant to reproduction is recommendation 29, which states that:

"Governments are urged to ensure that adolescents, both boys and girls, receive adequate education, including family-life and sex education, with due consideration given to the role, rights and obligations of parents and changing individual and cultural values. Suitable family planning information and services should be made available to adolescents within the changing socio-cultural framework of each country." (United Nations, 1984b; p. 24).

Governmental response to this call for action requires adequate information on all aspects of adolescent reproductive behaviour. In response to this need, the Population Division of the Department of International Economic and Social Affairs of the United Nations Secretariat, with financial support from the United Nations Population Fund (UNFPA), has undertaken a global review of the factors affecting adolescent birth rates, which include abortion, sexual exposure and contraceptive use. The findings are being presented in two reports because the problems and concerns regarding adolescents in developed and developing countries are quite different. The present volume is the first report (volume I) and covers developed countries. Volume II will cover developing countries.

The present review has been undertaken against a background in which many fundamental changes are taking place in sexual attitudes and behaviour in the population at large. In European and most other developed countries, policy initiatives, including social assistance or social insurance schemes for the protection of unmarried mothers, liberalization of abortion laws and improved accessibility to contraception for teenagers, have been instituted in response to these changes. Although the problems of adolescent reproductive behaviour affect young boys as well as young girls, this volume is restricted to the study of adolescent women only, as there is little information on adolescent men, making meaningful comparisons impossible.

The United Nations Statistical Office provided support to this project through its Special Questionnaire on Adolescent Reproductive Behaviour. The co-operation of all countries that responded to the questionnaire is gratefully acknowledged, as is the support of a large number of researchers in this field who responded to our request for data on sexual exposure and contraceptive use among teenagers. The data on pregnancy and abortion, and sexual exposure, presented in chapters II and III were compiled with the aid of a consultant, Elise F. Jones.

- iv -

.

CONTENTS

		Page
PREFACE		iii
Explanate	ory notes	ix
INTRODUC	TION	1
Chapter		
I.	LEVELS AND TRENDS IN ADOLESCENT BIRTH RATES	6
	A. Introduction	6
	B. Current levels of fertility	7
	C. General trends in adolescent fertility, 1950-1980	10
	D. Characteristics of teen-age mothers	19
II.	PREGNANCY AND ABORTION	22
11.	A. Introduction	22
	B. Data and definitions	22
	C. Abortion	23
	D. Pregnancy rates	29
	E. Opting for abortion	31
	Annex to chapter II	
	Measurement of adolescent pregnancy	36
III.	SEXUAL EXPOSURE	39
111.	A. Introduction	39
	B. Marriage and cohabitation	40
	C. Sexual exposure among unmarried teenagers	45
	D. Frequency of intercourse	51
	E. Estimates of exposure to pregnancy	51
	Annex to chapter III	
	A. Sample selection	54
	B. Age at first intercourse	55
	C. Marital status	56
IV.	CONTRACEPTIVE USE	57
IV.	A. Introduction	57
	B. Contraceptive prevalence	58
	C. Type of contraception used	62
	D. Contraceptive use at first intercourse	65
	Annex to chapter IV	
	A. Type of contraception	68
	B. Measures of contraceptive prevalence	69
17	SUMMARY AND CONCLUSIONS	70
٧.		70
REFEREN	CES	79
Anney:	COUNTRY TABLES AND FIGURES	87

List of text tables

No.		Page
1.	Countries by regional groupings	3
2.	Age-specific fertility rates for single years of age, by country	9
3.	Change in younger and older teen-age fertility and age-specific fertility rate per thousand women aged 15-19 years by country	17
4.	Abortion rates (per 1,000 women) among 15-19 year-olds, 1972-1984	25
5.	Grounds on which abortion is legal, early 1986	26
6.	Pregnancy rates (per 1,000) for selected countries	32
7.	Minimum legal age at marriage	43
8.	Proportion of teenagers who are married, by single years of age	44
9.	Percentage of women who are cohabiting, by age	46
10.	Combined percentage of women aged 18-19 years currently married and cohabiting	46
11.	Proportion of never married adolescents who ever had sex, by single years of age for selected countries	47
12.	Proportion of women who had experienced sexual intercourse by a given age for selected countries (retrospective data for never married and all teenagers)	47
13.	Contraceptive prevalence among all women by age for selected countries	59
14.	Contraceptive prevalence among sexually experienced, single women for selected countries	61
15.	Type of contraception used, as a percentage of users among sexually experienced girls, for selected countries	64
16.	Contraceptive prevalence and distribution of methods used among sexually experienced teenagers by marital status for selected countries	66
17.	Type of contraception used at first intercourse and current use among sexually experienced women for	66

List of text figures

Figure		Page
I.	Age-specific fertility rates for 15-19-year-olds, around 1985	8
II.	Teen-age fertility rates and total fertility rates for countries in eastern Europe, 1950-1985	11
III.	Teen-age fertility rates and total fertility rates for countries in northern Europe, 1950-1985	12
IV.	Teen-age fertility rates and total fertility rates for countries in southern Europe, 1950-1985	13
٧.	Teen-age fertility rates and total fertility rates for countries in western Europe, 1950-1985	14
VI.	Teen-age fertility rates and total fertility rates for countries in Oceania, Asia and North America, 1950	15
VII.	Proportion of illegitimate births among all births to teenagers	20
VIII.	Abortion rates for selected countries, most recent data	24
IX.	Pregnancy, abortion and birth rates among adolescents	30
X.	Pregnancy rates among younger and older adolescents	30
XI.	Trends in pregnancy rates	33
XII.	Abortion as a percentage of pregnancies	34
XIII.	Abortions and births as percentages of pregnancies	35
XIV.	Abortion rate as a percentage of pregnancy rate among younger and older adolescents	35
XV.	Proportion of teenagers (15-19 years) who are married, by region, 1950-1980	41
XVI.	Proportion of teenagers who ever had sex by age, for selected countries	48
XVII.	Proportion of women having had sex by the age of 17 for various birth cohorts	50
xvIII.	Proportion of women having had sex by the age of 20 for	50

List of text figures (continued)

Figure		Page
XIX.	Estimates of sexual exposure	53
XX.	Proportion of teenagers (15-19 years) who are married, by age-specific fertility rates	53
XXI.	Contraceptive prevalence among 18-19-year-old sexually experienced single women and currently married women for selected countries	63

Explanatory notes

The following symbols have been used in the tables throughout this publication:

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

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

A hyphen (-) indicates that the item is not applicable.

A minus sign (-) before a figure indicates a decrease.

A point (.) is used to indicate decimals.

A slash (/) indicates a crop year or financial year, e.g. 1980/81.

Use of a hyphen (-) between dates representing years, e.g., 1980-1982, signifies the full period involved, including the beginning and end years.

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

The following abbreviations have been used in this volume:

ASFR Age-specific fertility rate

C Current

IUD Intra-uterine device

N Sample size NM Never married R Retrospective

TFR Total fertility rate

INTRODUCTION

Teen-age pregnancy is a continuing concern among developed countries, where overall fertility rates are at unprecedentedly low levels. In most of these societies, effective methods of contraception are readily available, most currently married couples practise birth control and abortion laws are fairly liberal. The dominant theme in the concerns about adolescent fertility in these countries is the continuation of high levels of unwanted or unintended pregnancies among teenagers in the context of changing sexual attitudes and behaviour and a rise in age at first marriage. When confronted with an unwanted pregnancy, young people will increasingly opt for an abortion or, if they do decide to carry the pregnancy to term and if they are single, marriage is less frequently chosen to legitimize the birth.

Abortion, even when readily available to adult women, is often more restrictive for adolescents, compelling many teenagers to resort to illegal abortion, which poses a particular risk to the health of the young girl. Even in societies where abortion is legal and socially acceptable for adolescents, young women may be at greater risk as they frequently ask for help at a later stage of pregnancy because of fear or ignorance.

In European and most other developed countries, changing marriage norms and patterns have led to an increasing number of couples living together in informal unions, better known as cohabitation. A birth to a cohabiting couple may or may not trigger marriage to legitimize the birth. In the Scandinavian countries, such a union is more likely to be a stable union in itself, not evolving into marriage even with the birth of a child, but in most other developed countries these unions often lead to marriage. The trend towards cohabitation, however, is most common among women in their twenties (United Nations, 1988a and b). Among teenagers, a trend in which an increasing proportion of births is to unmarried girls has been observed in a large number of developed countries (Livi-Bacci and Ventisette, 1980). The problems faced by pregnant unmarried teenagers are different from those faced by older women. Very often a pregnant adolescent may not be in a stable relationship and marriage may not be an available option and even when it is, she may not be ready for it. In addition, her education is likely to be interrupted. The psychological costs of unintended pregnancies are well known, and for an unmarried teenager, they are likely to have far-reaching consequences for the mother and the child.

In this study, differences in observed levels of adolescent birth rates and pregnancy rates in developed countries are discussed and explained in terms of the immediate proximate determinants of teen-age fertility rates, such as exposure to sexual intercourse, the predominance of marriage, contraceptive use and abortion (Davis and Blake, 1956; Bongaarts, 1978, 1982). In this framework of analysis, the observed levels of birth rates among teenagers are seen as resulting from interactions between sexual exposure (including marriage), pregnancy, abortion and contraceptive use. Each of these factors is taken up in a separate chapter and for each factor estimates of prevalence are sought for as many countries as possible, with emphasis on similarities and differences between countries. Levels and trends

in adolescent birth rates are reviewed in chapter I. Birth rates among teenagers is one component that goes into the calculation of pregnancy rates, which are defined in this report as the sum of birth rates and abortion rates. Levels and trends in pregnancy and abortion rates are reviewed in chapter II. The two important determinants of pregnancy, sexual exposure and contraceptive use, are taken up in chapters III and IV, respectively. A summary and conclusions appear in chapter V.

Recently the Alan Guttmacher Institute (Jones and others, 1986) undertook an in-depth study of adolescent reproductive behaviour in six developed countries (Canada, France, the Netherlands, Sweden, the United Kingdom and the United States), which was intended to highlight comparisons with the experience of the United States. The present report, which draws upon some of the material presented in the Alan Guttmacher study, covers all developed $\frac{1}{2}$ countries including the six mentioned above (table 1).

In this report, adolescent birth rates and long-term trends in birth rates starting from the 1950s are presented (chap. I). Even though teen-age birth rates are at fairly low levels in developed countries, there is considerable variation in the levels between countries and regions. Countries in the western and northern European regions have lower adolescent rates than those in eastern and southern European countries, and the United States is often singled out as having somewhat high adolescent fertility rates when compared with other developed countries. Westoff, Calot and Foster (1983) found broad similarities in birth rate trends over the period 1971-1981 among western and northern European countries. In these countries, teen-age rates declined over this period, but in eastern and southern European countries teen-age rates were increasing over the same period.

Pregnancy rates vary as do birth rates and abortion rates (see chap. II). For example, in the United States, birth rates among teenagers have declined in the recent period despite rising pregnancy rates because abortion rates have increased (Jones and others, 1986). Since the 1960s, the liberalization of abortion laws in most developed countries has led to an increase in the proportion of pregnancies that end in abortion. Data for the most recent period, however, show that abortion rates have stabilized in a number of countries (Tietze and Henshaw, 1986).

Sexual behaviour among adolescents has various implications for their health, including pregnancy, sexually transmitted diseases and psychological problems. Adolescent sexual behaviour is discussed in the context of exposure to the risk of pregnancy (see chap. III).2/ Formerly, it was assumed that the initiation of sexual activity, and subsequent exposure to the risk of childbearing, was associated with marriage. Because marriage is an easily identifiable event, this provided a convenient basis for the quantitative assessment of exposure to the risk of pregnancy. There is increasing evidence to show that this is no longer the case, particularly among teenagers. Teenagers are becoming sexually active at increasingly younger ages and a growing proportion of them are sexually experienced by the end of their teen-age years. Marriage, however, remains a condition which presupposes regular sexual relations. Outside of marriage, relations may develop that involve more or less frequent sexual activity, ranging from a situation where

Table 1. Countries by regional groupings

EASTERN EUROPE	WESTERN EUROPE
Bulgaria	Austria
Czechoslovakia	Belgium
German Democratic Republic	France
Hungary	Germany, Federal Republic o
Poland	Luxembourg
Romania .	Netherlands
	Switzerland
NORTHERN EUROPE	
	UNION OF SOVIET
Denmark	SOCIALIST REPUBLICS
Finland	
Ireland	NORTH AMERICA
Norway	
Sweden	Canada
United Kingdom of Great	United States of America
Britain and Worthern Ireland	
SOUTHERN EUROPE	OCEANIA
Greece	Australia
Italy	New Zealand
Malta	
Portugal	ASIA
Spain	
Yugoslavia	japan

couples are cohabiting but not formally married to a "dating" relationship in which sexual intercourse may or may not occur. $\frac{3}{}$ Estimates of exposure can be made which range from a minimum (prevalence of marriage) to a maximum (proportions sexually experienced).

Data on knowledge, availability, accessibility and patterns of use of contraception are not available in a format comparable across all countries. In this report, available data on prevalence, type of methods used and use at first intercourse are presented (chap. IV). Information on other issues relating to adolescent contraceptive acceptance and use discussed above has been given in the text where relevant.

Although contraception is used by a vast majority of currently married couples in developed countries (United Nations, 1987b), high levels of unintended pregnancies and abortions among teenagers suggest that the same is not true for teenagers. The above-mentioned study by Jones and others (1986), found that differences in pregnancy rates between adolescents in the United States and those in the other five developed countries occur mainly because teenagers in the United States are less likely to practise contraception. Among adolescents, the study of contraceptive use must go beyond measures of prevalence rates. Knowledge, availability, accessibility and even effective use all take on different dimensions when it comes to young people who are inexperienced in sexual matters. Because a large number of countries have sex education (which may go under several different names) in their school curriculum, knowledge about contraception is not lacking among adolescents. Teenagers in a number of developed countries, when surveyed on this question, say they learned about sex and contraception from their peers, by reading books and magazines and in school, but they rarely discussed such matters with their parents or even their partners (Siedlecky, 1979; Palomba and Menniti, 1986). Availability of most types of contraception is not restricted by law for teenagers in developed countries, although very young teenagers may have to go through cumbersome procedures before they can obtain some types of contraceptives. Even where they are available, contraceptives may not be easily accessible to teenagers. For example, teenagers may be reluctant to go to the school clinic for supplies or may not want to purchase them from the local drug store.

Even when a teenager claims to be currently using contraception, in-depth questions about past use reveal that, very frequently, precautions are not taken at the first sexual encounter. A large number of adolescents do use contraception on a regular basis, however, when the relationship becomes more established. The type of method chosen often changes with increased sexual experience and, as a relationship develops, methods used may change from the less effective ones to the more effective ones. The effectiveness of a method, of course, depends on whether it is used properly. Some surveys found that many adolescents who claimed to be using the rhythm method, for example, could not identify the "safe" period.

The availability of data on topics such as sexual activity, abortion and contraceptive use varies among the developed countries reviewed in the present report. Social surveys yielding information on sexual activity and

contraceptive use among young people have been common in northern and western Europe and in North America. A number of countries in these regions also regularly report legal abortions in their national statistical series. Reasonably complete statistics on abortion are provided by several eastern European countries as well, although data on sexual activity are relatively scarce for that part of Europe. Particularly where data are drawn from small surveys, whether they be national, subnational or based primarily on the population of students, extreme caution needs to be used in their interpretation. In this report such data are used to make broad comparisons across countries and not as indicators of the precise levels of the phenomenon being measured.

"teenagers" are used interchangeably "adolescents" and terms The throughout this report. The concept of adolescence has been variously defined as "the state or process of growing up" or "the period of life from puberty to maturity", depending on the subject-matter being studied. This gives an inkling of the difficulties of identifying a specific period of life as the In this study, for an operational definition of adolescent period. adolescence, an age criterion encompassing the ages 13-19 years is used. There are several reasons for choosing an age definition of adolescence. Among them are the ease of identifying the adolescents in any population and the facility with which demographic information, as compiled in this report, can be obtained. $\frac{4}{}$ Most importantly, an age definition will facilitate the formulation of programmes aimed at adolescents. A limitation of this report is that only adolescent women are studied, although the problems faced during this stage of life concern young men just as they do young women. Lack of data is one reason for this constraint but for some issues, contraceptive use for example, estimates of male methods of contraception such as the condom and withdrawal are available and these have been included in this report.

Chapter I

LEVELS AND TRENDS IN ADOLESCENT BIRTH RATES

A. Introduction

In a study of fertility rates of European adolescent women in 1950, 1960 and 1971, Livi-Bacci and Ventisette (1980) noted increases in adolescent fertility over the two decades (1950-1970) in almost all of the 23 countries they studied, while over the same period total fertility rates for all women decreased in 20 of the 23 countries considered. In England and Wales, the Republic of Germany, German Democratic Republic, Italy, Netherlands, Norway, Romania, Scotland, Spain and Switzerland, the increase in births per 1,000 women aged 15-19 exceeded 50 per cent over the two decades. Particularly large increases (over 100 per cent) were recorded in Norway, Scotland and England and Wales. Among the few countries that recorded decreases in fertility rates for teenagers were some northern European countries (Denmark and Sweden) and eastern European countries (Czechoslovakia, Poland and Yugoslavia). The rise in fertility among young women relative to older women in most countries during this period was attributed to earlier age at sexual maturity, increased autonomy and freedom of teenagers and the relaxation of traditional moral teachings, all of which resulted in increased levels of pre-marital sexual experience (Van de Kaa, 1987; Livi-Bacci and Ventisette, 1980).

In the decade from 1970 to 1980, however, fertility among adolescents declined in most developed countries. In a recent review of 29 developed countries, Westoff, Calot and Foster (1983) distinguished three5/ principal types of national patterns of trends in adolescent fertility. The three groups of countries are identified on the basis of the level of teen-age total fertility rate (the sum of the single-year fertility rates per 1,000 women under age 20) in 1971 and the direction and magnitude of change in this measure across the ensuing decade from 1970 to 1980. The first type is characterized by low initial fertility (teen-age fertility rates from 100 to 200), which generally drops to somewhat lower levels by the end of the 1970s. Countries in this group were in western European countries and Japan. second group, some western and northern European countries, Australia, and Canada, and white teenagers in the United States of America, displays higher teen-age fertility rates than the first group at the beginning of the decade (approximately 200 to 400) and typically steeper declines thereafter. last group, comprising seven eastern and southern European countries, starts with intermediate fertility levels (teen-age fertility rates around 200) which, in contrast, rise appreciably in subsequent years.

It is clear from the reviews mentioned above that fertility among young women in developed countries was not always at the high levels recorded at the beginning of the 1970s and that there was a period in the decade before the 1970s when adolescents themselves experienced a "baby boom", as did older women in most countries. While the work of Livi-Bacci and Ventisette and that

of Van de Kaa focused only on European countries, the work of Westoff and his colleagues encompassed all developed countries. The indicators of teen-age fertility used in each of their studies, however, are not the same and this difference makes an analysis of trends difficult. In this chapter, teen-age fertility rates for all developed countries are presented in the context of regional groupings of these countries. Some of the data set forth here draw upon the reviews mentioned above. The levels and trends in adolescent fertility presented in this chapter serve as a basis for the discussion of related issues in subsequent chapters, especially those concerning sexual activity, pregnancy, non-marital fertility and contraceptive practice.

B. Current levels of fertility

Teen-age fertility rates \(\frac{6}{2} \) for the period around 1985 ranged from a low of 4 per 1,000 women in Japan to a high of 78 per 1,000 women in Bulgaria (figure I). Only in Denmark, Germany, Federal Republic of, Japan, the Netherlands and Switzerland were teen-age rates at very low levels: below 10 per 1,000 women. In most northern and western European countries, rates were between 10 and 25 per 1,000 women, while in most southern European countries the rates ranged between 25 and 50 per 1,000 women. Teen-age rates in eastern European countries were generally the highest. Bulgaria, Czechoslovakia, Hungary and Romania all had rates above 50 per 1,000 during the mid-1980s. Pro-natalist policies that favour early marriage and childbearing may play a role in explaining the higher rates in eastern European countries (David, 1982; Festy, 1986). The rate for teenagers in the United States, although lower than those of eastern European countries, was somewhat higher than the rates for other developed countries. The teen-age rate in the United States was double that in Canada, its closest neighbour. \(\frac{7}{2} \)

Age-specific fertility rates for single years of age from 14-19 years show some interesting differences between countries (table 2). Among women as young as 14 years old, those in the United States had the highest fertility: 5.5 births per 1,000 women. Hungary and Romania had the next highest rates, which were only about half as high as the rate in the United States. age-specific rate of 5.5 births per 1,000 14-year-old girls would mean that in one year there were about 10,000 14-year-old mothers for the United States! Up to age 16, the United States still had the highest age-specific rate - 30.9 per 1,000 for young women age 16 compared with the two closest countries, Hungary and Poland (27.2 and 26.8 per 1,000, respectively). The difference between the United States and Hungary and Poland is not as striking as at age 14, although the numbers involved are larger. After age 17, age-specific rates rise quite sharply in all countries, especially the eastern European countries, where at age 19 the average rate for all countries in the region is nearly two times that for the region with the next highest rate - southern Europe (157.3 per 1,000 and 84.5 per 1,000, respectively).

In a country as large as the United States, even moderate fertility rates translate to numbers of births of quite some magnitude. In 1982, there were as many as 523,531 births to young women below the age of 20, of which 9,773 were to girls between the ages of 15 and 17, representing 35 per cent of all births to young women 15-19-years old. In 10 of the 28 countries studied,

Figure I. Age-specific fertility rates for 15-19-year-olds, around 1985

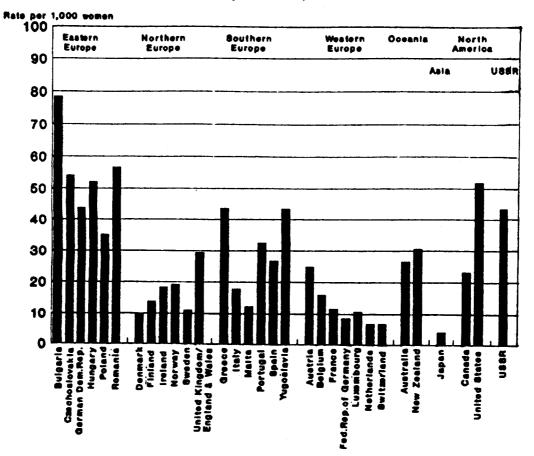


Table 2. Age-specific fertility rates for single years of age, by country

	Age										
Country	Year	14	15	16	17	18	19				
Eastern Europe											
Czechoslovakia	1982	0.4	1.7	8.9	28.5	75.1	141.2				
German Dem. Rep.	1979	0.1	1.6	7.9	29.0	75.1	139.4				
Hungary	1981	2.6	9.5	27.2	56.2	92.0	126.4				
Poland	1980	0.7	4.3	18.9	56.2	125.4	226.5				
Romania	1979	2.6	9.1	26.8	55.9	100.7	153.2				
Northern Europe											
Denmark	1984	0.0	0.6	2.2	4.9	13.9	29.0				
Finland	1983	0.1	0.8	3.4	10.9	22.9	38.9				
Ireland	1981	0.3	1.5	6.0	15.4	35.1	58.6				
Norway	1983	0.1	0.7	5.1	15.1	29.5	49.5				
Sweden	1983	0.1	0.6	2.2	6.4	17.0	32.9				
United Kingdom		2.									
(England and Wales)	1980	0.6	2.6	10.6	27.8	48.1	68.1				
Southern Europe											
Greece	1981	2.0	7.9	20.3	42.4	73.0	105.3				
Italy	1979	0.3	0.7	9.4	18.1	30.2	58.7				
Portugal	1979	1.4	5.4	16.2	35.7	63.2	88.2				
Spain	1979	1.2	3.8	11.0	22.4	37.7	58.0				
Yugoslavia	1980	1.6	4.6	15.4	35.7	69.5	112.4				
Western Europe											
Austria	1983	0.4	1.6	7.9	20.9	43.7	70.7				
Belgium	1978	0.7	4.1	15.3	32.9	54.0	64.9				
France	1983	0.3	1.4	5.0	12.2	26.8	49.3				
Germany, Federal											
Republic of	1983	0.2	1.0	3.8	9.7	20.1	33.9				
Luxembourg	1979	0.4	0.7	5.9	11.3	26.4	44.1				
Netherlands	1982	0.2	0.7	2.5	5.9	11.8	19.3				
Switzerland	1983	0.1	0.3	1.5	4.0	11.4	21.8				
Oceania											
Australia	1982	1.0	3.7	11.8	25.3	39.2	53.6				
New Zealand	1981	1.4	5.4	20.0	37.1	56.6	72.5				
Asia											
Japan	1979	0.0	0.1	0.9	3.7	9.3	20.8				
North America											
Canada	1983	1.2	4.9	12.7	21.8	33. 0	46.0				
United States	1980	5.5	14.4	30.9	51.5	73.4	91.4				

<u>Sources:</u> Institut national d'études demographiques, unpublished tabulations and the United Nations Statistical Office Special Questionnaire on Adolescent Reproductive Behaviour.

more than one quarter of teen-age births were to girls below age 17. In Bulgaria, Greece, Northern Ireland (24 per cent of legitimate births in 1985) and the United States, more than 20 per cent of births to teenagers 15 to 19 years old were of parity two or more (not shown).

C. General trends in adolescent fertility, 1950-1980

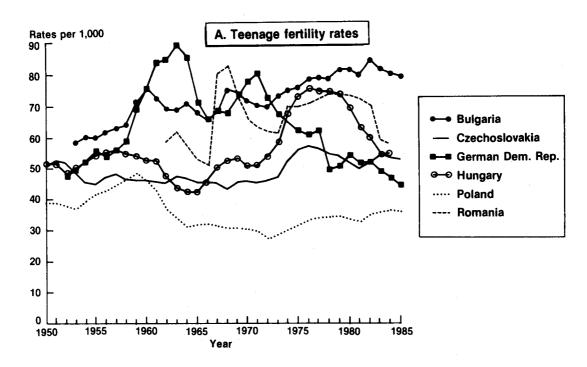
Trends in adolescent fertility (measured as number of births per 1,000 women aged 15-19 years) going back as far as 1950 show that for most developed countries, there was a period of increase in rates from 1950 to about 1965 or 1970 and declines thereafter. There are, of course, a number of deviations from this general pattern. The most notable exceptions are Japan, countries the Union of Soviet Socialist eastern Europe and (figures II-VI). For most of northern Europe, western Europe and Oceania, rates peaked between 1965 and 1970. Trends for individual countries are discussed below in terms of the familiar geographic subdivisions of Europe: the East, North, South and West, together with Canada and the United States in North America, the USSR, Japan, and Australia and New Zealand in Oceania.

Teen-age rates in Ireland had a trend distinctly different from other northern European countries. Adolescent fertility in that country was low (10 per 1,000 women) until 1960, after which time it increased to more than 20 per 1,000 in 1975 and stabilized at that level until 1980 (figure III). Most recent data for Ireland show the beginning of a decline similar to that in other northern European countries. Denmark, Finland and Sweden are the only countries in northern Europe to experience lower teen-age fertility rates in 1980 than in 1950, while in Norway and the United Kingdom the rates in 1980 were still moderately higher than those in 1950, although continuing declines into the decade of the 1980s would take the rates even lower than they were in the 1950s.

Teen-age fertility rates in western Europe were generally lower than those in northern Europe, with the exception of Austria, where rates were about 20 per 1,000 higher than the other countries for most of the period (figure V). For all other countries in this region, rates, which were already at low levels in 1950, were only moderately lower at the end of three decades.

Teen-age rates in eastern and southern Europe are not as homogeneous as those within northern and western Europe. Eastern European rates were generally the highest among all developed countries, except in the case of the German Democratic Republic, where rates declined sharply in the 1970s after a period of increase. In Czechoslovakia and Poland rates remained fairly stable, but teen-age rates have shown an increasing trend over the past three decades in Bulgaria, Hungary and Romania (figure II). In Poland, teen-age rates appear to have remained stable at about 30 per 1,000 from 1965 up to about 1980, while in the German Democratic Republic, which had the highest rates in the region up to 1970, rates have declined quite sharply since 1970. Data for the most recent period (1980s) show that teen-age rates for Hungary and Romania have also declined sharply.

Figure II. Teenage fertility rates and total fertility rates for countries in eastern Europe, 1950-1985



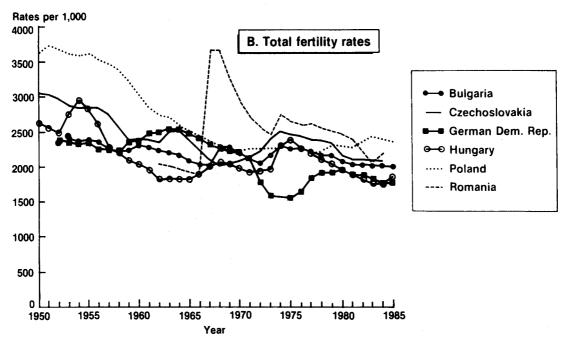


Figure III. Teenage fertility rates and total fertility rates for countries in northern Europe, 1950-1985

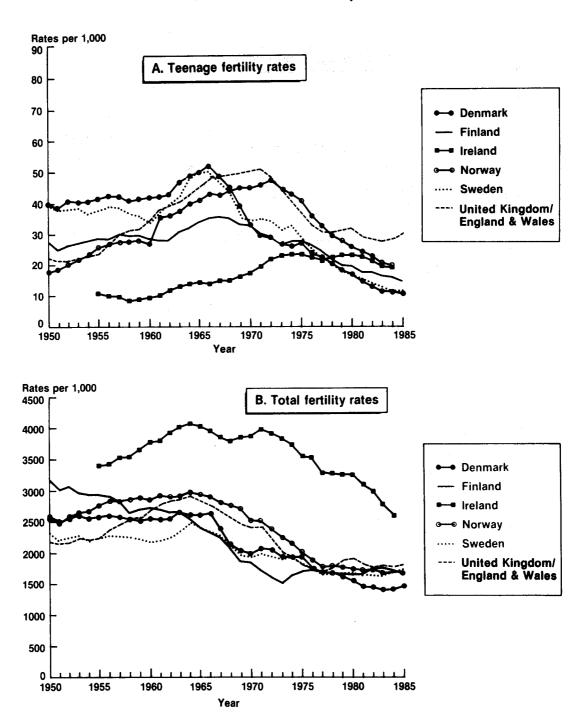
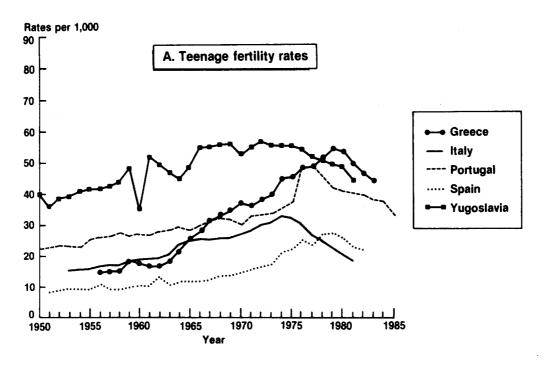


Figure IV. Teenage fertility rates and total fertility rates for countries in southern Europe, 1950-1985



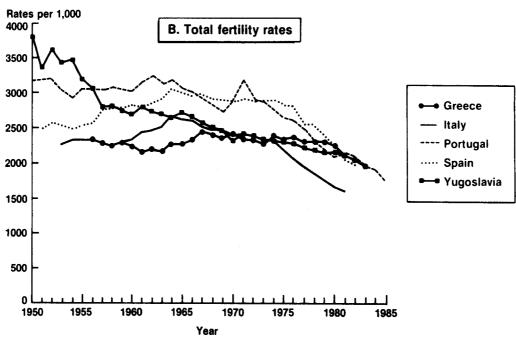


Figure V. Teenage fertility rates and total fertility rates for countries in western Europe, 1950-1985

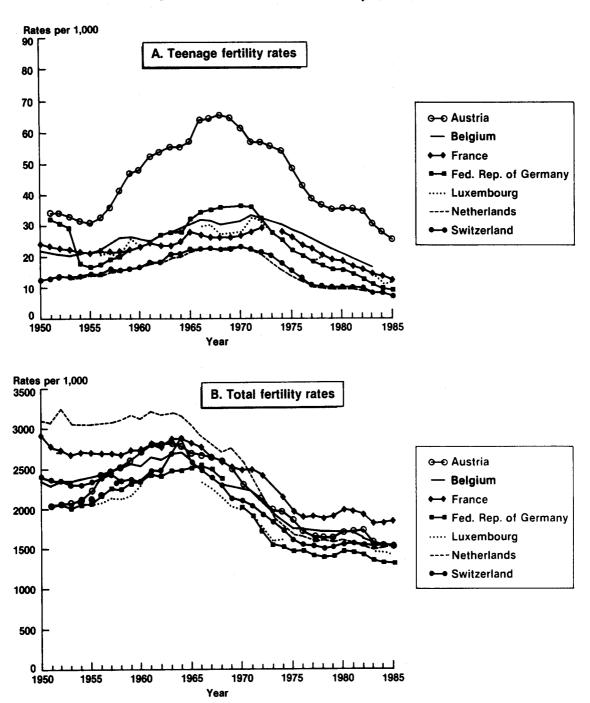
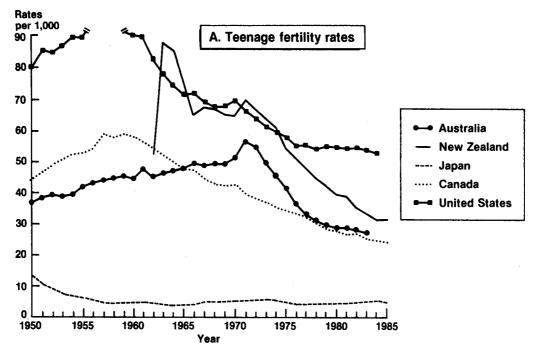
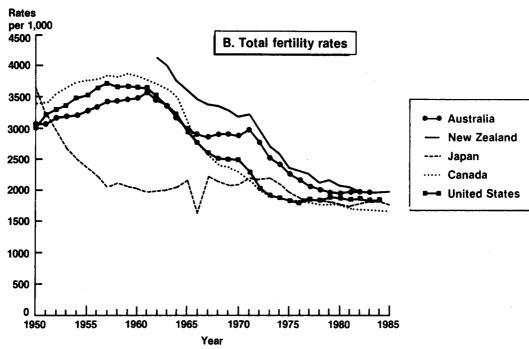


Figure VI. Teenage fertility rates and total fertility rates for countries in Oceania, Asia and North America, 1950-1955





In southern Europe, Greece, Portugal, Spain and Yugoslavia recorded somewhat higher rates in 1980 than in 1950, the increase being continuous over the period in the case of Greece. Italy, which also saw an increase in rates from 1960 to 1975, experienced a sharp drop from 1975 to 1980 (figure IV). Data for the most recent period (1980s) show declines in the teen-age birth rate for Greece and Portugal as well.

Among the other developed countries, only the USSR (Annex table) showed an increasing trend in teen-age rates, from a rather low level of 15.6 per 1,000 women in 1955 to 40.9 per 1,000 women in 1980. Australia, New Zealand, Canada and the United States (figure VI) followed the general pattern described earlier for northern and western European countries, except that rates in Canada and the United States peaked in 1955-1960, a decade earlier than in European countries. In the period before 1970, the United States had the highest teen-age rates among all developed countries. After 1970, rates recorded in the United States were lower than those in most eastern European countries but still somewhat higher than those in other developed countries. It should be noted, however, that among all of the developed countries studied here, the United States and Canada recorded the largest decline in teen-age rates over the three decades, although the rate for the United States has been roughly steady at about 55 per 1,000 since 1975.

The decline in fertility rates experienced by teenagers is more pronounced among teenagers below the age of 17 than among older teenagers (table 3). On the other hand, among teenagers in those countries that experienced increases in teen-age rates over the decade of the 1970s, somewhat higher percentage increases in rates among the younger teen-age girls were observed. Poland is a case in point, where rates among younger teen-age girls more than doubled from 8 per 1,000 to 20 per 1,000 over the decade. In Spain, the increase was from a fairly low rate of 5 per 1,000 in 1971 to about 10 per 1,000 in 1981. Other countries that experienced increases in the early teen-age rates were mainly in eastern Europe (Czechoslovakia, Poland and Romania), as well as Greece, Ireland, Japan and Portugal. Most other countries showed large percentage declines in early teen-age rates, mostly more than 30 per cent over the decade. The United States had extremely high early teen-age rates in 1971 (30 per 1,000). By 1980, the rates had declined by 15 per cent to 26 per 1,000, still among the highest in developed countries.

Do trends in teen-age fertility rates mirror what is happening with overall fertility levels or are they independent of trends among older women? Sharp declines in overall total fertility rates (rates per 1,000 women of all ages), beginning in 1965, were observed among women in western and northern European countries. Starting from already low levels of fertility in the early 1960s, the decline was precipitous, leading to below-replacement fertility for these countries (Calot and Blayo, 1982). A similar decline in fertility, although not starting at the same date, was observed in other non-European industrialized countries (Preston, 1986). Technological, social and economic changes have been identified as the causes of this decline (Teitelbaum and Winter, 1985; Davis, 1986; Preston, 1986; Westoff, 1986; Van de Kaa, 1987), most of which occurred through the mechanism of improved and effective methods of birth control and the liberalization of abortion laws

Table 3. Change in younger a/ and older b/ teen-age fertility and age-specific fertility rate (per thousand women) aged 15-19 years, by country

•	Year	Younger	Older	ASFR	Year	Younger	Older	ASFR	Perce	ntage change		Proportion of teen-age births
		(15-17)	(18-19)	(15-19)	: . 	(15-17)	(18-19)	(15-19)	Younger	Older	ASFR	to younger women
Eastern Europe												
Czechoslovakia	1971	9.2	92.8	37.0	1981	9.6	107.3	42.2	4.3	15.6	14.10	28.2
German Dem. Rep.	1972	11.4	116.0	46.3	1979	9.7	107.3	42.2	-14.9	-7.5	-8.90	15.6
Hungary	1971	15.6	103.0	44.7	1981	23.9	109.2	52.3	53.2	6.0	17.00	13.5
Poland	1971	8.4	87.7	34.9	1980	20.0	175.9	72.0	138.1	100.6	106.30	16.5
Romania	1971	19.9	120.9	53.6	1979	23.6	127.0	58.1	18.6	5.0	8.40	n.a.
lorthern Europe												
Denmark	1971	8.7	55.1	24.2	1981	2.9	30.4	12.1	-66.7	-44.8	-50.00	
Finland	1971	7.0	60.3	24.8	1981	4-1	34.0	14.0	-41.4	-43.6	-43.50	
Ireland	1971	4.8	40.6	16.8	1981	5.8	46.9	19.5	20.8	15.5	16.10	
Norway	1971	11.9	92.2	38.6	1981	6.0	48.8	20.3	-49.6	-47.1	-47.40	
Sweden	1971	11.1	61.9	28.0	1981	3.6	30.4	12.6	-67.6	-50.9	-55.00	15.1
United Kingdom												
(England and Wales) 1971	17.1	91.8	42.0	1980	10.4	58.1	26.3	-39.2	-36.7	-37.40	27.4
Southern Europe												
Greece	1971	12.4	68.0	30.9	1981	18.2	89.1	41.8	46.8	31.0	35.30	
Italy	1971	10.4	50.6	23.8	1979	7.2	45.5	19.9	-30.8	-10.1	-16.40	
Portugal	1971	10.6	59.6	27.0	1979	14.7	75.9	35.1	38.7	27.3	30.00	
Spain	1971	5.3	28.6	13.1	1979	9.6	47.8	22.3	81.1	67.1	70.20	
Yugoslavia	1971	16.9	102.5	45.4	1980	14.3	90.9	39.8	-15.4	-11.3	-12.30	24.4
Western Europe												
Austria	1971	17.7	107.6	47.7	1981	9.7	67.6	29.0	-45.2	-37.2	-39.20	
Belgium	1971	19.0	84.4	40.8	1978	13.2	59.4	28.6	-30.5	-29.6	-29.90	
France	1971	9.9	75.4	31.7	1981	5.7	45.5	18.9	-42.4	-39.7	-40.40	
Germany, Fed. Rep o		9.6	71.3	30.2	1981	3.3	28.9	11.8	-65.6	-59.5	-60.90	
Luxembourg	1971	9.5	62.8	27.2	1979	4.6	35.2	14.8	-51.6	-43.9	-45.60	
Netherlands	1971	6.7	42.5	18.6	1981	2.6	17.3	7.5	-61.2	-59.3	-59.70	
Switzerland	1971	4.7	44.6	18.0	1981	1.9	20.7	8.1	-59.6	-53.6	-55.00	14.4
Oceania												
Australia	1971	20.0	97.8	46.0	1981	10.5	47.8	23.0	-47.5	-51.1	-50.00	
New Zealand	1971	26.8	120.7	58.1	1981	16.0	64.5	32.2	-40.3	-46.6	-44.60	32.1
lsia									4			
Japan	1971	0.5	9.6	3.5	1979	1.2	15.1	5.8	140.0	57.3	65.70	15.0
orth America	4074	45	 -		4004	·40 =		•••				
Canada	1971	15.7	72.7	34.7	1981	10.3	42.7	21.1	-34.0	-41.3	-39.20	
United States	1971	30.2	105.4	55.3	1980	25.6	82.4	44.5	-15.2	-21.8	-19.50	35.3

a/ Younger teen-age rate is the number of births per 1,000 women aged 15-17 years.

b/ Older teen-age rate is the number of births per 1,000 women aged 18-19 years.

(Teitelbaum and Winter, 1985; Westoff, 1983). Among eastern European countries, the period from 1958 to 1968 was one of rapid fertility decline 2' associated with the liberalization of abortion laws. In the subsequent decades, these countries adopted pro-natalist policies which included more restrictive abortion laws and family policy measures such as financial incentives for childbearing (United Nations, 1987a; Teitelbaum and Winter, 1985; David and McIntyre, 1981; Bravo, forthcoming).

Age-specific fertility rates for teenagers show declines similar to those among older women in northern and western European countries and the non-European developed countries (Australia, Canada, Japan, New Zealand and United States), but with a lag of about five years in all northern European countries and in Finland, Ireland, Norway, and the United Kingdom, in western Europe. It is plausible that the mechanisms used to prevent unwanted and unplanned pregnancies were made available to teen-age women, particularly unmarried young women, only at a later date, hence the time lag. These mechanisms include laws governing the availability and accessibility of contraception and abortion among unmarried teenagers as well as a relaxation by parents of strict attitudes towards their teen-age children. Some of these issues as they relate to adolescents are taken up in the following chapters.

Improvements in contraceptive technology and their availability to teenagers decreased the prevalence of shotgun or forced marriages (Bourgeois-Pichat, 1986) and indeed the low proportions married among teen-age women declined even further during the late 1960s and 1970s (see chap. III). Marriage was the channel through which fertility could be regulated if exposure to pregnancy was only within the confines of marriage. However, the broad social and technological changes in the 1960s that affected desired family size also had their effects on the institutional aspects of marriage and the family (Roussel, 1987). Increasingly, childbearing is no longer exclusively confined to marriage and the institution of marriage itself is undergoing tremendous change as cohabitation becomes increasingly popular among young people (Westoff, 1986; United Nations 1988a and b).

In most southern European countries, teen-age rates were increasing in the decades of the 1960s and the 1970s while adult rates were fairly stable (as in Greece) or decreasing (as in Italy, Portugal, Spain and Yugoslavia). For these predominantly Catholic countries, 10/ the trends may represent a weakening of traditional social forces that encouraged early marriage and discouraged pre-marital sexual activity (Westoff, Calot and Foster, 1983). However, in the most recent period (for the 1980s) both teen-age and adult rates have declined.

Among the eastern European countries, except Bulgaria, trends in fertility rates among all women were matched by trends among younger women. In Romania, for example, the sharp increase in total fertility rates in 1967, which reflects the tightening of abortion laws at that time, is also reflected in teen-age rates for that country. However, in the USSR (annex tables) total fertility rates declined from 2.9 per woman in 1955 to 2.3 per woman in 1980, while the teen-age rate increased from a low of 15.6 per 1,000 women in 1955 to 40.9 in 1980.

D. Characteristics of teen-age mothers

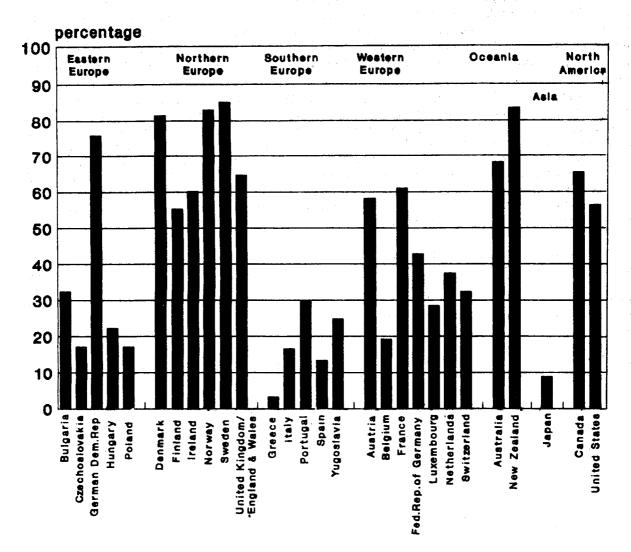
The one outstanding characteristic of teen-age mothers and one that gives rise to most concern about teen-age childbearing is that a vast majority of teen-age girls are unmarried at the time of the birth of their child. In 12 out of 27 countries (figure VII), more than half of teenagers who had a birth (in one calendar year during the mid 1980s) were unmarried. Il In Denmark, the German Democratic Republic, New Zealand, Norway, and Sweden, more than seven out of 10 teen-age childbearers were unmarried. Only Greece and in Japan was the proportion of illegitimate births less than 10 per cent. Teenagers in northern European countries, and to some extent in western European countries (Austria and France), were most likely to have had a birth while unmarried. Australia and New Zealand, in Oceania, and Canada and the United States also have high proportions of births by unmarried teen-age women.

Trends in the proportion of births among teenagers to unwed women show this proportion to have increased somewhat in all developed countries over the decade of the 1970s (Höpflinger, 1985; United Kingdom, 1985). In the United States, for example, among young women under 17 years of age, the proportion of all births to unmarried mothers increased from 43 per cent in 1970 to 63 per cent in 1981, while among women aged 18-19 years, the corresponding increase was from 22 to 41 per cent (Ventura, 1984). The increase in the percentage of adolescent births occurring to unmarried women, observed in these countries, took place mostly because the proportion of unmarried women increased as age at marriage increased (see chap. III). Thus, even at constant rates of childbearing among married and unmarried women, the proportion of births to unwed mothers will increase. In spite of the fact that a large proportion of teen-age births are to unmarried women, fertility rates among unmarried teenagers are somewhat lower 12 than those for married teenagers in most countries, and over the decade of the 1970s both married and unmarried fertility rates declined, the decline being slightly larger among married women (Höpflinger, 1985).

Teen-age girls in the United States are a notable exception. Although fertility rates among unmarried teen-age girls are lower than those among married girls, $\frac{13}{}$ fertility rates among unmarried teenagers increased during the decade from 1970 to 1980 while rates among married teenagers declined. Fertility rates among unmarried 15-17-year-old women increased from 17.1 per 1,000 in 1970 to 20.9 in 1981, while those among 18-19-year-old unmarried women increased from 32.9 per 1,000 in 1970 to 39.9 per 1,000 in 1981. The increases were among white teenagers whereas rates for black teenagers declined over the same period (Ventura, 1984). More recent data show that these trends continued into the early 1980s (United States, 1986).

Of course, births to unmarried women, classified as "illegitimate" in the reporting of vital statistics, are illegitimate only in the sense that the woman is not legally married at the time of the birth of the child. A birth could be legitimized by marriage soon after. $\frac{14}{}$ In other instances, a couple could be cohabiting $\frac{15}{}$ or living in a consensual union (as in the case of New Zealand $\frac{16}{}$) which may or may not be registered as a marriage at some later date.

Figure VII. Proportion of illegitimate births among all births to teenagers



Source: United Nations, Demographic Yearbook, 1986 (Sales No. E/F.87.XIII.1), tables 23 and 33.

Young women who had a birth while a teenager also tend to be less educated than others in their age category (Ventura, 1984; Malacic, 1986; Pongracz, 1986). In Hungary, a survey of adolescents carried out in 1983 by the Demographic Research Institute found that single females who had an abortion did not differ in education levels compared with their peers but, the education level of those who had given birth, especially those who were single, was lower than the average for the age group as a whole (Pongracz, 1986). Similarly, birth registration data for 1981 in the United States show that 54 per cent of teen-age women aged 18-19 years with babies had completed high school compared with 65 per cent of all women aged 18-19 years. Among 19-year-old women, $\frac{17}{}$ of those who had a birth in 1981, 61 per cent had completed high school while 79 per cent of all 19-year-olds graduated in the same year (Ventura, 1984). In another nation-wide survey of adolescents in the United States in 1976, Zelnik, Kantner and Ford (1981) found that women of socio-economic status $\frac{18}{}$ were nine times as likely to deliver illegitimate births as those in the highest socio-economic status category. The differences were extreme among white teenagers.

Levels and trends in adolescent birth rates that were discussed in this chapter are interrelated with the extent of pregnancy and abortion among teenagers. Where abortion rates are high and pregnancy rates relatively low, birth rates among adolescents are low but, on the other hand, where pregnancy rates are high and abortion rates low, birth rates among adolescents are high. In chapter II, issues relating to pregnancy and abortion among adolescents are discussed and, for the countries where data are available, levels and trends in pregnancy rates and abortion rates are presented.

Chapter II

PREGNANCY AND ABORTION

A. Introduction

A teenager faced with pregnancy has two possible choices: to bring the pregnancy to term or to have an abortion. In chapter I, levels and trends of live births were reviewed. It was shown that for the majority of developed countries, birth rates among adolescents (defined as the number of live births per 1,000 teen-age women) have been declining since the early 1970s. among several countries there is concern that pregnancy rates have not followed a similar declining trend and that more and more teenagers are turning to abortion as a means of resolving unwanted pregnancies. Data show that abortion, which is legal in most countries, is indeed an option chosen by a large proportion of teenagers. The study by the Alan Guttmacher Institute (Jones and others, 1986) compared pregnancy rates among teenagers in the United States with those in five other developed countries: Canada, England and Wales, France, the Netherlands and Sweden. The United States was found to have the highest rates of pregnancy and abortion. In the present chapter, a similar kind of comparison is extended to all developed countries. Rates of abortion and pregnancy among teenagers are reviewed and the socio-economic characteristics of young women who had an abortion are discussed.

B. Data and definitions

Most countries legally require those who perform abortions to report them to health authorities. Data from such official registration systems are published in the United Nations <u>Demographic Yearbook</u>. Of course illegal abortions, be they performed in countries where abortion is legal or illegal, will not appear in official statistics. 19/ A review of induced abortion compiled by the Alan Guttmacher Institute (Tietze and Henshaw, 1986) is a rich source of abortion data because it includes both official statistics and estimates based on other sources. This chapter relies mainly on data from that review. 20/ In order to present abortion rates separately for younger and older teenagers, data collected in response to a United Nations Statistical Office inquiry to Governments of Member States were used.

Pregnancies have been estimated as the sum of births and abortions for a given calendar year. Because of lack of reliable information, pregnancies that end in spontaneous foetal loss (miscarriages and still births) are omitted. As a result, the total number of pregnancies, and thus the pregnancy rate, will be significantly underestimated, 21/ but cross-country comparisons should be unaffected as the prevalence of spontaneous loss is likely to be constant across populations. Adjustments for spontaneous loss will not be carried out here, as the analysis is comparative in nature and does not attempt to establish precise levels for any one country. However, other adjustments have been made to improve comparability of the data. A full discussion of the measurement of pregnancy rates for this study as well as the adjustments just referred to is presented in the annex to this chapter.

C. Abortion

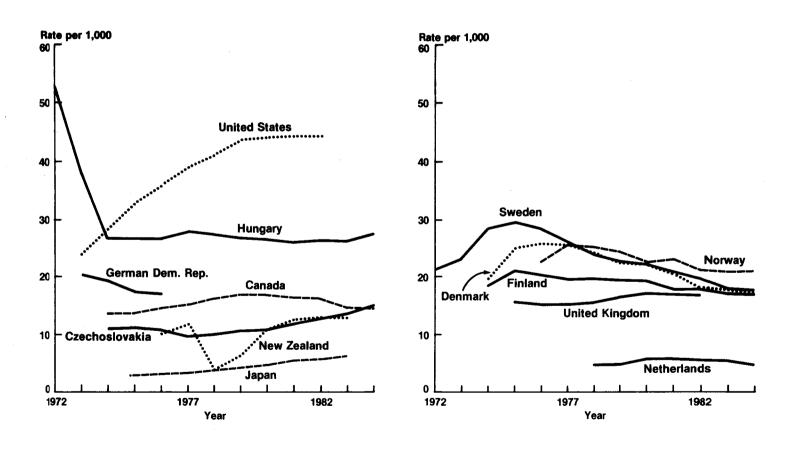
High rates of abortion among teenagers were recorded in the United States during the early 1980s (44 abortions per 1,000 teen-age women). These rates were more than double those recorded among teenagers in most European countries. With the exception of the Netherlands, where rates were at very low levels throughout the late 1970s and early 1980s (around 5 per 1,000 adolescent women), abortion rates for other countries were clustered around the 20 per 1,000 level (figure VIII and table 4). Trends in abortion rates show small decreases for most countries for the period from 1975 to about 1982, except in Czechoslovakia, Great Britain and the United States. In Czechoslovakia, abortion rates remained fairly constant until 1980 and increased slightly to about 15 per 1,000 thereafter. In Great Britain, a slowly increasing trend in rates peaked in 1980, after which rates started to decline but the overall level was about 16 per 1,000. In the United States, abortion rates increased by as much as 37 per cent from 1975 to 1979 and then stabilized at about 44 per 1,000.

Liberalization of abortion laws does not always bring about an increase in abortion rates. In Sweden, a liberalization of the laws in 1975 brought about only a small increase in rates (Tietze and Henshaw, 1986). On the other hand, changes in abortion laws had a tremendous impact on the reported rates of legal abortions in Hungary. Effective 1 January 1974, further restrictions on the availability of induced abortion were introduced. New laws made it difficult for married women to obtain abortions, although they were still available by request to single women. The impact on overall teen-age abortion rates was quite visible: in 1974, abortion rates fell to 27 per 1,000 from 38 per 1,000 in 1973.

Most developed countries have fairly liberal abortion laws (table 5), with liberalization going as far back as the mid 1930s in some northern European countries (Tietze and Henshaw, 1986). The exceptions are Belgium, Ireland, and Malta, where at present the most restrictive laws apply (table 5).22/ Eleven countries permit abortion on request. In these countries, abortions are usually limited to the first trimester of pregnancy. Of course, the correspondence between laws and practice is not always exact. Existence of restrictive laws implies neither observance nor enforcement, and liberal laws do not imply availability.

Where laws are especially prohibitive, women may seek unofficial means to obtain abortions. They may go to private clinics or use "menstrual regulation" techniques which may take place as late as 10 weeks after the last menstrual period. Alternatively, women may travel to neighbouring countries to seek abortions, as do Irish women; Spanish women did the same until recently when the abortion laws were changed (Tietze and Henshaw, 1986). Illegal abortions are especially dangerous because they are often performed in medically unsafe conditions, posing a danger to the life of the woman. For example, when restrictions were imposed in Romania in 1966, there was a fivefold increase in deaths attributed to abortion (Tietze and Henshaw, 1986).

Figure VIII. Abortion rates for selected countries, most recent data



25 -

Eastern Europe Czechoslovakia German Democratic Republic Hungary Northern Europe Denmark Finland	53.0	20.4 38.3	11.0 19.2 26.6	11.2 17.3 26.5	10.8 16.9 26.6	9.6	10.0	10.6	10.8	11.9	12.7	13.6	15.0
German Democratic Republic Hungary Northern Europe Denmark	53.0	20.4	19.2	17.3	16.9			10.6	10.6	11.7			
Republic Hungary Northern Europe Denmark	53.0												
Hungary Northern Europe Denmark	53.0					• •							
Hungary Northern Europe Denmark		38.3	26.6	26.5	26.6				26.5	26.0	26.4	26.2	27.7
Denmark					20.0	27.8	27.3	26.7	20.5	20.0	20.4	2010	
							2/ 7	22.5	22.1	20.4	18.2	17.6	17.4
Finland		••	19.9	25.0	26.0	25.5	24.3	19.5	19.4	17.9	17.9	17.1	16.9
rinian	••	••	18.5	21.2	20.4	19.6	19.8	24.4	22.6	23.3	21.1	20.8	21.0
Norway			••	••	22.7	25.5	25.4		22.0	20.9	19.6	17.9	17.6
Sweden	21.4	23.2	28.6	29.7	28.5	26.2	23.9	22.7	17.3	17.0	16.9	••	
United Kingdom	••	••	••	15.7	15.2	15.2	15.6	16.6	17.3	17.0	10.7		
Western Europe									5.7	5.8	5.5	5.4	4.7
Netherlands	••	• •	••	••	••		4.7	4.8	5.7	J. 0	,,,		
North America						45.7	4/ 7	17.0	16.9	16.3	16.2	14.7	14.7
Canada	••		13.6	13.7	14.6	15.3	16.3		44.3	44.5	44.4		
United States	••	23.9	28.2	32.5	35.8	39.0	41.1	43.9	44.3	44.5	4121		
East Asia							7.0	4.4	4.8	5.5	5.9	6.2	
Japan	••	••	••	3.1	3.4	3.5	3.9	4.4	4.0	3.5			
Oceania New Zealand					10.1	11.9	3.8	6.6	10.8	12.7	13.1	13.3	••

Table 5. Grounds on which abortion is legal, early 1986

O		Medical		lumidiaal	Social and	0n
Country	Narrow	Broad	Eugenic	Juridical (rape,	social and	request
	(life)		(foetal)	incest, etc.)	medical	. 544553
Eastern Europe						
Bulgaria <u>a</u> /	-	X	X	X	х <u>ь</u> /	-
Czechoslovakia	•	X	X	X	X ç/	-
German Dem. Rep.	-	-	-	-	•	Х <u>с</u> /
Hungary d/	-	X	X	X	X <u>⊊</u> /	-
Poland <u>e</u> /	-	X	-	X	Х <u>с</u> /	•
Romania	•	x	X	X	X <u>c</u> / <u>f</u> /	-
Northern Europe						
Denmark	-	-	-	•	-	X <u>c</u> /
Finland g/	-	X	X	X	X <u>c</u> /	-
Ireland	X	-	• •	-	•	-
Norway	-	-	-	-	-	X <u>c</u> /
Sweden	-	-	-	-	-	х <u>ь</u> /
United Kingdom <u>i</u>	<i>'</i> -	X	X	•	х <u>і</u> /	-
Southern Europe						
Albania	-	X	-	-	-	-
Greece	-	X	X	•	•	-
Italy	-	-	-	-	-	Х <u>с</u> /
Malta	X	-	•	•	-	-
Portugal	-	X	X	-	-	-
Spain	-	X	X	X	-	-
Yugoslavia	-	-	-	•	-	Х <u>Б</u> /
Western Europe						
Austria	-	-	-	•	-	X <u>c</u> / k
Belgium	X	-	-	•	•	
France	-	-	-	-	-	х <u>ь</u> /
Germany, Fed.						-
Rep. of	-	X	X	X	X <u>c</u> / <u>k</u> /	-
Luxembourg	-	X	X	X	Χ <u>ς</u> /	-
Netherlands	-	•	-	-		Х <u>ј</u> /
Switzerland	-	X	-	-	-	-

Table 5 (continued)

_	Medical			Juridical	Social and		0n
Country . I	Narrow Broad Eugenic (life) (health) (foetal)		(rape, incest, etc.)	social- medical		request	
Oceania	***				V =/ 1/		_
Australia	•	X	ΧV	•	X <u>m</u> / <u>I</u> /		_
New Zealand	-	X	X	X	•		-
East Asia							
Japan e/	•	X	X	X	Χn	•	•
North America							
Canada	-	X	•	•	-		
United States	-	•	•	•	•		х <u>і</u> /
Union of Soviet							
Socialist Republi	cs -	•	-	•	•		Х <u>с</u> ,

Source: Tietze and Henshaw (1986).

- a/ On request for unmarried women, married women with two living children and married women over age 40 with one living child.
 - b/ During the first 10 weeks.
 - c/ During the first three months or 12 weeks.
- d/ On request for unmarried women, married women who have three living children or who have experienced three deliveries, certain categories of women with two living children, married women over age 40 and women without a home or apartment of their own.
- \underline{e} / No formal authorization required, and abortion permitted in doctor's office; abortion de facto available on request.
 - f/ On request for women over age 40 and those with four or more living children.
 - g/ On request for women over age 40.
 - $\overline{\underline{h}}$ / During the first 18 weeks.
 - i/ The Abortion Act of 1967 does not apply to Northern Ireland.
 - j/ Prior to viability of foetus.
 - k/ Gestational limit specified is for interval since implantation.
 - $\overline{\underline{\textbf{I}}}$. In Northern Territory and South Australia.
 - m/ In South Australia, by legislation; in New South Wales and Victoria, by judicial decision.
 - n/ During the first 24 weeks.

Abortion laws are generally not intended to pertain specifically to adolescents, although they may affect adolescents more than any other women. In their comprehensive review of abortion laws and their impact on adolescents, Paxman and Zuckerman (1987) concluded that liberalization of laws does not rule out the existence of special provisions restricting availability of services for adolescents:

"... numerous impediments [are] created by the law - screening procedures, parental consent requirements and requirements as to where the abortion may take place, who may perform it, and how many doctors must approve of the procedure. Moreover, the cost of a legal abortion may affect the incidence of illegal abortion." (Paxman and Zuckerman, 1987, p. 88).

About one quarter of all abortions in Canada, Finland, New Zealand, Norway, the United Kingdom and the United States in recent years were performed on teenagers. Nonetheless, except for Finland, this proportion has declined since 1975, when nearly a third of all abortions in Canada and the United States were performed on teenagers (Tietze and Henshaw, 1986). Canada, Finland, Great Britain, New Zealand, Norway and the United States, 18-19-year-olds have the highest abortion rates of any age group. 23/ are particularly high among 18-19-year-olds in the United States. This was not the case in the past, when older women in these countries were the most likely to seek abortions. But as they took advantage of the increasing availability of contraception to prevent unplanned births, and sterilization procedures to terminate childbearing after achieving their desired family size, older women became less predominant among the abortion seekers. contrast, abortion rates are somewhat higher among older women in the eastern European countries, where utilization of contraception and sterilization is more limited (United Nations, 1987b).

Who are the teenagers who choose abortion over carrying the pregnancy to term? The one outstanding characteristic of teenagers requesting abortion is that the majority of them are unmarried. $\frac{24}{}$ This is true of countries in all of the European regions, as well as in North America and Oceania (David and McIntyre, 1981; Jones and others, 1986; Demers, 1986; Siedlecky, 1984; Henshaw, 1987). Among Dutch adolescents who obtained abortions in the early 1980s, for example, 4 per cent were married, 81 per cent were single and living with parents, 11 per cent were living on their own and 5 per cent were cohabiting (Jones and others, 1986). In the United Kingdom in 1983, of every 10 teenagers who conceived outside of marriage, 4 aborted, 2 married the father, 2 became single mothers (with the name of the father registered) and 2 were already single mothers (with the name of the father unregistered) (United Kingdom, 1985). Similar proportions were reported in Australia in 1981: among 28,781 pre-marital conceptions among teenagers, 49 per cent ended in abortion, 39 per cent in pre-marital births and 12 per cent in marital births (Siedlecky, 1984).

Henshaw (1987), while monitoring the profile of abortion seekers in the United States, reported very little change in their characteristics from 1980 to 1983. Most abortions were sought by young, unmarried women and white

women, although the abortion rate among non-white women is more than twice that of whites. Among teen-age women in the United States, differentials in abortion rates between white and non-white women narrowed somewhat between 1978 and 1981, but then widened slightly between 1981 and 1983.

While there is enough evidence to ascertain that most abortion seekers in developed countries are young, unmarried women (Tietze and Henshaw, 1986), unfortunately no information regarding their sexual behaviour and socio-economic status is collected regularly at the national level. 25/ A comparison of 201 Finnish women under 18 years of age who were seeking abortion with a control group of 185 schoolgirls showed that those seeking abortion were more likely to have experienced intercourse at an earlier age and had more frequent and regular intercourse. Both groups cited "love" as the most frequent motive for starting a sexual relationship. Although as much as 85 per cent of the abortion seekers had used contraception at some point, they used the condom, withdrawal and rhythm and used them irregularly (Ruusuvaara, 1983).

A similar survey in Denmark in the late 1970s interviewed three groups of teen-age women; one, those who carried the pregnancy to term; another, those who aborted the pregnancy; and a third, a control group residing in the same area as the others. Women who chose to have their baby were more likely to have a stable partner, come from a family with lower socio-economic status, and to be in the labour force (whether employed or unemployed) than women in the other two groups. The aborters, on the other hand, were more likely still to be in school. About two thirds of all three groups had used contraception at first intercourse, and it was usually a traditional method (David and Rasmussen, n.d).

A nation-wide survey in Norway in 1977 reported women of lower socio-economic status to have had fewer abortions (Norway, 1981). In the United States, reporting on the 1976 nation-wide survey of adolescents, Zelnik, Kantner and Ford (1981) found some indication that premaritally pregnant women of higher socio-economic status are more likely than those of lower status to have abortions.

D. Pregnancy rates

Pregnancy rates 26/ range from a high of about one pregnancy for every 10 teen-age women in the United States and Hungary to about one pregnancy for every 100 teen-age women in Japan and the Netherlands (figure IX). The eastern European countries have higher rates than the western and northern European countries (Denmark, Finland, Great Britain, Norway, and Sweden) and Canada. For most of the latter countries, rates ranged from 30 to 45 pregnancies per 1,000 women.

Older adolescents in most countries become pregnant at much higher rates than younger adolescents. This is to be expected considering that, for almost all countries, the legal age of consent or marriage is between 17 and 18 years and marriage rates among older teenagers are much higher than among the younger ones. Among younger teenagers, those in the United States, the German

Figure IX. Pregnancy, abortion and birth rates among adolescents

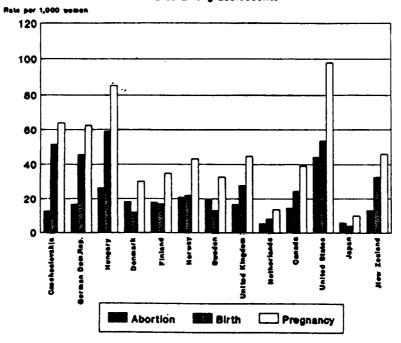
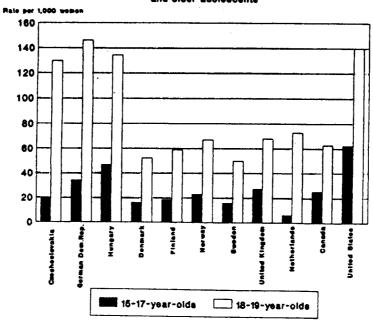


Figure X. Pregnancy rates among younger and older adolescents



Democratic Republic and Hungary had the highest rates. Young teenagers in the Netherlands had by far the lowest pregnancy rates overall (figure X). It is among the older teenagers that vast differences were observed between countries.

For most countries, a slowly declining trend in pregnancy rates was observed (table 6 and figure XI). Over an eight-year period, from 1975 to 1982, pregnancy rates in Sweden declined 50 per cent, those in Denmark declined 42 per cent and in Finland and Norway, about 30 per cent. More modest declines were observed in Great Britain and Czechoslovakia. 27/ A small increase occurred in the United States rates (9.6 per cent).

E. Opting for abortion

The option to carry a pregnancy to term is becoming less and less popular among pregnant teenagers. The proportion of pregnancies among teenagers that end in abortion has increased since the early 1970s (figure XII). As much as 60 per cent of pregnancies end in abortion in Denmark, Japan and Sweden (figure XIII). In Finland and Norway, one out of every two pregnancies end in Although teenagers in the United States experience the highest pregnancy and abortion rates, the proportion of pregnancies that end in abortion is less than 50 per cent, up from one third in 1975. Women in the eastern European countries are the most likely to carry a pregnancy to term. In Czechoslovakia, the German Democratic Republic and Hungary, and in New Zealand, about one quarter to one fifth of pregnancies ended in abortion. Pregnancies among younger adolescents were more likely to end in abortion than among older teenagers. This was particularly the case among the northern and western European countries as well as in Czechoslovakia and the German Democratic Republic (see figure XIV). In the latter two countries, although overall abortion rates are lower than in other countries, comparing younger to older adolescents, young teenagers are more than twice as likely to opt for abortion than older ones.

Pregnancy rates declined over the decade of the 1970s for most countries despite increases in the incidence of sexual activity among teenagers. show that more and more teenagers are having sexual intercourse and are doing so at increasingly younger ages (see chap. III). Proportions of teenagers who are married continue to be extremely low and cohabitation does not appear to be prevalent even in the northern European countries, $\frac{28}{}$ probably because of continuing school enrolment and lack of financial independence. Although a large proportion of teenagers who do not have a steady partner claim to have experienced sexual intercourse at least once, their frequency of intercourse is likely to be sporadic and much lower than that among married teenagers or teenagers in other stable relationships. This may be one reason why recorded growth in the proportion of teenagers ever having experienced sexual intercourse has not resulted in increasing pregnancy rates. Declines in pregnancy rates have been attributed to increased use of contraception among young, unmarried women and an increasing reliance on the more efficient methods (see chap. IV). Unfortunately, the nature of the data does not permit a direct test of the correlation between contraceptive prevalence among teenagers and pregnancy and abortion rates.

Table 6. Pregnancy rates (per 1,000 women) for selected countries

Country	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Eastern Europe											·		
Czechoslovakia	••		63.4	66.6	67.7	65.7	64.3	64.2	62.1	61.1	64.0		
German Dem. Rep.	••	71.8	69.0	64.2	62.5	4.4	• •	• •	• •	• •	• •	• •	• •
Hungary	106.8	96.1	94.2	99.1	101.6	102.0	101.3	100.2	95.6	89.0	85.4	79.7	80.4
Northern Europe													
Denmark	••	••	45.5	52.0	49.1	47.4	44.1	40.1	38.3	31.9	30.2	28.2	27.9
Finland		••	45.7	48.7	46.5	43.8	41.1	38.7	38.2	34.8	34.9	32.8	32.1
Norway	••	••	••	• •	58.4	57.9	54.4	51.8	47.9	47.1	43.1	40.6	40.2
Sueden	55.0	54.3	60.6	58.5	53.5	48.3	43.2	40.0	38.0	35.3	32.7	29.5	•••
United Kingdom		••	••	52.6	48.0	45.2	45.7	47.6	47.9	45.3	44.7	••	••
Western Europe													
Nether lands	••	••	••	••	• •	••	14.1	13.7	14.9	14.8	13.7	13.1	12.1
North America													
Canada	••	• •	48.3	47.5	47.3	46.7	45.5	44.5	44.1	42.2		39.1	
United States	• •	••	• •	89.4	89.7	92.9	93.6	97.3	98.5	97.8	98.0	••	•••
East Asia													
Japan	••	• •	••	7.8	7.5	7.2	7.4	7.9	8.4	9.4	10.0	10.5	••
Oceania													
New Zealand	••	••		• •	60.9	59.4	47.8	48.2	49.5	51.0		46.0	••

Figure XI. Trends in pregnancy rates

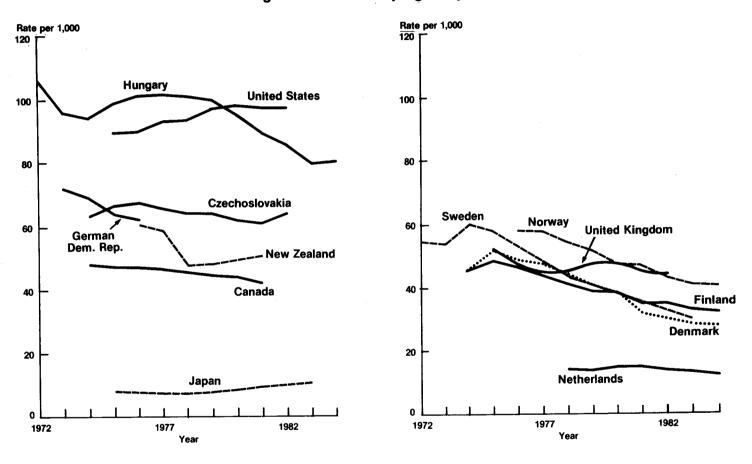


Figure XII. Abortion as a percentage of pregnancies

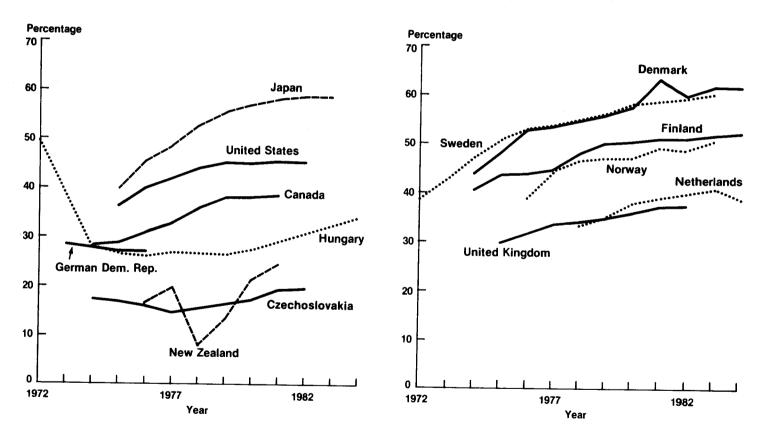


Figure XIII. Abortions and births as a percentage of pregnancies

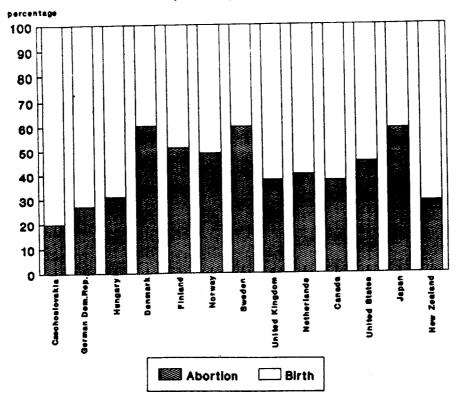
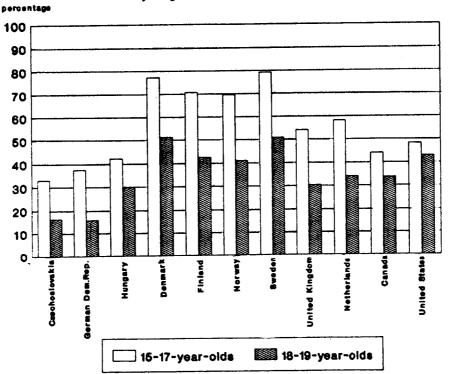


Figure XIV. Abortion rate as a percentage of pregnancy rate among younger and older adolescents



Source: Annex tables. - 35 -

Annex to chapter II

Measurement of adolescent pregnancy

For purposes of this study, pregnancies have been estimated as the simple sum of births and abortions for the given calendar year. Although this may often be the only feasible numerator for the computation of pregnancy rates, it suffers from several important deficiencies. These are reviewed here, along with a few more general issues that particularly affect the measurement of adolescent pregnancy. Certain problems that are trivial in the case of older women can assume major significance for adolescents because the probabilities of both births and abortions change so rapidly during the teen-age years.

To begin with, when pregnancies are estimated by adding together births and abortions, pregnancies that end in spontaneous foetal loss (miscarriages and still births) are omitted. Although the total number of pregnancies, and thus the overall pregnancy rate, is therefore significantly understated, the prevalence of spontaneous foetal loss may not vary greatly from one population to another within a given age group, so that most kinds of comparisons should be affected less than the measurement of absolute levels. Nevertheless, pregnancies leading to induced abortions are exposed to the risk of spontaneous loss for a far shorter period than those leading to births. So comparisons in which the relative magnitudes of the birth component and the induced abortion component of pregnancy differ appreciably are subject to distortion. This would apply, for instance, to many comparisons between age groups, periods and countries.

An adjustment can be made for the omission of spontaneous foetal loss, although any such procedure is to some extent arbitrary since the reporting of miscarriages is poor, and the likelihood of early undetected foetal loss is especially uncertain (Bongaarts and Potter, 1983). Also, rates of spontaneous foetal loss may well vary with age and possibly by socio-economic characteristics. One formulation that has been used is to inflate the number of births by 20 per cent and the number of abortions by 10 per cent (Dryfoos, 1982, table 2.1). It seems plausible that, within a fairly large margin of error, any adjustment that gives more weight to births than to abortions stands to improve comparability. Because of the practical difficulty of calculating adjusted rates and the modest gain in the precision of intercountry comparisons, it was decided to present unadjusted rates only. However, a description of the adjustment procedures follows.

Another, and more serious, problem is that both the period to which the event is assigned and the age of the woman involved are usually recorded as of the occurrence of either a birth or an abortion. This implies a displacement in the period and the age relevant to the experience of risk of pregnancy, i.e., the time of conception. Moreover, since the duration of pregnancy is typically several months longer for a birth than for an abortion, the conception date of a birth would be earlier, when the woman was younger, than the conception date of the aborted foetus. Both conceptions are, however,

recorded as occurring at the same date to a woman of identical age. In other words, there is not only a displacement in period and age but also a discrepancy in the amount of the displacement according to the type of outcome. Abortion rates and also birth rates may shift fairly abruptly from one year to the next, and they rise very rapidly with age during adolescence. Thus, like the situation described above with respect to spontaneous foetal loss, the number of pregnancies occurring in a given year to women of a given age is significantly understated when measured by births and abortions occurring at that date to women of that age. When the relative importance of the two components differs, comparisons of the pregnancy level across time, age or space are affected as well.

A technique for adjusting the numbers of births and abortions for this displacement was developed by Dr. Christopher Tietze of the Population Council. His procedure, which deals with the entire reproductive age span, is essentially as follows. It is assumed that the length of gestation is on the average nine months for births and three months for abortions. The total number of births to women of all ages occurring during a 12-month period centred six months later than the given calendar year are taken from monthly vital statistics or, if necessary, estimated as the average of the total number of births occurring during that year and the following year. number is distributed by five-year age group of mother according to the average of the reported age distributions for that year and the following year and, if possible, by single year of age below age 20. Relating the resulting lagged estimates of births by age to the abortions reported for each age that occurred during the given calendar year eliminates the difference between births and abortions in the amount of displacement of the date of conception. Conceptions leading to both events still represent a 12-month period centred three months earlier than the given calendar year, a disjuncture that is unlikely to be of significance.

Next, the age discrepancy is dealt with; a step Tietze called "de-aging". The reported numbers of abortions by age and the estimated numbers of births by age are used to generate continuous age curves by means of the Sprague formula. Births estimated as occurring during the first nine months of a given year of age and abortions during the first three months are then reassigned to the preceding year of age. This effectively shifts both events to the year of age at conception. Details of the computer programme utilized and examples are given in Tietze (1983).

The quantitative effect of adjusting for omission of spontaneous foetal loss and for displacement in date and age can be evaluated by comparing the unadjusted and adjusted rates per 1,000 15-19-year-old women for 1980 given for several countries:

			Ratio
	Unadjusted	<u>Adjusted</u>	Adjusted/Unadjusted
Czechoslovakia	60	100	1.7
Netherlands	14	25	1.8
Sweden	37	59	1.6
United States	96	135	1.4

As expected, the adjusted pregnancy rates are substantially higher and therefore permit a more realistic appreciation of the actual incidence of pregnancy among young women. On the other hand, intercountry comparisons are little affected. The rank order of the countries remains the same in the adjusted as in the unadjusted rates. Since both parts of the procedure have the effect of placing more emphasis on births, adjustment raises the rate more in countries where births represent a larger component of adolescent pregnancy, e.g., the Netherlands and Czechoslovakia, than in countries where abortions are more important, e.g., the United States and Sweden. The contrast between the highest rate, that of the United States, and the lowest, that of the Netherlands, drops by 22 per cent from a ratio of 6.9 in the unadjusted version to 5.4 in the adjusted version. Current experience of all the countries covered in the present report appears to fall within the range of increase exhibited by the United States and the Netherlands.

It goes almost without saying that the omission of illegal and unreported abortions also affects the measurement of pregnancy. Birth data are usually quite complete, hence one implication again relates to the differential introduced between the two components of pregnancy. The magnitude of this factor is obviously highly variable, but because of the stigma associated with adolescent pregnancy in many societies, the undercount for women under age 20 tends to be greater than that for older ages.

Chapter III

SEXUAL EXPOSURE

A. Introduction

Previously, it had been assumed that the initiation of sexual activity, and consequently exposure to the risk of childbearing, was associated largely with marriage. Because marriage is an easily identifiable event, provided a convenient basis for the quantitative assessment of sexual exposure in a given population. However, for some time, certain European countries have been recognized as being to a greater or lesser extent exceptions to this Sweden, especially, has had a long tradition of acceptance pre-marital sexual activity and childbearing. The acceptance out-of-wedlock childbearing is traditional in certain districts of Austria and in some rural communities in other parts of Europe (Van de Kaa, 1987). Since approximately the 1960s, the situation has altered profoundly in most Western societies, and sexual activity before marriage, often on a frequent and regular basis, has become increasingly common. As a result, there is no longer any easily measured statistical distinction which differentiates women who are sexually active from those who are not. The measurement of exposure presents a particular problem for adolescent women since the teen-age years are precisely the years during which the now unobserved transition into sexual exposure usually occurs.

Marriage remains a condition which presupposes regular sexual relations. Marriage may be preceded by one or more periods of cohabitation, either with the eventual marriage partner or with others. The sharing of living quarters by non-marital couples is also a fairly readily identifiable condition. Like marriage, it can be assumed to imply continuous exposure to the chance of pregnancy. Before and between intervals of shared living arrangements, whether within marriage or not, relationships develop that involve more or less frequent sexual activity. In general, exposure to pregnancy is probably considerably less in these situations than when living quarters are shared, but there is unquestionably great variation which is difficult to measure using surveys. The initial point of any exposure at all is the first experience of sexual intercourse, which is more likely to be accurately remembered and reported.

There are several ways of looking at sexual exposure, none of which are particularly satisfactory. Statistics on proportions married are readily available and are presented for all countries in this chapter. However, due to the incidence of pre-marital sex, these data significantly underestimate the number of women exposed in most countries and increasingly so in more recent years. Statistics on proportions of women cohabiting with a male partner to whom they are not married are sometimes available, either from the usual statistical sources such as censuses and population registers or from special surveys. Operational definitions of non-marital cohabitation are far from uniform, however, creating considerable uncertainty regarding inter-country comparisons even where data are available. The total number of

women cohabiting, including both married and unmarried, can be assumed to constitute the proportion sexually active on a regular basis and consequently represents a minimum estimate of sexual exposure.

Some survey data on age at first intercourse exist, providing a basis for estimating the overall proportion of women who have ever had intercourse; this may be taken as a maximum estimate of exposure to the risk of pregnancy. In a few cases, data on frequency of intercourse have been collected, possibly offering further refinement between these two outer limits. Measurement problems and definitions of concepts used here are discussed in the annex to this chapter.

The present chapter reviews, first, the minimum estimate of sexual exposure - proportions married and proportions cohabiting. Available evidence on the first experience of sexual intercourse - the maximum estimate of exposure to the risk of pregnancy - is presented for countries. Estimates are at the national level for countries where such data are available and at subnational levels otherwise.

B. Marriage and cohabitation

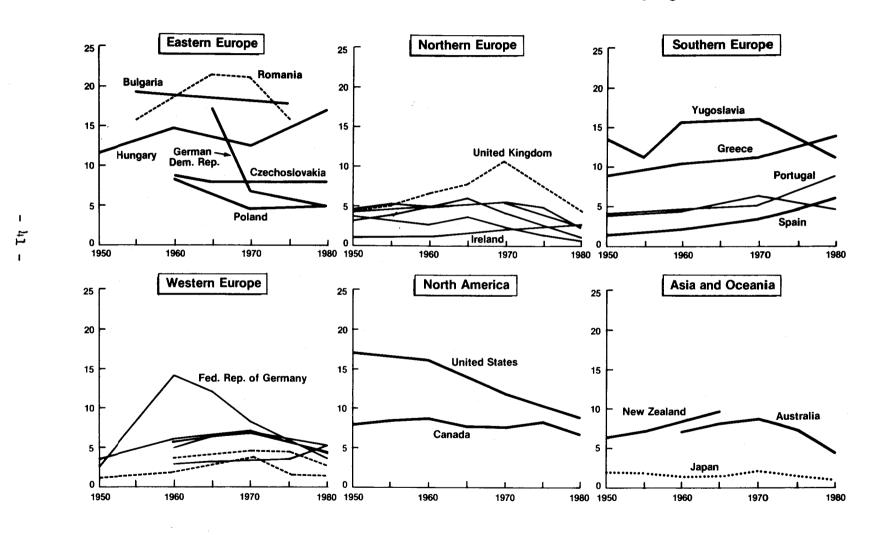
1. Marriage

Throughout the past three decades (1950-1980), only a small proportion of teen-age women were sexually exposed through marriage, less than 10 per cent in most northern and western European countries (figure XV). In 1950, more than 10 per cent of adolescents were married 19 in only three countries - Hungary, Yugoslavia and the United States. At the other extreme, less than 2.5 per cent of adolescents were married in 1950 in Ireland, Spain, the Federal Republic of Germany, Japan and Switzerland. In the decade of the 1960s, there appeared to be an increased tendency for teenagers to be married, followed by a decrease in the most recent period for a number of countries. This was especially pronounced in some northern and western European countries where the "marriage boom" among teenagers corresponded with the baby boom period of the 1960s (see chap. I). In the Federal Republic of Germany, for example, more than 10 per cent of teenagers were married in 1960 and in 1965. The proportion married then decreased dramatically to 3.6 per cent in 1980.

There are exceptions to this general pattern. In the predominantly Catholic countries of Spain, Portugal and Ireland and in Greece, there has been an increasing tendency over the three decades for adolescents to be married during their teen-age years, although in Ireland the increase is more recent. In many of the eastern European countries (Bulgaria, Hungary and Romania), the proportion of adolescents who are married has always been relatively high. In 1975 and 1980, the three above-mentioned countries were the only ones with more than 15 per cent of teenagers married.

Adolescents in the United States showed a steadily decreasing tendency to be married over the past three decades. In 1950, teenagers in the United States had the highest proportion married (17.1 per cent) among the developed countries. Proportions married remained high until about 1960, after which a

Figure XV. Proportion of teenagers (15-19 years) who are married, by region, 1950-1980



sharp decline occurred resulting in only 8.8 per cent of adolescents being married by 1980. As for most other countries, this declining trend in proportions married is reflected in the steady decline in teen-age fertility in the United States since 1960.

In all countries, there are laws establishing minimum legal age at marriage. 30/ For most developed countries, the minimum legal age ranges from 16-18 years for women and 18-20 years for men (table 7). In Spain and in some states of the United States and provinces of Canada, the minimum legal age is as low as 14 years for men and 12-13 years for women. Recent changes in the legal minimum age at marriage have tended to lower the age where the age was originally high, and to raise it where it had originally been low. In agreement with international recommendations, age limits were recommended to be 18 for males and from 16-18 for females. Several countries have in recent years changed the age limits for the legal age at marriage to 18 for both sexes, among them the Federal Republic of Germany and Italy, where the limits were 21 and 16 in the former and 16 and 14 in the latter for men and women, respectively (Livi-Bacci and Ventisette, 1980). Whether the legal age limits have an impact on the initiation of marriage is not clear, as exceptions to the law are frequently granted for special reasons, including pregnancy.

Responses to census and survey questions show that while in most countries negligible proportions of young women are reported as being married $\frac{31}{}$ at ages below the minimum legal age, in certain countries, particularly in Greece, Romania, Spain and the United States, this is not the case (table 8). Data on proportions married by single years of age show that there are marked differences across countries. Northern and western European countries generally have very low proportions married up to age 17, and at age 19, about 10 to 15 per cent are married. In contrast, proportions married are high even at the young ages in countries in eastern and southern Europe and in the United States. For some of these countries, for example the United States, $\frac{32}{}$ Canada, Portugal and Spain, this is not surprising as the minimum legal age at marriage for women is 15 or below.

2. Cohabitation

Cohabitation has emerged in European countries as an increasingly popular phenomenon among men and women of all ages. In the past, couples frequently lived together for short periods before marriage, but such unions have become more and more common and may or may not result in marriage (United Nations, 1988b). In France, Germany and Norway, the arrival or desire for a child typically leads to the legitimization of an informal union, although this is less likely to be the case in Sweden and Denmark (Festy, 1980).

Among the 15-19-year age group as a whole, the prevalence of informal unions is not nearly as high as among women between the ages of 20 and 29 years (United Nations, 1988b). However, proportions cohabiting among older adolescents (18-19-year-olds) are more comparable to the levels for women in their twenties, while the proportions cohabiting at ages below 18 years are

Table 7. Minimum legal age at mariage a/

			um legal marriage				um legal marriage
Region and country	Year reported	Groom	Bride	Region and country	Year reported	Groom	Bride
Eastern Europe				Western Europe			
Bulgaria b/	1983	18	18	Austria c/	1983	21	16
Czechoslovakia b/	1983	18	18	Belgium c/	1983	18	15
German Dem. Rep. b/	1983	18	18	France b/	1983	18	15
Hungary b/	1983	18	16	Germany,	1703	10	1,5
Poland b/	1983	21	18	Fed. Rep. of c/	1983	18	18
Romania d/	1983	18	16	Luxembourg d/	1983	18	15
_				Netherlands b/	1983	18	16
lorthern Europe				Switzerland c/	1983	20	18
Denmark c/	1985	20	18	-			
Finland b/	1983	18	17	North America			
Ireland <u>b</u> /	1983	16	16	Canada <u>e</u> / <u>f</u> /	1976	14-16	12-16
Norway <u>b</u> /	1983	20	18	United States <u>e/f</u> /	1979	14-18	13-17
Sweden b/	1983	18	18				
United Kingdom <u>b</u> /	1983	16	16	Asia			
				Japan <u>d</u> /	1982	18	16
Southern Europe							
Greece <u>g</u> /	1986	18	18	Oceania			
Italy <u>c</u> /	1983	18	18	Australia <u>b</u> /	1983	18	16
Portugal <u>b</u> /	1983	16	14	New Zealand <u>d</u> /	1983	16	16
Spain d/h/	1983	14	12				
Yugoslavia <u>b</u> /	1983	18	18	Union of Soviet Socia	list		
				Republics <u>f</u> / <u>i</u> /	1983	18	18

Source: United Nations (1988a).

a/ Based on secondary sources. Covers most recent information available. The legal minimum age may require parental or judicial consent.

b/ J. M. Paxman, Law and Planned Parenthood (London, International Planned Parenthood Federation, 1980), p. 96, table E.

c/ Communication from Consulate, New York. Requires parental or judicial consent.

d/ United Nations Demographic Yearbook 1982 (Sales No. E.83.XIII.1), table 25; and ibid., Demographic Yearbook 1983 (Sales No. E.84.XIII.1), table 24.

_e/ A. Henry and P. T. Piotrow, "Age at marriage and fertility", Population Reports, Series M, No. 4 (November 1979), p. 151, table 15.

f/ Varies according to states or provinces.

g/ Applies to Christian and Hindu Indians: see "The Child Marriage Restraint (Amendment) Act 1978", The Journal of Family Welfare, vol. 25, No. 1.

h/ Civil marriage only. Canonical marriages are not valid for girls under 14 years and boys under 16 years of age.

i/ L. M. Volodarsky, ed., Nagelenye SSR (The population of the USSR) (Moscow, Politizdat, 1983), p. 84. The legal minimum age for girls is 17 years in the Ukrainian SSR and Uzbek SSR.

Table 8. Proportion of teenagers who are married, by single years of age

			Pr	oportion	married		
Region and country	Year	15	16	17	18	19	15-19
Eastern Europe						T 7	
Czechoslovakia	1980	0.4	0.6	2.4	11.6	27.0	8.0
German Dem. Rep.	1981	0.0	0.0	0.0	4.4	16.1	4.2
Hungary	1980	0.8	4.2	11.4	23.5	38.1	16.1
Poland	1984	{	- 0.6 a/	}	{10.	3 <u>b</u> /}	4.7
Romania	1977	2.4	5.6	12.1	22.1	11.7	15.9
Northern Europe							
Denmark	1985	0.0	0.1	0.2	0.7	2.2	0.7
Finland	1984	0.0	0.0	0.5	2.0	5.0	1.6
Ireland	1981	0.0	0.2	0.9	3.4	7.7	2.3
Norway	1980	0.0	0.0	0.6	2.6	7.4	2.1
Sweden	1985	0.0	0.0	0.1	0.6	1.6	0.5
United Kingdom	1981	0.0	0.5	2.0	6.3	14.2	4.5
Southern Europe							
Greece	1981	2.6	6.3	12.4	20.3	28.8	13.8
Portugal	1981	0.9	2.8	6.8	13.1	21.8	8.9
Spain	- 1981	1.2	2.3	4.3	7.8	13.1	5.6
Western Europe							
Austria	1981	0.1	0.6	2.0	5.4	12.4	4.2
France	1982	0.2	0.3	0.8	2.1	6.0	1.9
Germany,							
Fed. Rep. of	1984	0.0	0.2	0.5	2.3	6.0	0.8
Luxembourg	1981	0.1	0.6	1.9	6.4	12.4	4.4
Netherlands	1985	0.0	0.2	0.7	1.8	4.6	1.5
Switzerland	1986	0.0	0.2	0.6	2.1	5.1	1.6
North America							
Canada	1981	0.5	1.4	3.5	9.1	11.8	6.6
United States	1980	1.4	2.6	5.9	12.3	21.1	8.8
Oceania							
New Zealand	1981	0.0	(1	/ي 0.2	}	91.7
Asia				. .			
Japan	1980	0.0	0.2	0.5	1.3	2.9	1.0

<u>Source</u>: United Nations Statistical Office Special Questionnaire on Adolescent Reproductive Behaviour.

a/ Ages 15-17 years.

b/ Ages 18-19 years.

c/ Ages 16-19 years, ever-married includes consensual unions.

negligible (table 9). For the period between the mid 1970s and mid 1980s, the proportion of 18-19-year-olds cohabiting ranged from 23 and 16 per cent in Denmark and Sweden, respectively, to 3 and 3.3 per cent in Norway and the United States, respectively.

Data from retrospective surveys show the proportions of teen-age women who had ever lived with a man for at least some minimum specified period to be increasing. In the Netherlands, for example, the 1982 Fertility Survey showed that while 5 per cent of the 1950-1954 birth cohort of women had cohabited before age 20, 9 per cent of the 1955-1959 cohort had done so. In Sweden, more dramatic increases were observed in the percentage of women who had ever lived with a man (for at least one month) by age 20, from just under 30 per cent among the 1936-1940 birth cohort of women to nearly 60 per cent among the 1956-1960 cohort (Jones and others, 1986). Increases of cohabiting 18-19-year-olds have more than offset what would otherwise have been a decline in numbers exposed to regular sexual activity owing to declining proportions married (table 10). In Canada, Denmark and Sweden, where there are high proportions cohabiting, about one fifth of the 18-19-year-old female population can be assumed to be exposed to regular sexual activity. This is true for the United States as well, although it is largely due to high proportions married. Norway and France show the lowest proportions - only about 8 per cent.

C. Sexual exposure among unmarried teenagers (excluding those cohabiting)

Estimates of sexual exposure among adolescents 33/ (tables 11 and 12) are based on surveys taken at dates ranging from 1972/73 in Yugoslavia to 1986 in Hungary and Italy; thus comparisons made between countries should take into account differences in dates as trend information shows that sexual activity among teenagers has increased tremendously in recent years. Moreover, not all of the estimates are based on national samples of all young women. For example, the estimates for France, although a national sample, included only students. Nevertheless, general comparisons will be made across countries on the level and pattern of sexual activity among adolescents.

The proportion of single adolescents who reported ever having had sex rises steeply with age through the teen-age years for all countries (figure XVI and table 11). Among 14-year-olds, only 3 per cent of girls in the Federal Republic of Germany and Hungary have ever had sex. Among 17-year-olds, however, as many as one fifth (Belgium and Yugoslavia) to one half (Federal Republic of Germany and Hungary) of single women have experienced intercourse. Among teenagers in the United States, where a great deal of attention has been focused on adolescent sexual behaviour, estimates for 1982 from the National Survey of Family Growth show that nearly three quarters of unmarried 19-year-old women had experienced sexual intercourse. Even at the younger ages, at age 16 for example, girls in the United States were more likely to have experienced sexual intercourse than their counterparts in European countries, although differences between countries are not as pronounced at the young teen-age years as they are among the older adolescents.

Table 9. Percentage of women who are cohabiting, by age

			A	je			
Country	Year	15.0	16.0	17.0	18.0	19.0	15-19
Canada	1981	0.1	0.6	1.8	4.4	7.0	2.9
Carioca	1984				{1	1.4 <u>a</u> /}	
Denmark	1975				22.6	23.0	
y Ci mai K	1975				{2	3.0 g/}	
France	1977				(4.0 <u>a</u> /}	
i i direc	1975						0.5
	1981						1.2
Hungary	1984						1.1
New Zealand	1981		{		5.6 b/	}	4.5
Norway	1980	0.0			1.9		1.3
NOI NOY	1980					3.0 <u>a</u> /}	
Sweden	1975				{1	6.0 g/}	
United Kingdom	1976		{		1.0 b/	}	
officed Killydon	1979		-			4.0 <u>a</u> /}	
United States	1980	(0.5 c	:/}	{	3.3 <u>a</u> /}	1.7

Sources: Canada (1981) - Demers (1986); Canada (1984), Denmark, Hungary, New Zealand and Norway - Special tabulations; France (1977) - Höpflinger (1984); France (1975 and 1981), United Kingdom (1979), Sweden (1975), United Kingdom (1976) - United Nations (1988a) and United States - Jones and others (1986).

Table 10. Combined percentage of women aged 18-19 years currently married and cohabiting

Country	Year	Currently married	Year	Currently cohabiting	Total
	<u> </u>				
Canada	1984	7.3	1984	11.4	18.7
Denmark	1985	1.4	1975	23.0	24.4
France	1982	4.0	1977	4.0	8.0
Norway	1980	4.9	1980	3.0	7.9
Sweden	1980	1.5	1980	16.0	17.5
United Kingdom	1981	10.1	1979	4.0	14.1
United States	1980	15.9	1980	3.3	19.2

Sources: Text tables 8 and 9.

a/ Ages 18-19 years.

b/ Ages 16-19 years.

c/ Ages 15-17 years.

Table 11. Proportion of never married adolescents who ever had sex, by single years of age for selected countries

					Age	•		
Country	Sample	Year	15	16	17	18	19	20
Belgium	NM, Flanders	1983/84	12	21	20	43	51	
Canada	NM, Montreal, Students	1981		••	••	{5	3 <u>a</u> /}	
France	NM, National, Students	1980	••	••	••	34	• •	••
Germany,	·							
Fed. Rep. of	NM, National	1980	9	28	56	• •	• •	• •
Hungary	NM, National	1986	15	21	50	64	• •	• •
Italy	NM, National	1986	• •	(3	4 <u>b</u> /}	• •		
Norway	NM, National	1977		••	••	{6	6 <u>a</u> /}	• •
United Kingdom	NM, Great Britain	1976		22	36	54	57	67
United States	NM, National	1982	17	29	41	53	65	
Yugoslavia	NM, Croatia, Students	1972/73	••	11	18	31	38	••

Sources: Belgium - Geeraert, Unpublished tabulations; Canada - Frappier, 1983, as cited in Herold (1984); France - Les Dossiers de <u>l'Etudiant</u> (1980); Germany, Fed. Rep. of - Schmid-Tannwald and Urdze (1983); Hungary - Unpublished tabulations from 1986 Fertility Survey; Italy - Associazione Italiana per <u>l'Educazione Demografica</u> (1986); Norway - Unpublished tabulations from the 1977 Fertility Survey; United Kingdom - Dunnell (1979); United States - Jones and others (1986); Yugoslavia - Beluhan and others (1972-1973).

Table 12. Proportion of women who had experienced sexual intercourse by a given age for selected countries (retrospective data for never married and all teenagers)

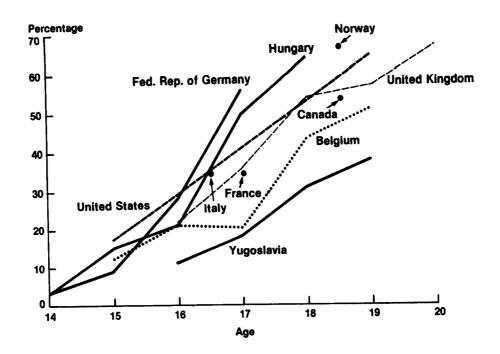
Country			By exact age			
	Sample	Year	18	19	20	
Czechoslovakia	NM, SSR	1969	10	23	41	
France	All, National	1984	28	••	70	
Japan	NM, 7 cities, students	1981	8	10	17	
Netherlands	NM, National	1981	22	37		
Sweden	All, National	1981	• •	79	94	
United States	All, National	1982	37	53	66	

<u>Sources</u>: Czechoslovakia - Dlhos (1969) as cited in Pavlik and Rychtarikova (1987); France - <u>Le Nouvel Observateur</u> (1984); Japan - Hayashi (1983); Netherlands - Jones and others (1986); Sweden - Jones and others (1986); United States - Pratt and Hendershot (1984).

a/ Ages 18-19 years.

b/ Ages 16-17 years.

Figure XVI. Proportion of teenagers who ever had sex, by age, for selected countries



Unfortunately, information on sexual activity is available only in Hungary, Italy and Yugoslavia in the eastern and southern European countries. A recent survey in Hungary (1986) among unmarried young women shows that the proportion of sexually experienced teenagers is as high as in Norway and the United States. Proportions of sexually experienced teenagers in Yugoslavia were consistently lower at all ages as compared to other countries but in Italy, the only other southern European country with comparable data, teenagers appear to be as experienced as their counterparts in the other European countries.

Cross-country comparisons among 19-year-old unmarried teenagers show that those in the United States were most likely to have experienced sexual intercourse - nearly twice as likely as Yugoslav 19-year-olds. In the United Kingdom, Belgium, Canada, Hungary, Norway and the Federal Republic of Germany, about one half to two thirds of unmarried 19-year-olds had experienced sexual intercourse.

Retrospectively reported estimates of sexual activity 34/ (table 12) show that by age 20, nearly all teenagers in Sweden had experienced sexual intercourse (94 per cent), while more than two thirds in France and one third in the United States had done so. In Czechoslovakia, estimates for the late 1960s showed that nearly half of unmarried teenagers had experienced sexual intercourse by age 20. Estimates of experience of sexual intercourse are extremely low for Japan. Among unmarried, urban students, only 17 per cent had experienced sexual intercourse by age 20.

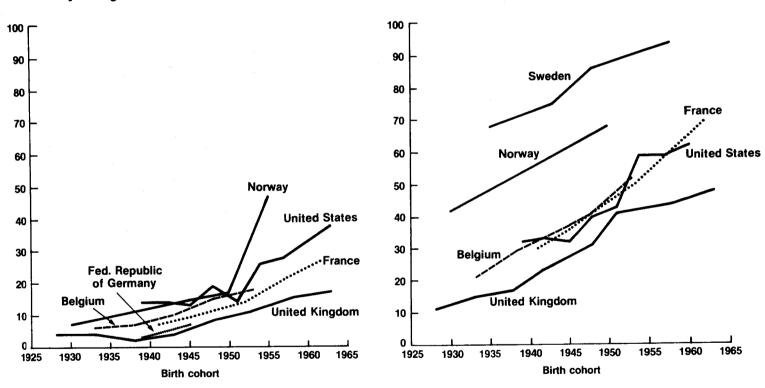
More and more adolescents in developed countries are sexually experienced by the time they reach the end of their teen-age years and are initiating their first sexual experience at increasingly younger years. Retrospective surveys that included a question on the age at first intercourse confirm this trend for various cohorts of teenagers (figures XVII and XVIII). Without doubt, the proportion who had experienced sex by age 19 has been increasing steadily over the years among all adolescents (figure XVIII). The increase appears to be at the same rate for all countries, except among the most recent cohort in France. Forty-nine per cent of the 1949-1958 cohort in France had experienced intercourse by age 19, whereas among the 1959-1965 cohort the corresponding percentage was as high as 70 per cent. Sweden and Norway had particularly high proportions of sexually experienced teenagers compared with other countries.

Parallel trends are seen in proportions sexually experienced by age 19 in the United States and France in both level and rate of increase. The two trends are not strictly comparable, however, as the proportion for the United States includes only those first experiences that were not within marriage or were pre-marital, whereas in the case of the remaining countries, all first experiences were included regardless of marital status.

While the proportion of young women sexually experienced by age 17 among the more recent cohorts has been rising steadily over time, the increases are much more pronounced, especially in Norway, the United States and France.

Figure XVII. Proportion of women having had sex by the age of 17 for various birth cohorts

Figure XVIII. Proportion of women having had sex by the age of 20 for various birth cohorts



Among cohorts born after 1950, the proportion sexually experienced by age 17 was nearly one half in Norway, a third in the United States and about one quarter in France. Cohorts born after 1950 would have turned 15 after 1965. It was during this period that the "sexual revolution" is said to have commenced and it was also in the late 1960s that one observed a concomitant increase in teen-age rates (chap. I) as well as a slight increase in proportions married in a number of western and northern European countries (see chap. III, sect. B.1).

D. Frequency of intercourse

Estimates of the frequency of intercourse among non-married adolescents offer some degree of refinement of estimates of sexual exposure. However, such data have been collected in only a few instances and are often not comparable across countries. Some report average frequency per month, while others give a distribution of ranges of frequencies. In a number of surveys, estimates of frequency have to be gleaned from reported proportions having had intercourse in the past one or three months among the sexually experienced population. Estimates are presented in this section in their various forms and although no direct comparisons are possible between countries, these estimates only confirm that sexual intercourse among the unmarried is often sporadic in nature.

In Finland, one survey in 1971 found that of sexually experienced unmarried women aged 18-29 years, 33 per cent had not had any intercourse during the past month and among those who had, the reported average frequency was 3.8 times a month (Leppo, 1978). Lower average frequency of intercourse was reported in the United States in 1976 among unmarried women. The reported frequency of 2.6 times per month, however, included those women who had not had intercourse in the past month (Zelnik, Kantner and Ford, 1981). More recent data (1982) for the United States show that 20 per cent of unmarried teenagers who had had intercourse in the previous three months said that they had done so one or fewer times a month, 29 per cent said their frequency was two to three times, 25 per cent said four times and 26 per cent said more than four (Jones and others, 1986).

E. Estimates of exposure to pregnancy

If the proportion sexually experienced at any given age is the maximum estimate of exposure to pregnancy and the proportion married or cohabiting at each age the minimum estimate, then the data reviewed thus far show that the range between the maximum and minimum estimate is indeed very large for most countries, particularly among younger adolescents.

A comparison of data from tables 9 and 10 makes it clear that at ages under 18 years exposure is only about 4 per cent when one considers marriage alone and is about 5 to 6 per cent if one considers both marriage and cohabitation. On the other hand, by the age of 17 as many as one fifth to one half of young women have experienced intercourse. The estimated proportion of exposure to the risk of pregnancy ranges from about 5 to 6 per cent to about one fifth to one half of teenagers in some countries.

Among older teenagers (18-19 years), the situation is quite different. Proportions exposed to regular sexual activity (by our definition) are somewhat higher among older teenagers — about 10 to 25 per cent of 18-19-year-olds (table 10) in some countries. Of the remaining 75 to 90 per cent, a third to one half had experienced sexual intercourse. Unfortunately, regional comparisons are not possible as only one or two countries in each region (more in western and northern Europe) had data on both cohabitation and sexual activity. The range of proportions of teenagers exposed to the risk of pregnancy according to these minimum and maximum estimates for some countries is shown in figure XIX. While differences between countries among 18-19-year-olds are not as pronounced as those among the younger teenagers in proportional terms, the absolute gap between the estimates is large in both cases.

Unfortunately, it is not possible to study the relationship between exposure and fertility, abortion and pregnancy rates because of the lack of comparable data. However, data on proportions of 15-19-year-olds who are married show a strong positive relationship with fertility rates of this age group (figure XX), particularly among countries where a larger proportion of adolescents are married. This is the case among the eastern European countries and the United States. Two possible explanations can be put forward for this relationship. One, that married teenagers are more likely to get pregnant in the first place because of increased exposure and are more likely to carry the pregnancy to term when they do so. $\frac{35}{}$ The other possible explanation is that unmarried pregnant teenagers are likely to legitimize their pregnancy by marriage during pregnancy or soon after birth. $\frac{36}{}$ Among countries with low proportions married (5 per cent or less), however, there is much variation in age-specific rates.

The other factor is contraceptive use. The relationship between exposure and pregnancy depends on the extent of contraceptive use and whether unmarried teenagers are more likely to use contraception than their married counterparts. These issues are discussed in chapter IV.

Figure XIX. Estimates of sexual exposure

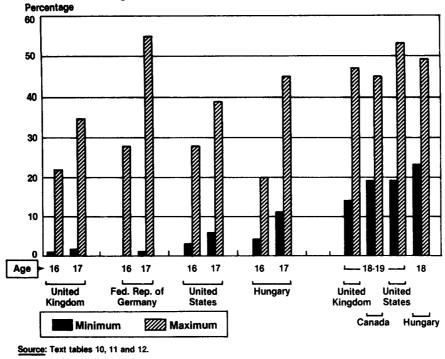
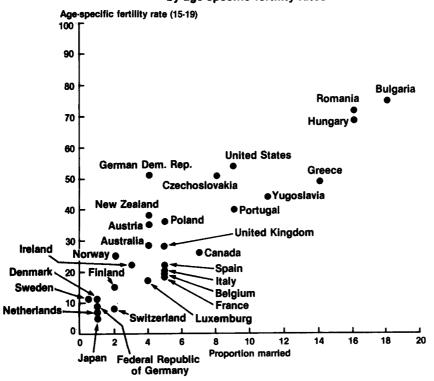


Figure XX. Proportion of teenagers (15-19 years) who are married, by age-specific fertility rates



Annex to chapter III

In order to make generalizations about age at first intercourse in a given population and to make comparisons among populations, certain measurement procedures must be followed. These procedures are well established in demography and the social sciences generally, but are apt to be less familiar to physicians and other professionals who may be especially interested in adolescence. Two kinds of difficulties often encountered are briefly discussed here. The first relates to the selection of the observations on which the study is based, and the second to the appropriate treatment of age and marital status.

A. Sample selection

The analysis of age at initiation of sex is often based on the responses given by a relatively small number of individuals from within a larger population that is under examination. The universe of a particular random sample may be a restricted one, limited, for instance, to students. samples can be used, as long as it is recognized that the generalizations emerging from the study apply specifically to that group. Statements are frequently made concerning age at first intercourse in a given country, which, upon further investigation, prove to be based on studies of one segment of the There is considerable empirical evidence of wide national population. variation among subgroups within a given society. For example, studies of adolescents in the United States show wide disparities in reproductive behaviour between whites and blacks. Data from the 1970 survey of youth in the Federal Republic of Germany indicate slower initiation of sexual activity among students than among workers (Schmidt and Sigusch, 1972). Data from the 1974/75 survey in Ottawa, Canada, suggest, not implausibly, that there can be a substantial contrast even between students at two different universities in the same city (Pool and Pool, 1978).

Random selection implies that a given individual in the sample has the same likelihood of reporting particular behaviour as any comparable individual in the universe. The literature on age at first intercourse is replete, however, with analyses of samples for which this essential principle does not Reports based on medical clientele are a typical example. studies usually involve patients of a particular doctor, hospital or clinic who have come to a particular source for medical services seeking reproductive health care in one form or another, e.g., childbirth, contraception, abortion or sexually transmitted disease. Even if their visit to the clinic was not related to their sexual behaviour, such persons would be unlikely to constitute an unbiased sample, but when they appear specifically in connection with this behaviour, they certainly do not constitute an appropriate group for the analysis of adolescent behaviour more generally. The results of such studies may be valid and interesting for many purposes, but they do not provide a basis for generalizations concerning the sexual behaviour of the population at large. One important factor influencing the use of this approach may be that in many countries, unmarried minors cannot legally be approached directly through sociological surveys on topics of this nature, whereas medical research is not subject to this restriction.

B. Age at first intercourse

There are essentially two types of questions used to obtain information on age at first intercourse, a current status question, such as "Have you ever had sexual intercourse?" or a retrospective question, such as "At what age did you first have intercourse?" The current status question is most appropriate cross-sectional surveys of adolescents, as they are at present experiencing the transition to sexual activity, and yields data relevant as of the date of the survey. The retrospective question can be asked of older individuals who have mostly passed the transition to sexual activity and yields information relevant to the period when they were adolescents. latter provides a way of avoiding legal restrictions on social surveys of unmarried minors, and information based on those who have just recently achieved adult status can still be quite up to date. Moreover, when the sample is composed of a broad range of ages, retrospective data can be separated by cohort, providing a valuable measure of trends over time. Sometimes both types of questions are asked in cross-sectional studies of adolescents.

Whichever method is utilized, the results lend themselves most readily to generalization and comparison across groups when presented as distributions of the proportions sexually active by age. The current status question provides data on proportions who have ever had intercourse at given ages, calculated simply as the number sexually experienced in an age group divided by the total number in that age group. This proportion is conventionally taken to be representative of the midpoint of the age group. However, since sexual activity tends to increase with age in a nonlinear fashion, the accuracy of the results will be affected by the breadth of the age groups used. proportions should be based on as detailed data as possible, ideally data in single years. For example, the proportion shown for the age of 21 from the 1976 Fertility Survey of Canada actually refers to the midpoint of the age group 18-23 years. These intervals are too broad for a focus on initiation into sexual activity and, similarly, the single observation available from the 1986 Italian survey had to be assigned to the midpoint of the seven-year range of the sample.

The retrospective question, on the other hand, provides data on the proportions who have ever had intercourse by given ages. This is calculated as the number who report having intercourse before reaching a given age divided by the total number who have attained that age. The results can be shown either as the distribution of incremental fractions of individuals having their first experience of intercourse during the preceding age interval or in the form of a cumulative distribution up to successive ages. When the sample includes individuals who are currently of the ages in question, care must be taken to exclude from each calculation anyone who has not actually attained the relevant age, since, if intercourse has not already occurred,

there is still the possibility that it will occur before that age is reached. This is essentially equivalent to a life table procedure. Results of this kind refer to exact age, that is, age at the beginning of an age interval. Although the accuracy of the results is not affected by the breadth of the age intervals used, a more complete picture is obtained when greater detail is given. The results by single years for the 1973/74 Norwegian survey are more satisfactory than those by two-year intervals for the 1981 Swedish survey (shown in country annex tables).

C. Marital status

Marital status presents a somewhat different kind of problem. Traditionally, most of the interest in early sexual activity focused on exposure to the risk of pre-marital pregnancy. Recently, the more general issue of pregnancy in adolescence has received greater attention for reasons of health as well as social and economic concerns. Whatever the research perspective, the base of the study with respect to marital status needs to be explicitly identified. Moreover, whenever marital status is a factor in the analysis, it is essential that the denominator of the proportions having ever had intercourse be composed of individuals of the same marital status at the time of observation as those in the numerator and that all persons at risk be represented.

In the case of current data, observation of sexual activity and marital status is simultaneous, and the procedure is quite straightforward. When the data are retrospective, the situation is more complicated. Samples that do not include individuals currently representative of all marital statuses cannot provide a complete picture of earlier experience. In particular, samples limited to never married women exclude the pre-marital experience of women who have married meanwhile. Even when all marital statuses are covered, current marital status clearly is not necessarily the same as marital status at first intercourse, and the response regarding age at first intercourse can be used only in conjunction with a question on age at marriage.

Chapter IV

CONTRACEPTIVE USE

A. Introduction

One of the crucial factors mediating between sexual activity rates and pregnancy rates among adolescents is contraceptive prevalence. macro-level, adolescent pregnancy rates that are observed in developed countries are not directly related to levels of sexual exposure among adolescents mainly because of variation in levels of contraceptive prevalence (Jones and others, 1986). Factors that affect prevalence among adolescents include external ones such as the laws and regulations and social policies that determine access to contraception. For the most part, laws and regulations on contraceptives affect adult women and adolescents alike in terms of the types of contraception that are permitted for distribution or prescription, but some laws relate specifically to teen-age women. In some countries (almost exclusively developing countries), unmarried women are not permitted access to contraception and married women may require consent of their spouse. In others, a minimum age for eligibility for certain kinds of services may be specified. For example, in Hungary, as reported by Paxman and Zuckerman (1987), hormonal contraceptives may be prescribed for any woman above the age of 16, but only medical specialists may prescribe them for women between the ages of 16 and 18. Where liberal contraceptive laws apply, the focus of public debate, at least in the United States and the United Kingdom, has recently been on whether the parents should be notified of use of contraception by an adolescent who is a minor. Lack of confidentiality in their consultations with the family physician or the school clinic and inaccessibility of services discourage teenagers from taking precautions against an unwanted pregnancy.

Aside from external influences at the social and policy level that affect an adolescent's contraceptive behaviour, factors which vary at the individual level are also important, such as whether or not the sexual encounter is planned, whether or not it occurs within a stable relationship, and whether or not either partner has previous contraceptive experience. As a young girl or boy becomes more experienced or continues to be sexually active, he or she is more likely to start using some form of contraception if pregnancy is not desired. Data from surveys that elicited information on contraceptive use at first intercourse and subsequent behaviour show that a vast majority of young people were unprotected at their first sexual encounter but that many used contraception at a later stage (Senderowitz and Paxman, 1985; Van Nimwegen and Moors, 1986). Moreover, the type of contraception used may change over time from the less reliable methods to the more reliable ones (Weiner and others, 1984; Dunnell, 1979).

Differences between adolescents and adult women in maturity, knowledge and life experience affect their behaviour patterns as they relate to contraceptive acceptance and use. Most adolescents' understanding of

sexuality and human reproduction is at best incomplete and at worst confused. Young people learn about birth control mainly from friends, books and magazines and partly in school (Siedlecky, 1979; Palomba and Menniti, 1986) and a large number of them do not discuss sex or contraception with their parents or their partners (Ruusuvaara, 1983; Leppo, 1978).

Differences in levels of prevalence and the type of birth control methods preferred by adolescents over their reproductive experience have been studied in depth for six developed countries — the United States, Canada, England and Wales, France, the Netherlands and Sweden (Jones and others, 1986). The findings from this study show that the United States had the lowest level of use of any of the six countries, thereby contributing to the higher incidence of unintended pregnancy among unmarried adolescents in the United States as compared with the other five countries.

This chapter reviews a comparative analysis of available information on contraceptive prevalence among teenagers for countries in the developed regions, including the six mentioned above. Because of the paucity of data at the national level, survey data drawn from samples based, in many cases, on subnational population groups $\frac{37}{}$ have been utilized. Surveys of adolescents that specifically asked questions about contraceptive use may also contain information about types of methods used, use at first intercourse and subsequent use. These data are also presented in this chapter.

Determinants of contraceptive use have been explored in some detail for women (mostly currently married women) of reproductive ages as a whole (United Nations, forthcoming), but little comparative analysis of the factors that influence use among adolescents as a group has been undertaken, with the notable exception of Jones and others (1986). Data pertaining to factors that influence the use of contraception are available for some countries, but because of the lack of comparability in data across countries, these have been referred to in the text only.

B. Contraceptive prevalence

Contraceptive prevalence 38/ in countries for which estimates by detailed age categories are available (eight in all) ranged from a low of 11 per cent of all 18-19-year-old women in Spain to about a third of all 18-19-year-olds in Norway and the United States and to about half in Canada and the United Kingdom (table 13). Because countries differed in the proportion of sexually experienced young women, the comparison of contraceptive prevalence rates becomes more meaningful when related to sexually exposed women, that is, those who are married and/or sexually experienced. Unfortunately, such information is available for only a few countries, mostly for sexually experienced single women only.

When restricted to unmarried women at risk, prevalence rates are much higher in general but vary enormously across countries. At least 9 out of 10 women 15-19 years of age in the Federal Republic of Germany and a similar proportion of 16-19-year-olds in the United Kingdom were protected by some form of contraception. By contrast, only about one fifth of 18-19-year-olds

Table 13. Contraceptive prevalence among all women by age for selected countries

Country	Year	15	16	17	Age 18 19	20	21
Country	1001	,,					
Canada	1984				<u> 51.6 </u>		
Finland	1971				30_		
france <u>a</u> /	1980			2	0		
	1982					_66	l
Hungary	1986	I	11.6		43.3		
Norway	1977			1	39.7		
Spain	1985			I	11		
United Kingdom	1983				50		
United States	1982	1	13.4		36.6_		

Sources: Canada - Unpublished tabulations from the Canadian Fertility Survey, 1984; Finland - Leppo (1978); France - Jones and others (1986), p. 133, table 6.3; Hungary - Unpublished tabulations from the 1986 Fertility Survey; Norway - Tabulations from the Norway Fertility Survey, 1977; Spain - Instituto Nacional de Estadística (1987); United Kingdom - Office of Population Censuses and Surveys (no date); United States - Tabulations from the 1982 National Survey of Family Growth.

a/ Sample of school girls.

in Hungary, about half of sexually experienced 18-19-year-olds in the United States and about two thirds in Denmark were reportedly using some form of contraception (table 14). Prevalence among younger teenagers (15-17 years) in the United States is markedly lower (43.4 per cent) than among older teenagers or among younger teenagers in European countries such as the Federal Republic of Germany (95 per cent), the United Kingdom (91 per cent) and Belgium (76 per cent). Hungary is the only eastern European country for which an estimate of contraceptive prevalence among single adolescents is available. About one out of five single adolescents aged 18 or 19 was using contraception at the time of the 1986 Fertility Survey.

In eastern Europe, prevalence rates among all currently married women of reproductive ages range from 60 to 80 per cent (United Nations, 1984a), while scattered evidence suggests relatively low contraceptive use for adolescents (David and McIntyre, 1981), mainly because of insufficient knowledge about methods and their availability. In Czechoslovakia, for example, a survey of young married couples found that more than one quarter of the husbands and half the wives considered their sex education to be insufficient or non-existent (David and McIntyre, 1981).

The five countries in northern Europe that appear in table 2 show high contraceptive prevalence rates, except for Finland where about one third of sexually active 18-20-year-olds were using contraception. Although no information was available for Ireland, it is very likely that only a small proportion of teenagers use any birth control there. Family planning clinics in Ireland will supply contraceptives to minors over the age of 18 but will do so for those under 18 years of age only with parental consent (O'Higgins, 1986). Like their counterparts in most countries of northern Europe, sexually experienced adolescents in western European countries reported fairly high levels of contraceptive prevalence. Although comparable data, at the national level for all single adolescents, were not available for France, a series of surveys of schoolgirls in post-secondary school and in academic high school (about 18-21 years and about 17-18 years old, respectively) reported prevalence rates of 80 and 58 per cent, respectively (Jones and others, 1986).

Even among currently married women of all reproductive ages, women in southern Europe, with the exception of Italy, had lower prevalence rates than in other developed countries (United Nations, 1987b). However, very little information is available for the adolescent population in southern Europe, especially among unmarried sexually active adolescents. One survey in Italy showed very high use among adolescents at first intercourse while, in contrast, a fertility survey in Spain in 1985 reported only 7 per cent use among all single women aged 18-19 years (Spain, 1987).

Recent literature on adolescent fertility in the United States has identified some of the main causes of observed high pregnancy rates among adolescents to be: low contraceptive prevalence, poor contraceptive services for adolescents and ineffective sex education (Jones and others, 1986). Data presented in tables 1 and 2 show that contraceptive prevalence among United States teenagers is relatively low in comparison with other developed countries, particularly among younger sexually experienced teenagers (ages

Table 14. Contraceptive prevalence among sexually experienced, single women, for selected countries

					Age		
Country	Year	15	16	17	18	19	20
Belgium <u>a</u> /	1983/84	<u> </u>	76	83	8	- <u>-</u>	
Denmark	1975				70	<u> </u>	
Finland	1971				I	34	I
France <u>b</u> / Germany,	1980			I <u></u> !	58		
Fed. Rep. of <u>c/</u>	1980/81	I <u></u>	95				
Hungary <u>d</u> /	1986				18	3.9_	
Netherlands	1979/80			56	76	51	
	1981		1		88		
Norway <u>e</u> /	1977				87	<u></u>	
Spain <u>d</u> /	1985				17	<u></u>	
Sweden <u>f</u> /	1978		1	79	I		
United Kingdom	1976		15	11	92	<u></u> 1	
United States	1982	I	43.4		J <u></u> 55	5.4_	

Sources: Belgium - Unpublished tabulations from the 1983-1984 survey in Flemish Belgium from Geeraert; Denmark - Schmidt (1979); Finland - Leppo (1978); Germany, Fed. Rep. of - Schmid-Tannwald and Urdze (1983); Hungary - Tabulations from the 1986 Fertility Survey; Netherlands (1979/80, 1981) and France - Jones and others (1986); Norway - Central Bureau of Statistics of Norway as cited in Jones and others (1986); Spain - Instituto Nacional de Estadística (1987); Sweden - Weiner and others (1984); United Kingdom - 1976 Family Formation Survey as cited in Jones and others (1986); United States - Tabulations from the 1982 National Survey of Family Growth.

a/ For Flemish Belgium - secondary school girls.

b/ Sample of Academic High School girls.

c/ Use at last intercourse among women with at least two experiences.

d/ Among all single women.

e/ In the past four weeks.

f/ Use at last intercourse.

15-17). Even when the United States is compared with Canada, its closest neighbour, one third of 18-19-year-old Americans reported contraceptive use, while one half of Canadians that age did (table 13).

Current use data are not available for Australia or for Japan but data on ever use of contraception $\frac{39}{}$ by adolescents are available for these two countries. In Melbourne, one survey reported fairly high ever use (particularly use of the pill) among 18-25-year-old sexually active never married women $\frac{40}{}$ (Siedlecky, 1979). High ever use was also reported among Japanese youths, who almost exclusively used the condom as a method of contraception $\frac{41}{}$ (Hayashi, 1983).

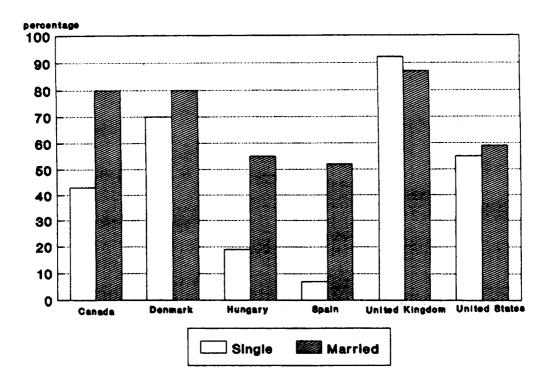
There is evidence to show that among single adolescents, those who are in a steady relationship or those who reported high frequency of intercourse are more likely to be using contraception (Weiner and others, 1984; Dunnell, 1979). One survey, in Italy, found that it took about 6 to 12 months into a relationship before adolescents begin to consider contraception (Palomba and Menniti, 1986). Among those who have just begun dating, sexual intercourse is less likely to be engaged in, and even then the encounters are usually unplanned or unexpected (Walløe and others, 1978; Leppo, 1978). It is not surprising, therefore, that contraceptive prevalence among these adolescents is lower.

Comparisons of contraceptive prevalence between single (sexually experienced) and married adolescents show that in the United Kingdom and the United States there is little difference in prevalence by marital status among 18-19-year-old women, but this is not the case in Denmark where two thirds of sexually experienced single women use contraception whereas four fifths of currently married (or cohabiting) women do so (figure XXI). One explanation for the lack of differentiation by marital status is that when overall prevalence is high, contraception is used to prevent unwanted pregnancies as well as to delay births. Data for Canada, Hungary and Spain that are presented in figure XXI pertain to all single women (including those who have not had a sexual experience at all). The difference in prevalence between married and single women is, as expected, somewhat large.

C. Type of contraception used

There is considerable variation in the type of contraception used by adolescents (table 15). In most countries, the dominant method used among sexually active adolescents is the pill, while non-clinical methods such as the condom, withdrawal and rhythm are also popular in some countries. 42/ In Spain and Bulgaria, the less effective but more accessible methods like withdrawal and the condom persist. For example, in Bulgaria, the majority of adolescents were relying on withdrawal as a method of contraception, while the pill accounted for only 7 per cent of use; and in Spain, nearly half the adolescents practising contraception were using condoms. Adolescent contraceptors in northern and western Europe and in North America relied more heavily on the pill, although quite large proportions also relied on the condom. In Norway, the proportion using the condom and the intra-uterine device (IUD) exceeded pill users, while in Belgium those using withdrawal and rhythm accounted for half the users.

Figure XXI. Contraceptive prevalence among 18-19-year-old sexually experienced single women and currently married women, for selected countries



Source: Text table 16.

Table 15. Type of contraception used, as a percentage of users among sexually experienced girls, for selected countries

			As a percentage of users				
Country	Date	Prevalence	Pill	Condom	Withdrawal	Rhythm	Other
Belgium	1983/84	81	72	27	11	23	1
Bulgaria	nd	73a/	7	1	82	7	3
Canada	1984	49a/	87	6	2	••	••
Denmark	1975	70	67	21	-	••	12
France	1979	80	86	••	••	••	15
Germany, Fed.Rep.of	1980/81	95	58	22	9	7	17b/
Hungary	1986	19a/	53	5	5	••	31c/
Netherlands	1981	88	78	20			2 <u>d</u> /
Norway	1977	87	34	34	11	5	26
Spein	1985	7a/	29	43	29	••	••
Sweden	1978	79	61	41	••	••	••
United Kingdom	1976	91	75	21	7	••	2
United States	1982	55	60	22	4	4	-

Sources: Belgium - Unpublished tabulations from the 1983/84 survey in Flemish Belgium provided by Geeraert; Bulgaria - Vassilev (1978) as cited in David and McIntyre (1981); Canada - Unpublished tabulations from the 1984 Fertility Survey provided by Balakrishnan; Denmark - Schmidt (1979); France and Netherlands - Jones and others (1986); Germany, Fed. Rep. of - Schmid-Tannwald and Urdze (1983); Hungary - Tabulations from the 1986 Ferility Survey; Norway - Central Bureau of Statistics as cited in Jones and others (1986); Spain - Instituto Nacional de Estadística (1987); Sweden - Weiner and others (1984); United Kingdom - 1976 Family Formation Survey as cited in Jones and others (1986); United States - Tabulations from the 1982 National Survey of Family Growth.

<u>Mote</u>: For sample restrictions and ages covered see text table 14.

- a/ Among single women.
- b/ Including 14 per cent using foam and tablet.
- c/ Including 26 per cent using post-coital pills.
- d/ Including 4 per cent using IUD.

Even in cases where teenagers report use of contraceptives in surveys, their use is likely to be relatively ineffective and irregular. For example, one survey in England reporting on pre-marital contraceptive use found that of the 1971-1975 marriage cohort who married before the age of 20, only 38 per cent said they always used a method and 24 per cent said they sometimes took a chance (Dunnell, 1979). Other studies have found that poor knowledge of the time of ovulation or the safe period for intercourse was extensive (Page and others, 1975; Palomba and Menniti, 1986).

A global review of contraceptive practice among women of all reproductive ages found patterns of use very similar to that observed among adolescents. The study concluded that "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.... By contrast, clinic and supply methods are heavily predominant in the Scandinavian countries, in England and Wales, Japan and the United States" (United Nations, 1984a, p. 29). Thus, the mix between the more reliable, clinical methods and the less reliable, non-clinical or supply methods for teenagers as well as for older women may be influenced by the same factors, that is, laws and regulations regarding the availability and accessibility of contraception. 43/

The majority of contraceptive users among single women and among married women relied on the pill (table 16). In Hungary, Spain and the United States more married users were using the pill than single users, although differences were not large. In Canada, Denmark and the United Kingdom, however, the opposite was true. In all countries except Hungary and Canada, more single users relied on the condom than did married users (this relationship is true for withdrawal as a method of contraception in Spain). As mentioned earlier, the omission of post-coital pills as one possible response to the inquiry on type of contraception used may affect the distribution of use among married and unmarried women. Unmarried women are more likely to resort to post-coital pills than married women as was the case in Hungary, where as many as 26 per cent of single users took post-coital pills whereas no married user was reported taking them.

The more effective methods are popular among married teenagers whereas, among unmarried teenagers, there appears to be a large proportion who are using the more ineffective methods. Factors likely to affect the choice of methods are the irregularity of sexual intercourse among unmarried teenagers, lack of knowledge of other methods and unavailability or a reluctance to reveal sexual experience or intentions to clinic personnel or a doctor whom they would have to consult to get the more effective methods.

D. Contraceptive use at first intercourse

A surprisingly large proportion of adolescents claimed to have used some form of contraception at their first intercourse experience. The fraction of users at first intercourse was as high as 78 per cent in the Netherlands and 77 per cent in the Federal Republic of Germany (table 17). In most countries, the proportion who were protected at first intercourse was considerably less

Table 16. Contraceptive prevalence and distribution of methods used among sexually experienced teenagers by marital status for selected countries

	Prevalence		Pill		Condom		Withdrawal	
Country	Single	Married	Single	Married	Single	Married	Single	Married
Canada	49 a/	80	87	63	6	10	2	5
Denmark	70 _	80	67	54	21	22		
Hungary	19 a/	55	53	55	5	12	5	12
Spain	7 a/	52	29	30	43	6	29	7
United Kingdom	91	87	7 5	71	21	17	- 7	2
United States	55	59	60	75	22	11	4	

Sources: Canada - Unpublished tabulations from the 1984 Fertility Survey; Denmark - Schmidt (1979); Hungary - Unpublished tabulations from the 1986 Fertility Survey; Spain - Instituto Nacional de Estadística (1987); United Kingdom - 1976 Family Formation Survey as cited in Jones and others (1986); United States - Tabulations from the 1982 National Survey of Family Growth.

<u>Note</u>: For sample restrictions and ages covered see text table 15. a/Among single women.

Table 17. Type of contraception used at first intercourse and current use among sexually experienced women for selected countries

	Prev	Prevalence		Pill		Condom		Withdrawal	
Country	First	Current	First	Current	First	Current	First	Current	
Germany,									
Fed. Rep. of	77	95	23	58	42	22	17	9	
Netherlands	78	88	59	78	37	20	- 3		
Norway	63	87	0	34	76	34	22	11	
Sweden	59	79	8	61	88	41			
United Kingdom	57	91	14	75	63	21	18	7	
United States	57	55	16	60	46	22	30	4	

Sources: Germany, Fed. Rep. of - Schmid-Tannwald and Urdze (1983); Netherlands - Jones and others (1986); Norway - Central Bureau of Statistics as cited in Jones and others (1986); Sweden - Weiner and others (1984); United Kingdom - 1976 Family Formation Survey as cited in Jones and others (1986); United States - Tabulations from the 1982 National Survey of Family Growth.

Note: For sample restrictions and ages covered, see text table 15.

than those who were currently using contraception except for the United States, where use at first intercourse and current use were about equal. In a survey of young women in Hungary who did not want a pregnancy, a large proportion did not use contraceptives at first intercourse because of a lack of knowledge about methods or where to get them (Pongracz, 1986).

The distribution by type of method (for selected methods) shows that there is a tremendous difference between the methods used at first intercourse and those currently used. At first intercourse, the preferred methods were ones that were more traditional, easily accessible and ones that could be used when sex was unplanned. These methods include the condom, withdrawal and rhythm. In most countries (except for the Netherlands and the Federal Republic of Germany) less than one in five users took the pill at first intercourse while more than half used the condom in New Zealand, Norway, Sweden and the United Kingdom, whereas subsequent use patterns show that more than half of adolescents (except in Norway) used the pill and a smaller proportion relied on the condom.

Annex to Chapter IV

In most of the fertility surveys canvassed as part of the larger World Fertility Survey project, only ever-married or currently married women were included or in some cases only women over the age of 20 were sampled. As a large proportion of single women are sexually active (chap. III), there can no longer be any justification for excluding single women from fertility or contraceptive prevalence surveys. Even surveys that focus solely on the adolescent population do not provide comparable prevalence rates; while some sampled only sexually experienced single teenagers, others sampled boys and girls in school and yet others sampled pregnant teenagers or teenagers wanting an abortion. In addition, the age groups included in the adolescent category may vary.

A. Type of contraception

The terms contraception or family planning as used in the design of survey questionnaires and in the literature are generally defined to include all clinic and supply methods, sometimes referred to as modern methods (including male and female sterilization, intra-uterine devices (IUDs), hormonal pills and injectibles, condoms and scientific vaginal methods such as diaphragm, cervical cap, spermicidal foams, jells and creams), as well as traditional methods such as withdrawal and rhythm. While estimates of prevalence of most clinic and supply methods are fairly straightforward and easily calculated, indicators of overall contraceptive prevalence suffer from some problems that are of particular importance to the teen-age group. Less important with respect to teenagers is whether, in fact, use of a particular method was intended for contraceptive purposes. For some types of methods such as abstinence, breastfeeding or sterilization, it is unclear if the practice was primarily intended for contraceptive purposes. These methods, however, tend to be more popular among older women (United Nations, forthcoming). There are some methods of birth control whose use may not be reported at all by a survey respondent unless specifically asked about. Omission of these methods would underestimate the level of overall contraceptive prevalence. This can be a particular problem in the case of methods that do not require supplies (rhythm and withdrawal) or methods that can be used on an on-and-off basis such as the condom, post-coital pills and menses-inducers. Questions about traditional methods like rhythm and withdrawal and the use of the condom have been regularly included in survey questionnaires and are therefore specifically asked about. However, other methods have been overlooked. For example, there are no estimates of the prevalence of use of post-coital pills, as they are still in the developmental stage, but the demand for such drugs has been reportedly growing in some countries (Jones and others, 1986). These drugs have not been approved for wide distribution in many countries and physicians and family planning clinics often do not prescribe them. In the United States, for example, post-coital pills have not been approved contraceptive purposes by the Food and Drug Administration (Johnson, 1984).

B. Measures of contraceptive prevalence

Contraceptive prevalence is the percentage using contraception among the population which is of interest. In chapter IV, the base population is sometimes all adolescents, sometimes unmarried adolescents or sexually experienced, unmarried adolescents. In each case, however, the base population is properly defined. While contraceptive prevalence measures the level of use, the complement of the ratio does not necessarily constitute non-use among women at risk and should not be interpreted as such. Pregnant women, women immediately post-partum, women who believe themselves to be infecund and women who desire a pregnancy all fall into this category of non-use. Questions on the use of contraception can be worded in several different ways depending on the concept to be measured. In this study, current use, use at first intercourse and use at the most recent intercourse are the measures that are of interest. These are defined below.

1. Current use

In this study, the more widely used "current use" measure, that is, the use of contraception around the time of the interview, is employed as an indicator of prevalence of contraceptive use. In most surveys "current use" refers to use at the time of the survey ("now") or within a specified period of time ("within the last month"). This can be particularly ambiguous in the case of methods that can be used irregularly (condom, withdrawal, diaphragm or douche) and that are also more likely to be used by adolescents. This measure, although with its own limitations, is chosen in preference to an "ever use" measure, which is whether or not a woman had at any time in her life used contraception. The "ever-use" measure does not distinguish between recent use and use occurring some time ago, or between women who used a contraceptive briefly in the past and those who used it regularly.

2. Use at first intercourse and use at the most recent intercourse

Two measures that are relevant to contraceptive practice among teenagers but not widely used in general studies of contraceptive prevalence are the proportion of women who used any contraception at all at first intercourse and the proportion who used it at the most recent encounter. Clearly, there are large differences in methods used at different stages of adolescents' sexual lives starting with non-use or use of less reliable methods at the first sexual encounter and switching to more reliable methods as sexual relations become more frequent. Although these questions are not routine questions in survey instruments that have older, currently or ever-married women as respondents, a number of surveys focusing on adolescents have included them.

Chapter V

SUMMARY AND CONCLUSIONS

The present study reviews the available information in developed countries on trends in adolescent fertility and its proximate determinants. framework of analysis is one in which adolescent birth rates are seen as the consequence of interacting factors such as the extent of exposure to childbearing, contraceptive use, and the levels of pregnancy and abortion rates. The extent of sexual exposure among unmarried adolescents, the degree to which contraception is used and the availability and accessibility of abortion to teenagers are all crucial factors in the observed teen-age birth Over the past decade, changes have taken place in each of these factors, brought about by changes in attitudes and norms, such as those towards marriage and childbearing, and in policies and laws, such as those that affect contraceptive services for adolescents and the availability of For each country, the observed level of birth rates among abortion. adolescents is brought about by a particular mix of these factors. In order to gain some insight into the reasons for the observed differences in adolescent birth rates among developed countries, indicators of the prevalence of each of these factors that affect the birth rate were compared. results are summarized first and conclusions follow.

Summary

Adolescent birth rates for the mid 1980s showed a wide range from an extremely low rate of 4 births per 1,000 teen-age girls in Japan to a high of 78 births per 1,000 teen-age girls in Bulgaria. Most countries in northern and western Europe had birth rates that varied between 10 and 25 births per 1,000 women. Teenagers in the United States were bearing children at rates that were somewhat higher than those in other developed countries, but lower than the rates prevalent in eastern European countries. Most teen-age childbearing is concentrated at the ages of 18 and 19 although in some countries, such as the United States, more than one quarter of teenage births were to young girls below the age of 17.

Long-term trends in adolescent fertility rates show that for most countries (excepting those in southern and eastern Europe) teenagers experienced a peak in fertility rates between 1965 and 1970 and steady declines thereafter. Most recent data in the northern and western European countries and in North America and Oceania for the first half of the 1980s show a stabilization of rates in some countries (Finland, Netherlands, Sweden, Switzerland, United Kingdom, and United States) and continued declines in others. Canada and the United States started out with extremely high rates but have experienced steep declines over the past two decades. In most countries of southern and eastern Europe, teen-age fertility rates increased over the decade of the 1970s. More recently, however, the rise in rates in some of these countries has been reversed. This is true for Romania and Bulgaria in eastern Europe and in all southern European countries.

In nearly half the countries studied, more than 50 per cent of teen-age mothers were unmarried at the time of the birth of the child. Moreover, in several countries (Denmark, German Democratic Republic, New Zealand, Norway and Sweden) more than 7 out of 10 teen-age mothers were unmarried at the birth of their child. Teenagers who had a birth were also more likely to have lower educational attainment and be of lower socio-economic background.

Adolescent birth rates are directly influenced by levels of pregnancy and abortion. In nearly all countries, pregnancy rates declined from the 1970s to the 1980s, a notable exception being the United States, where pregnancy rates have stabilized at a high of about 98 per 1,000 women aged 15-19 years. Among the developed countries, current rates (for the early 1980s) range from 98 and 80 per 1,000 teen-age women in the United States and Hungary, respectively, to 10 and 12 per 1,000 in Japan and the Netherlands, respectively.

In Denmark, Finland, Norway and Sweden, abortion rates among adolescents have declined slightly since the mid 1970s. For most other countries, rates have stabilized or increased, as in the case of the United States. Current rates of abortion among teen-age women in the United States are more than double those among teen-age women in most European countries. In the United States, the abortion rate in 1982 was 44 per 1,000 adolescent women, while in most European countries the rate was around 20 per 1,000 adolescent women. Japan and the Netherlands had extremely low adolescent abortion rates: 5.9 and 5.5 per 1,000 women, respectively.

Teenagers of today are less likely to become pregnant than in the past. However, if they do, they are more likely to choose abortion than to carry the pregnancy to term. The proportion of pregnant teenagers who choose abortion over pregnancy has been increasing for all countries and especially among the younger teenagers (15-17-year-olds). In Denmark and Sweden, more than three quarters of young, pregnant teenagers opted for abortion.

Attempts to explain cross-country differences in pregnancy rates by differences in sexual exposure were not very successful because of the lack of comparable data for unmarried women. Only a few countries had such information at the national level and among the numerous small surveys of the sexual behaviour of adolescents that are available, only a few were included that met certain criteria of generalizability and sample size.

However, as an alternative approach, minimum (prevalence of marriage and cohabitation) and maximum (proportions sexually experienced) estimates of exposure were compiled for a few countries. Data show that this range, between the minimum and the maximum estimate, can be rather large, particularly among the younger adolescents, among whom proportions married or cohabiting are negligible but proportions sexually experienced are not. In the United Kingdom, for example, about 15 per cent of 18-19-year-olds were married or cohabiting and nearly 50 per cent of unmarried girls were sexually experienced at the age of 19. Among adolescents aged 17 years, only 2 per cent were married and about one third of those unmarried claimed some sexual experience.

The perception that teenagers are becoming sexually active at increasingly younger ages is confirmed by retrospective data for a few countries. Proportions sexually experienced varied somewhat between countries. In the United States, Hungary and the United Kingdom, two thirds of unmarried adolescents were sexually experienced at the age of 19, whereas in Yugoslavia the proportion was about one third. In Sweden, 94 per cent of all girls (married and unmarried) in a national sample had experienced sexual intercourse by the time they were 19 years old. Marriage, among teenagers, on the other hand, seemed equally unpopular in nearly all countries. Except for the eastern European countries, fewer than 10 per cent of adolescents were married in most countries for the period around 1980.

Reasonably comparable data on levels and trends in contraceptive prevalence are available for some countries. Contraceptive prevalence among older, sexually experienced teenagers (18-19 years old) ranged from 92 per cent in the United Kingdom to about 50 per cent in the United States, while among younger teenagers, prevalence rates ranged from 95 per cent in the Federal Republic of Germany to 43 per cent in the United States. Part of the explanation for the higher pregnancy rates in the United States relative to European countries is that teenagers in the United States are less likely to take precautions against unwanted pregnancies than their European counterparts.

It is surprising to find high prevalence rates among teenagers (most northern and western European countries had prevalence rates of over 75 per cent) in settings where unwanted teen-age pregnancies continue to be a problem. One explanation could be that teenagers, because of insufficient knowledge and experience, use contraception less effectively. Teenagers also tend to use contraception on a more regular basis only when more stable relationships become established. The proportion of adolescents who said they used a method of contraception at first intercourse was somewhat lower than the prevalence at subsequent use or what is reported as current use. example, in Sweden, 59 per cent of sexually experienced teenagers said they used contraception at first intercourse, but an additional 20 per cent (making the total 79 per cent) said they were currently using contraception. types of contraceptives used at first intercourse were more traditional and easily accessible and also less effective when not used correctly. include condoms and withdrawal, but current use patterns show that adolescents tend to move to the more effective methods as they become more experienced and/or enter into more stable relationships.

Conclusions

It is difficult to integrate estimates of the proximate variables, such as abortion, sexual exposure and contraceptive use, into an explanation of long-term trends in adolescent birth rates, as data on trends for these variables are lacking. For example, although abortion laws have been fairly liberal in most European countries, and legal abortions have been registered for a long period, data on the number of teen-age girls requesting abortions are not available until the 1970s for most countries. Then there is the problem of illegal abortions, which constitute a sizeable proportion of abortions in some countries and particularly among teenagers. Illegal

abortion is undocumented and no reliable estimates exist for its prevalence among teenagers. Data on sexual exposure and contraceptive use are not available even for adult women for the 1950s and 1960s. Officially recorded statistics do not collect or provide such information; instead data on these topics are drawn almost exclusively from national sample surveys, which until recently tended to cover only samples of married women. However, retrospective data from such surveys allow the construction of some indicators of sexual activity for the 1960s and 1970s. The lack of data turned out to be a serious shortcoming in the understanding of the relationship between exposure, contraceptive use and pregnancy, and clearly there is a continuing need for information on these factors as well as on teen-age attitudes and behaviour.

In spite of these data deficiencies, some general explanations are possible for the observed trends in birth rates. Between 1960 and 1970, a small peak in adolescent birth rates was experienced by northern and western European countries. A corresponding peak in the proportion of married teenagers was observed during the same period. One of the factors that explains the increase in adolescent birth rates and in proportions married is increase in sexual activity among adolescents, as seen retrospective data on sexual exposure. Pregnant adolescents frequently chose marriage to legitimize the birth and the prevalence of forced marriages increased. In the 1970s, both proportions of married teenagers and birth rates declined to the low levels observed in the 1980s in these countries, while levels of sexual exposure continued to rise. Data on abortion rates from the 1970s up to the most recent period show small increases at the beginning of the 1970s, and subsequently rates have declined slightly or stabilized. Unfortunately, retrospective data are not available for contraceptive use, but certainly the increased availability of abortion and contraception was the main cause of declines in adolescent birth rates and in proportions of adolescents married, that is, there was no longer a need for shot gun or forced marriages. In some eastern European countries and in most southern European countries, where more restrictive abortion laws applied and where marriage was relatively popular among teenagers, adolescent birth rates continued to increase until the early 1980s.

At the present time, the mix of proximate variables that explain levels of adolescent birth rates has changed somewhat. Marriage appears to be extremely unpopular among teenagers and forced marriages measured by the number of births that occur within seven months of marriage have also declined. proportion of teenagers who have had at least one sexual experience continues to increase, while pregnancy rates have declined or stabilized in some However, unwanted pregnancies continue to be a problem to countries. Data show that abortion rates have stabilized at high levels in teenagers. most countries and a large proportion of pregnancies among teenagers end in Although abortion laws are liberal in almost all developed countries, laborious impediments to access to abortion still exist for teenagers and serve to delay abortion requests, thereby increasing the risks associated with the procedure. Because of the negative health effects of abortion for teenagers, serious efforts need to be made to reduce the incidence of abortion by making available to teenagers alternative methods of avoiding pregnancies.

Access to contraception does not seem to have been a problem among teenagers in most northern and western European countries, where prevalence rates are quite high. In many of the countries with high prevalence rates, contraceptive services for teenagers are confidential, free and accessible (Jones and others, 1986). However, young people have needs that go beyond the There is a need for family provision of contraceptive services alone. planning counselling services which would motivate sexually active teenagers to use contraception effectively and consistently. Many countries have policies regarding sex education, including education on family planning for adolescents in public schools, but their implementation is not always uniform and is usually left up to the schools themselves. In a survey conducted by the Alan Guttmacher Institute, it was found that out of 30 developed countries, most had no uniform policy regarding the teaching of the use of contraceptive methods in secondary schools and the average age of those students who did receive contraceptive instruction in schools was 15 years (Jones and others, 1986).

The present review found that more and more unmarried, pregnant teen-age girls who choose to have their babies remain unmarried at the time of the birth of their child, thereby increasing the numbers of single mothers. Single motherhood, in combination with low education and low socio-economic status during a stage in life when a girl is almost a child herself, places responsibilities on the young mother which she is unlikely to be able to fulfil. Thus, much of the burden of providing adequate care and shelter for the child and the adolescent mother falls on the larger family and society. In most developed countries, social assistance programmes, including various forms of financial assistance from the State such as cash payments enabling the mother to look after her home and her child without going out to work, advances for the maintenance of the child and services of social workers, are provided for the unmarried mother, as for any mother who is in need and lacks private means.

<u>Notes</u>

- $\underline{1}$ / Developed countries that had a population of below 300,000 in 1985 are excluded.
- 2/ Throughout this report, the term "exposure to the risk of pregnancy" is used in a neutral sense to denote the chance of becoming pregnant. A negative connotation or a statistical one is not intended.
- 3/ Few surveys of adolescent sexual behaviour report on frequency of intercourse. Nevertheless, there are some data that show that frequency of intercourse among unmarried young women is not high (Zelnik, Kantner and Ford, 1981; Leppo, 1978).
- 4/ Wherever possible, data are presented for single years of age from 13-19 years. When presented in grouped form, the groups are under 17 and 17-19 years or 15-19.

- 5/ In their article, however, four groups of national and subnational units were identified. The fourth group (Group D) was comprised of two subnational units: the Arab population of Israel and the black population of the United States.
- $\underline{6}/$ Teen-age fertility rates are defined as the number of births per 1,000 adolescent women of ages 15-19 years.
- 7/ Among teenagers in the United States, the level of teen-age fertility among black teenagers is about two times that among white teenagers. Although the overall level of teen-age fertility in the United States is strongly influenced by the extremely high rates among black adolescents, the fertility of white adolescents is also higher than that of teenagers in most western European countries, in Canada or in Australia (Westoff, Calot and Foster, 1983).
- $\underline{8}/$ The data for the USSR are not shown in the figures, as age-specific rates were available only at five-year intervals.
- 9/ The main cause of the desire for low fertility was the rapid industrialization that took place in these countries in the post-Second World War period (David and McIntyre, 1981).
- 10/ Some of the eastern European countries as well as Ireland in northern Europe can be included in this category.
- 11/ A woman is considered married, and a birth legitimate, only if the woman was married in accordance with the laws of the country. A birth is illegitimate if the parents, according to national law, were not married at the time of birth, regardless of whether these children have been recognized or legitimized after birth. Therefore, illegitimate births are assumed to include births to persons in consensual and other unions as well. Births of unknown legitimacy status are considered to be illegitimate (United Nations, Demographic Yearbook 1983).
- 12/ In 10 northern and western European countries, the fertility rate of unmarried women was less than 5 per cent of that of married teenagers; only in Austria was the percentage above 5 per cent, namely, 9 per cent (Höpflinger, 1985).
- 13/ Among teenagers aged 15-17 years, the fertility rate among unmarried girls was 5 per cent that of married girls. Among those aged 18-19 years, the corresponding percentage was 13 per cent.
- $\underline{14}/$ Some couples, either cohabiting or in a stable relationship, might decide on marriage when a birth occurs. In such cases, it is not clear if it is only the birth that triggered marriage. Nevertheless, the outcome is a marriage soon after birth.

- 15/ In New Zealand 40 per cent of unmarried women of all ages who had a child in 1980 were found to be cohabiting (mainly with the child's father) (Khawaja, 1985).
- 16/ The Maoris in New Zealand have their own system of recognition of unions and fall outside the registration system used for registering marriages of the European tradition (O'Neill, 1985). In 1981, for example, of the 11,775 "married" women aged 15-19 years, 57 per cent were consensually married (Unpublished census tabulations).
 - 17/ The age by which most teenagers have completed high school.
- 18/ As a measure of socio-economic status, the mean number of years of completed education of the persons identified by the respondent as her parents or guardians was used.
- 19/ Even data from official registration systems are often very incomplete. For example, in France there is estimated to be one unregistered abortion for every two that are registered (Jones and others, 1986). In Japan also, the completeness of abortions by physicians is thought to be seriously underreported (Hayashi, 1985).
- 20/ Official statistics are taken at face value and no attempt is made to adjust for underreporting. The data therefore vary considerably in quality. In their report (1986), Tietze and Henshaw made an attempt to alert the reader to data that were more than 20 per cent underreported.
- 21/ Another source of bias is that calculating the pregnancy rate as the sum of the birth rate and the abortion rate drastically underestimates the actual incidence of pregnancy among women below the age of 20 because age is tabulated as of pregnancy termination rather than conception.
- 22/ Recent changes in abortion legislation in Greece, Finland and the Netherlands give women easier access to abortion (United Nations Sixth Population Inquiry among Governments).
- 23/ There is a likelihood of misstatement of age by younger women to appear to be age 18 and thus legally eligible to request an abortion.
- 24/ Among women of all ages, however, the proportion who were married when they obtained their abortion was fairly high in Czechoslovakia (78 per cent) and in Hungary (70 per cent) (Tietze and Henshaw, 1986).
- 25/ Several studies, reported in Tietze and Henshaw (1986), document the direct relationship between socio-economic status and abortion ratios (abortions per 100 pregnancies). In countries with restrictive abortion laws the relationship is strong. In the United States, for example, some weakening of this relationship was observed following the liberalization of abortion laws. In Scotland, where fairly liberal abortion laws apply, abortion ratios were directly related to socio-economic status among single women but an inverse relationship occurred among married women.

- 26/ Because of the lack of abortion data, pregnancy rates can be calculated for only 13 of the 38 developed countries; 3 in eastern Europe; 5 in northern Europe (none in southern Europe); the Netherlands in western Europe; Canada and the United States in North America; Japan in East Asia; and New Zealand in Oceania.
- 27/ Between 1975 and 1976 rates in Czechoslovakia were relatively higher than at earlier periods. A decline is observed thereafter.
- 28/ In recent years, unmarried cohabitation has increased somewhat, especially among women in Scandinavian countries, and is most popular among women 20-24 years old. Over 44 per cent of Swedish women and 37 per cent of Danish women in the 20-24 age group are cohabiting (United Nations, 1988b, chap. II).
- 29/ Teenagers who are divorced or separated, who constitute a very small proportion of the total, have been included in the "married" category.
- 30/ At the minimum legal age at marriage one could marry with or without parental consent. Parental control thus plays an important role in determining age at marriage both as a result of parental authority and of the legal requirements of parental consent (United Nations, 1988a).
- 31/ It is possible that adolescent women may overstate their age to meet the legal age requirement for marriage. On the other hand, census and survey data are self-reported and people are likely to report their marital status in terms of how they perceive their relationship. In the most recent Norwegian and New Zealand censuses a separate category was provided for consensual unions.
- 32/ In the United States, each state, and in Canada, each province, has its own marriage laws and the minimum legal age at marriage for women varies from 12-16 years in Canada to 13-17 years in the United States.
- 33/ The estimates of sexual exposure presented in table 11 are based on cross-sectional surveys of adolescents, reporting on the experience as of the survey date, and are estimates as of "current age". Those in table 12 are also based on cross-sectional surveys of adolescents but reporting on their experience in the past for a given cohort of women, that is, retrospective information on sexual experience by a given age. Because some surveys report one type of estimate and not the other, both types are presented here in order not to lose information for any one country. A more detailed discussion of the differences in the two approaches is presented in the annex to chapter III, while detailed information for each country is given in the annex tables.
- 34/ Retrospectively collected information suffers from the drawback that it does not refer to the current situation but rather to the experience of an older group of women at the time when they were teenagers. These data are therefore not comparable to current estimates of sexual activity presented in the paragraphs above.

- 35/ Fertility rates among married teenagers are somewhat higher than among unmarried girls in most countries (see chap. I).
- 36/ The prevalence of such marriages, however, has declined in recent years in some countries (Carmichael, 1987; Cutright and Smith, 1986).
- 37/ Surveys are considered to provide the best available estimates of contraceptive prevalence since they inquire about use of all methods, including those that do not require supplies or medical services. Statistics from service providers are inadequate for our purposes as it not uncommon for family planning services to withhold services from unmarried adolescents, and unmarried adolescents themselves may avoid getting their supplies from clinics.
- 38/ For a detailed description of the definition of contraceptive prevalence, see annex to chapter IV.
- 39/ Current use data are used in this report in preference to ever use data. For details, see annex to chapter IV.
- 40/ Only 5 per cent had never used any contraception at all, while 88 per cent had used the pill at some time.
- 41/ Even among women of all ages, nearly half (the highest among all developed countries) of currently married women were relying on the condom as a method of contraception (United Nations, 1987b).
- 42/ Among the reported methods used by Hungarian teenagers is the post-coital pill 26 per cent reported using this method. It is not clear whether this method has not been reported among teenagers in other countries because of non-use or because surveys did not ask about use of post-coital pills as a specific method. Other evidence suggests that the use of this method is growing in some countries (Jones and others, 1986). Because of the "after the fact" nature of the use of post-coital pills, they would be less likely to be reported as being currently used.
- 43/ There is within-country differentiation by age in types of methods used. The pill is used predominantly by the young and sterilization by older women.

REFERENCES

- Badgley, Robin F. and others (1977). Report of the Committee on the Operation of the Abortion Law. Ottawa: Minister of Supply and Services.
- Beluhan, A. and others (1972-1973). Poznavanje i primjena kontracepcije u srednjoskolske omladine u SRH (Knowledge and use of contraception among adolescents attending secondary schools in Croatia), <u>Stanovnisto</u> 10/11, pp. 204-217.
- Bone, Margaret (1986). Trends in single women's sexual behaviour in Scotland.

 Population Trends 43 (Spring), pp. 7-14.
- Bongaarts, John (1978). A framework for analyzing the proximate determinants of fertility. <u>Population and Development Review</u>, vol. 4, No. 1 (March), pp. 105-132.
- fertility variables. Studies in Family Planning, vol. 13, No. 6/7 (June/July), pp. 179-189.
- and Robert G. Potter (1983). <u>Fertility, Biology, and Behavior: An Analysis of the Proximate Determinants</u>. New York: Academic Press.
- Bourgeois-Pichat, Jean (1986). The unprecedented shortage of births in Europe. In <u>Below-Replacement Fertility in Industrial Societies: Causes</u>, <u>Consequences, Policies. Population and Development Review</u> (Supplement to vol. 12), K. Davis, M. Bernstam and R. Ricardo-Campbell, eds., pp. 3-25.
- Bravo, H. (forthcoming). Politiques démographiques en matière de fécondité.

 <u>Politiques de population</u>, Etudes et Documents.
- Calot, G. and Chantal Blayo (1982). Recent course of fertility in Western Europe. <u>Population Studies</u>, vol. 36, No. 3 (November), pp. 349-372.
- Carmichael, Gordon A. (1987). Bust after boom: first marriage trends in Australia. <u>Demography</u>, vol. 24, No. 2 (May), pp. 245-264.
- Cliquet, R. L. (1981). Geslachtsverkeer, voorbehoeding, zwangerschap en geboorte voor het huwlijk in Vlaanderen (Premarital sexual intercourse, contraception, pregnancy and births in Flanders), <u>Bevolking en Gezin</u>, nr. 3.
- Cutright, Phillips and Herbert L. Smith (1986). Trends in illegitimacy among five English-speaking populations: 1940-1980. <u>Demography</u>, vol. 23, No. 4 (November), pp. 563-578.
- David, Henry P. and R. McIntyre (1981). Reproductive Behavior, Central and Eastern European Experience. New York: Springer Publishing Company.

- David, Henry P. (1982). Eastern Europe: pronatalist policies and private behavior. <u>Population Bulletin</u>, vol. 36, No. 6 (February).
- and N. Rasmussen (n.d.). Adolescent pregnancy resolution: Danish experience, executive summary and major findings. Maryland: Transnational Family Research Institute.
- Davis, Kingsley (1986). Low fertility in evolutionary perspective. In Below-Replacement Fertility in Industrial Societies: Causes, Consequences, Policies. Population and Development Review (Supplement to vol. 12), K. Davis, M. Bernstam and R. Ricardo-Campbell, eds., pp. 48-65.
- and Judith Blake (1956). Social structure and fertility: an analytical framework. Economic Development and Cultural Change, vol. 4, No. 4, pp. 211-235.
- Demers, L. (1986). Young People and the Family: Some Demographic Aspects
 Ottawa: Department of the Secretary of State.
- Dlhos, E. (1969). The beginning of sexual life of our women. <u>Proceedings of Sexology Symposium of Prague</u> (Prague), pp. 44-49.
- Dryfoos, Joy (1982). The epidemiology of adolescent pregnancy: incidence, outcomes, and interventions. In <u>Pregnancy in Adolescence</u>, I.R. Stuart and C.F. Wells, eds. New York: Van Nostrand Reinholt Co., pp. 27-47.
- Dunnell, Karen (1979). <u>Family Formation 1976</u>. Social Survey Division, Office of Population Censuses and Surveys, London: Her Majesty's Stationery Office. See in particular, Contraceptive use before marriage, and sexual activity among single women, chapter 9; and Age at first intercourse and first pregnancy, chapter 10.
- Farrell, Christine (1978). My Mother Said....The Way Young People Learned
 About Sex and Birth Control. London: Routledge and Kegan Paul, Ltd.
- Festy, Patrick (1980). On the new context of marriage in Western Europe. Population and Development Review, vol. 6, No. 2 (June), pp. 311-315.
- (1986). Fécondité et politiques démographiques en Europe de l'Est. Politiques de Population, Etudes et Documents, vol. II, No. 3.
- Friedman, Herbert L. (1985). The health of adolescents and youth: a global overview. World Health Statistics Quarterly, vol. 38.
- Geeraert, Alfons (1983). <u>Relatievorming bij Adolescenten in Vlaanderen</u>. Centrum voor Bevolkings- en Gezinsstudiën, Rapport 61, Ministerie van de Vlaamse Gemeenschap (Brussels).
- _____, unpublished tabulations from 1983-1984 youth survey.

- Hayashi, Kenji (1983). Adolescent sexual activities and fertility in Japan.

 <u>Bulletin of the Institute of Public Health</u>, vol. 32, No. 2-4 (December),
 pp. 88-94.
- vol. 27, No. 3 (September), pp. 349-354.
- Henshaw, Stanley K. (1987). Characteristics of U.S. women having abortions, 1982-1983. <u>Family Planning Perspectives</u>, vol. 19, No. 1 (January/February), pp. 5-9.
- Herold, E. S. and R. Thomas (1978). Sexual and contraceptive attitudes and behavior of high school and college females. <u>Canadian Journal of Public Health</u>, vol. 69 (July/August).
- Herold, Edward S. (1984). <u>Sexual Behaviour of Canadian Young People</u>. Markham, Ontario: Fitzhenry and Whiteside.
- Höpflinger, F. (1984). Heirats- und Geburtenhäufigkeit bei Teenagern Ein intereuropäischer Vergleich. (Nuptiality and natality of teenagers an inter-European comparison). In Zeitschrift für Bevölkerungswissenschaft, Jg. 10, Heft 2, pp. 169-191.
- (1985). Changing marriage behaviour: some European comparisons. Genus, vol. XLI, No. 3-4 (July/December), pp. 41-64.
- Hungarian Central Statistical Office, unpublished tabulations.
- Johnson, Jeanette H. (1984). Contraception—the morning after. Family Planning Perspectives, vol. 16, No. 6 (November/December), pp. 266-270.
- Jones, Elise F. and others (1986), <u>Teenage Pregnancy in Industrialized</u>

 <u>Countries: A Study Sponsored by the Alan Guttmacher Institute</u>.

 New Haven: Yale University Press.
- Ketting, Evert (1982). Contraception and fertility in the Netherlands, International Family Planning Perspectives, vol. 8, No. 4 (December).
- Khawaja, Mansoor A. (1985). Trends and differentials in fertility, chapter VI. In Economic and Social Commission for Asia and the Pacific (ESCAP), Population of New Zealand, vol. 1. Country Monograph Series No. 12. United Nations, New York.
- <u>Le Nouvel Observateur</u> (1984). Amour: la premiere fois. (Sondage SOFRES. <u>Le Nouvel Observateur</u>) (23-29 March), pp. 46-53.
- Leppo, Kimmo (1978). <u>Contraception in Finland in a Public Health Perspective</u>, Helsinki, Väestöntutkimuslaitos, The Population Research Insitute.
- Les Dossiers de l'Etudiant (1978-1979). Guide Pratique, p. 20.

- pp. 3-8. (1980). 123 questions aux lycéens, lycéennes, No. 16 (September),
- Lewin, Bo (1982). The adolescent boy and girl: first and other early experiences with intercourse from a representative sample of Swedish school adolescents. Archives of Sexual Behavior, vol. 11, No. 5, pp. 417-428.
- Livi-Bacci, M. and M. Ventisette (1980). Pregnancy and childbearing in adolescence in countries with low fertility, chapter 10. In <u>Social</u>, <u>Economic and Health Aspects of Low Fertility</u>, Arthur A. Campbell, ed. Washington, D.C: United States Department of Health, Education and Welfare, National Institute of Health Publication No. 80-100.
- Malacic, J. (1986). Adolescent fertility in Yugoslavia, paper presented at Netherlands Interuniversity Demographic Institute Workshop on Life-styles, Contraception and Parenthood, held in Amsterdam (25-27 September).
- Meikle, S. and others (1981). An investigation into the sexual attitudes, knowledge and behaviour of teenage school students. Calgary, Alberta: unpublished report.
- Meredith, Philip (1986). Adolescent sexuality and contraception, chapter 2.

 In <u>Adolescents: Planning Contraceptive and Counselling Services</u>,
 P. Meredith, ed., International Planned Parenthood Federation, Europe Region.
- Netherlands Institute for Sociosexological Research, unpublished tabulations.
- Norway, Central Bureau of Statistics (1981). <u>Fruktbarhetsunderskelse 1977</u> Fertility Survey 1977 (Oslo).
- O'Higgins, Kathleen (1986). Family planning services in Ireland with particular reference to minors, chapter 8. In <u>The Adolescent Dilema:</u>
 <u>International Perspectives on the Family Planning Rights of Minors,</u>
 Hyman Rodman and Jan Teost, eds. New York: Praeger.
- O'Neill, C. J. (1985). Nuptiality and marital status, chapter VIII. In Economic and Social Commission for Asia and the Pacific (ESCAP), Population of New Zealand, vol. 1. Country Monograph Series No. 12. United Nations, New York.
- Page, R. and others (1975). Sexual activity and contraception use in young adults. New Zealand Medical Journal, vol. 82, No. 550 (October), pp. 261-264.
- Palomba, R. and A. Menniti (1986). Behaviour and attitudes concerning family planning in Italy, paper presented at Netherlands Interuniversity Demographic Institute Workshop on Life-styles, Contraception and Parenthood, held in Amsterdam (25-27 September).

- Parents (1982). 15-18 ans: eux et la virginité (Sondage Parents), pp. 74-79.
- Pavlik, Zdenek and Jitka Rychtaríková (1987). Demographic situation of adolescents in Czechoslovakia. <u>Acta Universitatis Carolinae, Geographica</u>, No. 1, pp. 51-67.
- Paxman, John M. and Ruth Jane Zuckerman (1987). <u>Laws and Policies Affecting</u>
 Adolescent Health. Geneva: World Health Organization.
- Pongracz, M. (1986). Teenage pregnancies, childbearing and abortions in Hungary, paper presented at Netherlands Interuniversity Demographic Institute Workshop on Life-styles, Contraception and Parenthood, held in Amsterdam (25-27 September).
- Pool, Janet Sceats and D. Ian Pool (1978). <u>Contraception and Health Care</u>
 <u>Among Young Canadian Women</u>. Ottawa: Department of Sociology and
 Anthropology, Carleton University.
- Prasad, M. R. N. (1983). Post-coital agents and menses-inducers, paper presented at the International Symposium on Research on the Regulation of Human Fertility, Stockholm.
- Pratt, William F. and Gerry E. Hendershot (1984). The use of family planning services by sexually active teenage women, paper presented at the annual meeting of the Population Association of America, Minneapolis, Minnesota.
- Preston, Samuel H. (1986). The decline of fertility in non-European industrialized countries. In <u>Below-Replacement Fertility in Industrial Societies: Causes, Consequences, Policies. Population and Development Review</u> (Supplement to vol. 12), K. Davis, M. Bernstam and R. Ricardo-Campbell, eds., pp. 26-47.
- Roussel, Louis (1987). Deux décennies de mutations démographiques (1965-1985) dans les pays industrialisés. <u>Population</u>, vol. 42, No. 3 (May-June), pp. 429-448.
- Ruusuvaara, L. (1983). <u>Teenage Abortions, Family Background, Sexual Experience</u> and Contraceptive Use. Helsinki.
- Schmid-Tannwald, Ingolf and Andrejs Urdze (1983). Sexualität und Kontrazeption aus der Sicht der Jugendlichen und ihrer Eltern, Band 132, Schriftenreihe des Bundesministers für Jugend, Familie und Gesundheit, Stuttgart: W. Kohlhammer.
- Schmidt, Gert (1979). Use of contraceptives in 1975 among Danish women 18-49 years. Scandinavian Population Studies, No. 5, pp. 245-257.
- Schmidt, Gunter and Volkmar Sigusch (1972). Changes in sexual behavior among young males and females between 1960-1970. <u>Archives of Sexual Behavior</u>. vol. 2, No. 1, pp. 27-45.

- Schoof-Tams, Karin, Jürgen Schlaegel and Leonhard Walczak (1976).

 Differentiation of sexual morality between 11 and 16 years. Archives of Sexual Behavior, vol. 5, No. 5. pp. 353-370.
- Senderowitz, Judith and John M. Paxman (1985). Adolescent fertility: worldwide concerns. Population Bulletin, vol. 40, No. 2 (April).
- Siedlecky, Stefania (1979). <u>Sex and Contraception before Marriage: A Study of Attitudes and Experience of Never-Married Youth in Melbourne</u>, Australia. Monograph No. 7, Australian Family Formation Project. Canberra: The Australian National University.
- (1984). Australian teenagers and pregnancy. <u>Journal of the</u>
 <u>Australian Population Association</u>, vol. 1, No. 1 (Autumm), pp. 31-40.
- Sigusch, Volkmar and Gunter Schmidt (1973). Teenage boys and girls in West Germany. The Journal of Sex Research, vol. 9, No. 2 (May), pp. 107-123.
- Spain, Instituto Nacional de Estadística (1987). Encuesta de Fecundidad 1985 (Madrid), vol. 1, 1987.
- Teitelbaum, M. and J. Winter (1985). The Fear of Population Decline.

 New York: Academic Press, Inc.
- Tietze, Christopher (1983). <u>Induced Abortion: A World Review, 1983</u>. New York: Population Council.
- Tietze, C. and S. K. Henshaw (1986). <u>Induced Abortion: A World Review</u>, <u>1986</u>. New York: Alan Guttmacher Institute.
- United Kingdom (1985). Editorial: a review of 1984. Office of Population Censuses and Surveys, Population Trends 42 (Winter).
- United Nations (1983). Demographic Yearbook 1981. Sales No. E/F.82.XIII.1.
- (1984a). Recent Levels and Trends of Contraceptive Use as Assessed in 1983. Sales No. E.84.XIII.5.
- (1984b). Report of the International Conference on Population,

 1984. Mexico City, 6-14 August 1984. Sales No. E.84.XIII.8.
- (1986). The Situation of Youth in the 1980s and Prospects and Challenges for the Year 2000. Sales No. E.86.IV.10.
- Developed Countries, 1985. ST/ESA/SER.R/63.
- (1987b). World Contraceptive Use. Wall Chart.
- (1988a). First Marriage: Patterns and Determinants. ST/ESA/SER.R/76.

- (1988b). World Population Trends and Policies: 1987 Monitoring Report. Sales No. E. 88. XIII.3.
- _____ (forthcoming). Recent Levels and Trends of Contraceptive Use as Assessed in 1987.
- United States, National Center for Health Statistics (1986). Advance report of final natality statistics, 1984. Monthly Vital Statistics Report, vol. 35, No. 4. Supplementary, Department of Health and Human Services Publication No. (PHS) 86-1120, Public Health Service, Hyattsville, Maryland.
- Van de Kaa, D. (1987). Europe's second demographic transition. <u>Population</u> <u>Bulletin</u>, vol. 42, No. 1 (March).
- Van Nimwegen, Nico and Hein G. Moors (1986). The social context of sexual and contraceptive behaviour of adolescents in the Netherlands, paper presented at Netherlands Interuniversity Demographic Institute Workshop on Life-styles, Contraception and Parenthood, held in Amsterdam (25-27 September).
- Ventura, S. J. (1984). Trends in teenage childbearing, United States, 1970-81. <u>Vital and Health Statistics</u>, Series 21, No. 41. Department of Health and Human Services Publication No. (PHS) 84-1919. Public Health Service, Hyattsville, Maryland.
- Walløe, Lars and others (1978). <u>Seksualitet, Familieplanlegging og Prevensjon</u>
 <u>i Norge</u>, Oslo: Universitetsforlaget. See, in particular, Sissel Engen
 and Lars Walløe, Alder ved første samleie, chap. 5, pp. 77-90; and Aase
 Hylland, Seksuell aktivitet, chap. 6, pp. 91-104.
- Weiner, Erik and others (1984). Sexual and contraceptive experience among teenagers in Uppsala. <u>Upsala Journal of Medical Science</u>, No. 89, pp. 171-177.
- Westoff, Charles F. (1983). Fertility decline in the West: causes and prospects. <u>Population and Development Review</u>, vol. 9, No. 1 (March), pp. 99-104.
- ______, Gérard Calot and Andrew D. Foster (1983). Teenage fertility in developed nations: 1971-1980. <u>Family Planning Perspectives</u>, vol. 15, No. 3 (May/June), pp. 105-110.
- Westoff, Charles F. (1986). Perspective on nuptiality and fertility. In Below-Replacement Fertility in Industrial Societies: Causes, Consequences, Policies. Population and Development Review (Supplement to vol. 12), K. Davis, M. Bernstam and R. Ricardo-Campbell, eds., pp. 155-170.
- Zelnik, Melvin and John F. Kantner (1977). Sexual and contraceptive experience of young unmarried women in the United States, 1976 and 1971. Family Planning Perspectives, vol. 9, No. 2 (March/April), pp. 55-71.

- (1980). Sexual activity, contraceptive use and pregnancy among metropolitan-area teenagers: 1971-1979. <u>Family Planning Perspectives</u>, vol. 12, No. 5 (September/October), pp. 230-237.
- Zelnik, Melvin, John F. Kantner and Kathleen Ford (1981). Sex and Pregnancy in Adolescence. Sage Library of Social Research, vol. 133. Beverly Hills, California: Sage Publications.

ANNEX TABLES AND FIGURES

Introductory note

For each country, where information is available, four annex tables and five annex figures are presented. The tables and figures are as follows:

Annex tables

Table A.1: Population estimates (thousands)

Source: United Nations Population Division, 1984 Assessment.

Table A.2: Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

Source: United Nations, <u>Demographic Yearbook 1970-1986</u>; C. Tietze and S. K. Henshaw, <u>Induced Abortion: A World Review, 1986</u> (New York: Alan Guttmacher Institute, 1986); United Nations, <u>Population and Vital Statistics</u>

Report, 1984 Special Supplement (Sales No. E/F.84.XIII.2); and United Nations Statistical Office Special Questionnaire on Adolescent Reproductive Behaviour.

Table A.3: Proportion of teen-age women who are married

Source: United Nations Population Division.

Table A.4: Estimates of sexual experience among teen-age women

Source: Sources given for each country below table.

Annex figures

Figure A.I: Proportion of teen-age births to total births (recent data)

Source: United Nations, <u>Demographic Yearbook 1986</u> (Sales No. E/F.87.XIII.1) and United Nations Statistical Office Special Questionnaire on Adolescent Reproductive Behaviour.

Figure A.II: Trends in fertility, abortion and pregnancy rates for adolescent

women and total fertility rates for women 14-49 years old

Source: Table A.2.

Note: Where data on abortion and pregnancy rates are not available, figure A.II shows only trends in fertility and total fertility rates

Figure A.III: Abortion rates as a percentage of pregnancy rates for younger and older adolescents

Source: C. Tietze and S. K. Henshaw, <u>Induced Abortion: A World Review</u>, 1986 (New York, Alan Guttmacher Institute, 1986); and United Nations Statistical Office Special Questionnaire on Adolescent Reproductive Behaviour.

Note: In the calculation of pregnancy rates (the sum of birth rates and abortion rates), the birth rates used were not calculated with a six-month time-lag.

Figure A.IV: Estimates of sexual experience by age

Source: Table A.4.

Figure A.V. Type of contraception used, as a percentage of users among sexually experienced women

Source: Text table 15.

LIST OF COUNTRY TABLES AND FIGURES

	Annex tables	Annex figures	Pages
Australia	A.1-3	A.I, II	· 91–92
Austria	A.1-3	A.I, II	93-94
Belgium	A.1-4	A.I, II, IV, V	95-98
Bulgaria	A.1-3	A.I, II, V	99-100
Canada	A.1-4	A.I-V	101-104
Czechoslovakia	A.1-3	A.I-III	105-106
Denmark	A.1-3	A.I, III, V	107-108
Finland	A.1-3	A.I-III	109110
France	A.1-4	A.I, II, IV, V	111-114
German Democratic Republic	A.1-3	A.I-III	115-116
Germany, Federal Republic of	A.1-4	A.I, II, IV, V	117-120
Greece	A.1-3	A.I, II	121-122
Hungary	A.1-4	A.I-V	123-126
Ireland	A.1-3	A.I, II	127-128
Italy	A.1-4	AI, II	129-130
Japan	A.1-4	A.I, II, IV	131-134
Luxembourg	A.1-3	A.I, II	135-136
Malta	A.1-3	A.I, II	137-138
Netherlands	A.1-4	A.I-V	139-142
New Zealand	A.1-3	A.I, II	143-144
Norway	A.1-4	A.I-V	145-148
Poland	A.1-3	A.I, II	149-150
Portugal	A.1-3	A.I, II	151-152
Romania	A.1-3	A.I, II	153-154
Spain	A.1-3	A.I, II, V	155-156
Sweden	A.1-4	A.I-V	157-160
Switzerland	A.1-3	A.I, II	161-162
Union of Soviet Socialist Republics .	A.1-3	A.II	163-164

LIST OF COUNTRY TABLES AND FIGURES (continued)

Annex tal	bles Annex figures	Pages
United Kingdom of Great Britain and Northern Ireland	, sa a.i, ii	165, 168-170 166 167
United States of America A.1-		171-174
Yugoslavia A.1-		175-178

Table A.1. Population estimates (thousands)

	10-14	years	15-19 years		
Year	Male	Female	Male	Female	
1950	299	288	285	273	
1955	379	364	316	300	
1960	504	480	396	378	
1965	546	523	523	496	
1970	611	580	568	543	
1975	649	616	627	599	
1980	669	639	660	629	
1985	667	636	687	657	
1990	618	586	686	654	
1995	667	629	637	604	
2000	696	656	686	647	

<u>Source</u>: United Nations Population Division, 1984 Assessment.

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

W	ASFR	TFR	V	ASFR	rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	36.8	3064.5	1973	54.5		• •	2743.5
1951	38.3	3056.5	1974	49.1	••	• •	2491.0
1952	39.1	3176.0	1975	45.3			2396.5
1953	38.7	3188.5	1976	40.9	••	• •	2224.0
1954	39.3	3192.5	1977	35.9			2143.0
1955	41.9	3271.0	1978	32.6	••		2036.0
1956	43.1	3327.0	1979	30.4	••		1978.5
1957	43.9	3419.5	1980	29.0			1935.5
1958	44.4	3417.5	1981	28.1			1920.5
1959	45.0	3440.5	1982	28.1			1935.5
1960	44.2	3452.5	1983	27.4	••		1937.0
1961	47.4	3539.5	1983	26.5			1931.5
1962	44.8	3421.5	1984				
1963	46.0	3332.0	1985				
1964	46.8	3146.0					
1965	47.5	2977.0					
1966	49.0	2880.5					
1967	48.4	2847.5					
1968	48.9	2887.5					
1969	49.0	2885.5					
1970	50.9	2859.0					
1971	56.3	2950.5					

Sources: See introductory note.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1 9 50	• •	
1955		
1960	0.9	7
1965	1.3	8.2
1970	1.4	8.8
1975	1.1	7.3
1980	0.6	4.3

<u>Source</u>: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

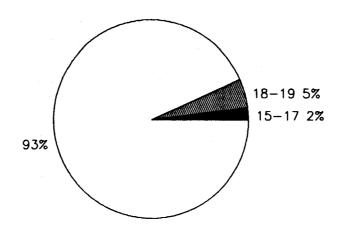


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

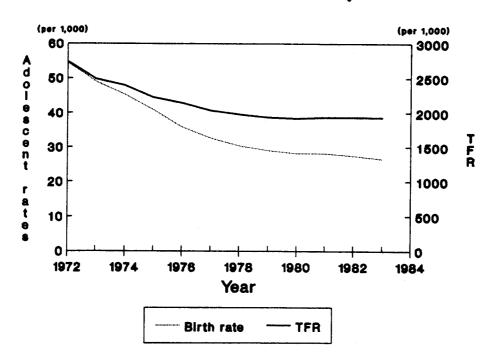


Table A.1. Population estimates (thousands)

	10-14	years	15-19 years		
Year	Male	Female	Male	Female	
1950	255	247	233	224	
1955	283	273	251	243	
1960	257	246	283	273	
1965	245	236	255	244	
1970	292	279	257	249	
1975	329	314	293	281	
1980	311	297	330	317	
1985	255	243	310	297	
1990	222	210	254	243	
1995	238	224	221	210	
2000	237	224	237	224	

Source: United Nations Population Division, 1984 Assessment.

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR			rate	Pregnancy rate	
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950			1972	56.4	••	••	2102.0
1951	34.1	2033.5	1973	55.0		••	1970.0
1952	34.0	2057.0	1974	53.4	••		1949.5
1953	32.9	2070.0	1975	48.1		••	1841.0
1954	31.4	2109.5	1976	42.1			1698.0
1955	30.5	2225.0	1977	37.6			1640.0
1956	32.2	2409.0	1978	35.9		••	1621.0
1957	35.4	2487.5	1979	34.8			1621.0
1958	41.0	2519.0	1980	35.3	••		1682.5
1959	47.0	2605.5	1981	35.0	••		1712.0
1960	48.0	2691.0	1982	34.3	••	••	1705.0
1961	52.2	2798.5	1983	29.7	••		1564.0
1962	53.8	2798.0	1984	26.9	• •		1527.5
1963	55.2	2810.5	1985	24.8	••		1481.5
1964	55.1	2769.5					
1965	56.7	2685.0					
1966	64.0	2661.5					
1967	64.4	2629.5					
1968	65.4	2590.5					
1969	64.8	2495.5					
1970	,61.4	2311.5					
1971	56.5	2202.0					

<u>Sources</u>: See introductory note.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1050		7 6
1950	0.3	3.5
1955	0.5	4.8
1960	0.7	6.0
1965	0.6	6.5
1970	0.6	7.0
1975	0.5	5.6
1980	0.5	4.2

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

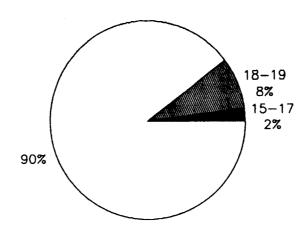


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

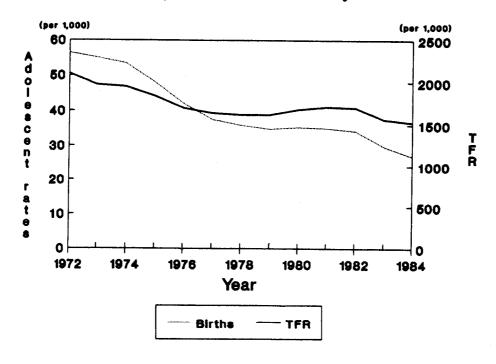


Table A.1. Population estimates (thousands)

	10-14	years	15-19 years		
Year	Male	Female	Male	Female	
1950	287	283	313	310	
1955	275	267	287	284	
1960	352	342	276	269	
1965	366	351	359	347	
1970	393	377	369	354	
1975	406	389	399	380	
1980	371	355	406	390	
1985	336	321	372	356	
1990	311	297	338	322	
1995	316	300	313	298	
2000	310	295	318	302	

<u>Source</u>: United Nations Population Division, 1984 Assessment.

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR		Pregnancy rate	TFR	
Year	<20	14-49	Year	<20	15-19	15-19	14-49	
1950	21.9	2354.0	1973	31.9	••		2074.5	
1951	21.1	2290.0	1974	30.8	••		1938.0	
1952	20.5	2336.5	1975	29.7	••	• •	1834.5	
1953	20.1	2329.0	1976	28.1		••	1741.0	
1954	20.8	2366.0	1977	26.8			1728.5	
1955	21.0	2389.0	1978	25.0	••		1711.5	
1956	22.3	2416.5	1979	23.4	• •		1696.0	
1957	24.2	2465.0	1980	21.8		• •	1695.5	
1958	26.0	2503.5	1981	20.3	••		1692.0	
1959	26.3	2560.0	1982	18.9	••		1682.5	
1960	25.4	2530.0	1983	17.4	••	••	1620.5	
1961	25.0	2643.5	1983	15.9			1570.0	
1962	26.4	2608.0	1984					
1963	27.8	2675.5	1985		••			
1964	28.9	2696.0						
1965	30.3	2598.0						
1966	31.6	2505.0						
1967	31.2	2392.5						
1968	30.0	2296.5						
1969	30.5	2271.0						
1970	31.1	2244.5						
1971	32.7	2211.5						

Table A.3. Proportion of teen-age women who are married

Year	Male	Female								
1950	••	••								
1955										
1960	0.6	5.7								
1965	0.8	6.3								
1970	1.0	6.8								
1975	0.9	6.1								
1980	0.7	5.3								

Source: United Nations Population Division.

<u>Sources</u>: See introductory note.

Figure A.I. Proportion of teen-age births to total births (recent data)

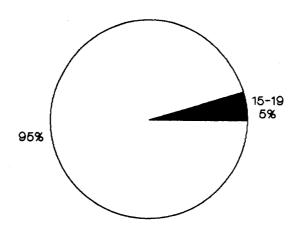
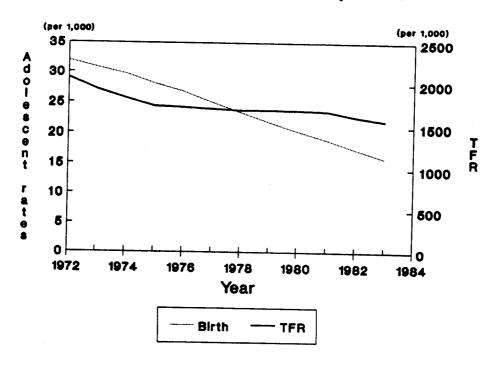


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old



BELGIUM

Table A.4. Estimates of sexual experience among teen-age women

	Data		Percentage who ever had intercourse by/at age								Sample					
	type		14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N	
 1975	C		••	••••••		••	34 <u>a</u> /		•••	•	18	NM	Flanders	-	400	
1975/76 R/C	B /C	1931-35	0.1	0.9	2.4	5.6	13	24	36	49	16-44		Flemish-	-	427	
	K/C	1936-40	•••	0.6	2.4	6.9	19	32	46	59			speaking			
		1941-45	0.1	1	4.2	9.7	24	38	52	66			Belgium			
		1946-50	0.5	2	5.6	15	29	45	62	74						
		1951-55	1	2.5	9.2	18	38	53	74							
		1956-59	7.3	23	55	85		••	• •	••						
1979/80	С	1,50 5,		••				37 <u>b</u> /				NM	Flanders	-	422	
1983/84	C		••	12 <u>c</u> /	21 <u>d</u> /	20 <u>e</u> /	43 <u>e</u> /	51 <u>b</u> /		••	15-19	NM	Flanders	-	389	

Sources: Cliquet (1981); and Geeraert (1983).

a/ At age 18.5.

b/ At age 19.5.

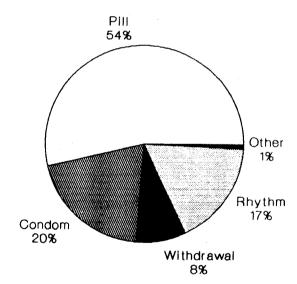
<u>c</u>/ At age 15.5.

d/ At age 16.5.

e/ At age 17.5.

Figure A.IV. Estimates of sexual experience by age percentage o 18 21-35 1003/54 Age

Figure A.V. Type of contraception used as a percentage of sexually experienced women



Contraceptive prevalence = 81%

Table A.1. Population estimates (thousands)

	10-14	years	15-19 years		
Year	Male	Female	Male	Female	
1950	302	297	344	338	
1955	300	291	292	289	
1960	358	345	300	291	
1965	350	336	356	344	
1970	338	324	348	334	
1975	319	299	332	318	
1980	321	303	319	303	
1985	338	320	320	303	
1990	345	328	337	320	
1995	353	334	344	328	
2000	343	324	352	334	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950			1973	69.3			2037.
1951			1974	72.9			2157.
1952			1975	74.9		••	2299.
1953	58.6	2411.5	1976	75.4	••		2237.
1954	60.5	2358.0	1977	78.2		••	2251.
1955	59.7	2382.0	1978	78.6	• •	• •	2206.
1956	61.8	2366.5	1979	78.1		••	2144.
1957	63.1	2261.0	1980	81.1		••	2152.
1958	63.9	2229.0	1981	81.2	••		2055.
1959	71.4	2232.5	1982	79.0			2011.
1960	75.1	2308.0	1983	84.1		• •	2019.
1961	72.3	2278.5	1983	81.1	••	••	2005.
1962	68.9	2222.0	1984	79.4	••	• •	1994.
1963	68.5	2190.0	1985	78.4	••	••	1976.
1964	70.9	2167.5					
1965	67.6	2076.0					
1966	65.5	2022.5					
1967	68.0	2028.0					
1968	75.3	2280.5					
1969	74.2	2278.5					
1970	71.5	2178.5					
1971	69.8	2108.5					

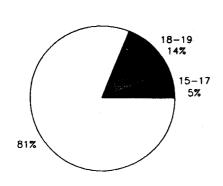
Table A.3. Proportion of teen-age women who are married

		·
Year	Male	Female
1950		
1950	••	• •
1955	5.2	19.3
1960	4.6	18.8
1965	4.0	18.5
1970	4.1	18.1
1975	4.3	17.8
1980	••	

Source: United Nations Population Division.

Figure A.i. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

Figure A.I. Proportion of teen-age births to total births (recent data)



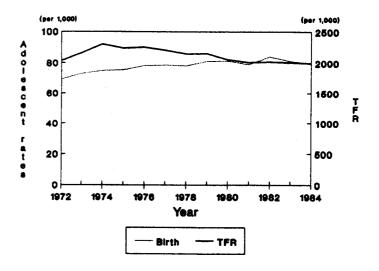


Figure A.V. Type of contraception used, as a percentage of sexually experienced women

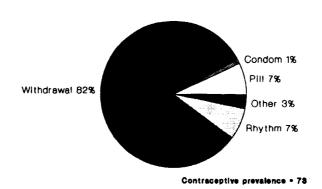


Table A.1. Population estimates (thousands)

	10-14	4 years	15-19 years		
Year	Male	Female		Female	
1950	571	554	544	534	
1955	700	672	576	564	
1960	892	852	705	678	
1965	1043	997	893	873	
1970	1173	1127	1058	1016	
1975	1198	1143	1171	1129	
1980	975	926	1171	1120	
1985	917	869	986	940	
1990	937	888	929	883	
1995	1001	944	949	902	
2000	1036	978	1013	959	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion	Pregnancy	TFR
					rate		
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	44.6	3373.0	1973	37.7	••	••	1979.5
1951	46.7	3424.0	1974	36.5	••	••	1890.0
1952	48.9	3558.5	1975	34.7	13.6	48.3	1836.0
1953	50.5	3635.5	1976	33.8	13.7	47.5	1824.0
	52.7	3739.5	1977	32.7	14.6	47.3	1795.5
1955	52.6	3745.0	1978	31.4	15.3	46.7	1765.5
1956	54.2	3771.0	1979	29.2	16.3	45.5	1720.0
1957	58.5	3842.5	1980	27.5	17.0	44.5	1724.5
1958	57.7	3800.0	1981	27.2	16.9	44.1	1710.0
1959	58.7		1982	25.9	16.3	42.2	1668.5
1960	58.0	3810.5	1983	26.1	16.2	42.3	1659.5
1961	56.4	3753.0	1983	24.4	14.7	39.1	1644.5
1962	53.6	3680.5	1984	23.9	14.7	38.6	1649.0
1963	51.8	3607.0	1985	23.2			1633.0
1964	49.0	3455.5					
1965	48.0	3114.5					
1966	46.8	2748.5					
1967	43.9	2527.5					
1968	42.2	2386.0					
1969	41.5	2333.5					
1970	42.1	2258.0					
1971	39.0	2140.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	1.0	7.9
1955	1.1	8.4
1960	1.3	8.7
1965	1.2	7.6
1970	1.6	7.5
1975	2.0	8.2
1980	1.6	6.6

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

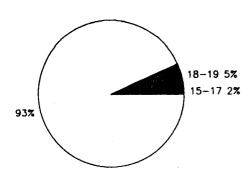


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

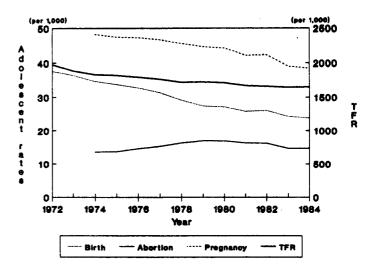
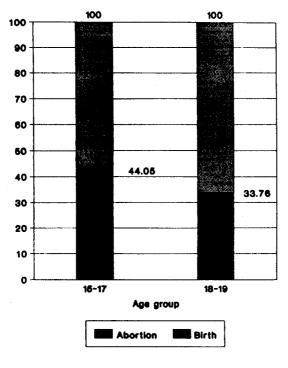


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents



CANADA

Table A.4. Estimates of sexual exposure among teen-age women

Survey Data Cohort			Cohort Percentage who ever had intercourse by/at age				t age	Sample							
date t	typ	e	14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N
 974/75	R	1952-54 <u>a</u> /	•••				•••	24.7	••••	•••	19-22	All	Ottawa	Students-	269,249
		1952-54 b/					••	30.6						Carleton	
		1954-56 a/					• •	29.7	••					and Ottawa	
		1954-56 b/			• •		••	44.9	••	••				universitie	
975	C		••	••	••	••	33.0	••	••	• •	17-19	NM	Ontario	11th and 12th grade students	106
976 c/	С		8.3	d/ 18	.6 <u>e</u> /	••	••	••		60.1	15-23	All	National		~572
979	С		32.	4 <u>d</u> /		••	••	• •	••	• •	13-18	NM	Calgary	Students	421
981	С		••	••	••	••	53.0 <u>f</u> /	••	••	••	+17-2	NM	Montreal	Community college students	140

Sources: Pool and Pool (1978); Herold and Thomas (1978); Badgley and others (1977); Meikle and others (1981); and Frappier (1983) as cited in Herold (1984).

a/ Sample - students at Ottawa University.

b/ Sample - students at Carleton University.

c/ Respondents considered as ever having had intercourse are those who said they currently had sex at least "a few times a year".

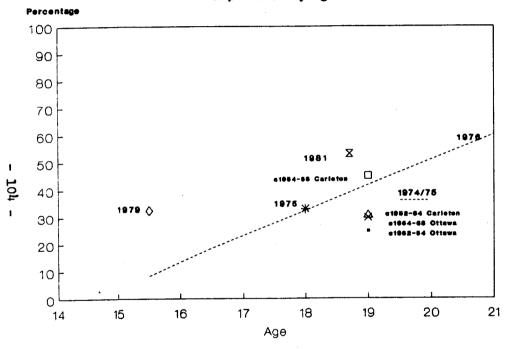
<u>d</u>/ At age 15.5.

e/ At age 16.5.

f/ At age 18.7.

Figure A.V. Type of contraception used, as a percentage of sexually experienced women

Figure A.IV. Estimates of sexual experience by age



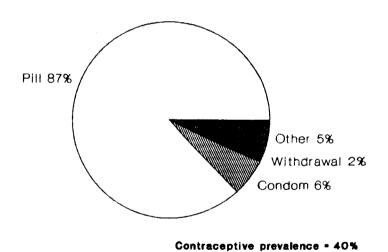


Table A.1. Population estimates (thousands)

	10-14	years	15-19	9 years
Year	Male	Female	Male	Female
1950	440	430	469	461
1955	531	516	435	426
1960	645	622	530	515
1965	666	639	644	621
1970	577	554	654	628
1975	564	536	591	565
1980	548	522	561	535
1985	655	626	546	521
1990	693	663	653	626
1995	596	572	692	663
2000	575	552	595	572

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR		Pregnancy rate	TFR
Year	<20	14-49	Year	<20		15-19	14-49
1950	51.0	3053.5	1973	45.8		••	2216.0
1951	52.9	3027.5	1974	46.9			2386.5
1952	51.9	2970.0	1975	52.4	11.0	63.4	2504.0
1953	48.4	2873.0	1976	55.6	11.2	66.6	2461.0
1954	45.2	2835.5	1977	56.9	10.8	67.7	2431.0
1955	44.7	2847.5	1978	56.1	9.6	65.7	2380.5
1956	47.2	2837.5	1979	54.3	10.0	64.3	2369.0
1957	48.3	2755.0	1980	53.6	10.6	64.2	2327.5
1958	46.3	2573.0	1981	51.3	10.8	62.1	2153.0
1959	46.0	2388.0	1982	49.3	11.9	61.1	2094.0
1960	46.1	2394.5	1983	51.3	12.7	64.0	2098.5
1961	45.3	2380.5	1983	53.8	13.6	67.4	2078.5
1962	45.0	2345.0	1984	54.1	15.0	69.1	2071.5
1963	47.4	2505.0	1985				
1964	46.6	2514.0					
1965		2369.5					
1966	45.0	2221.5					
1967	44.9	2087.5					
1968	43.0	2008.0					
1969	45.3	2045.0					
1970	45.6	2075.5					
1971	45.1						

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950		
1955		
1960	0.8	8.7
1965	0.9	7.9
1970	1.0	7.8
1975	1.2	7.9
1980	1.3	8.0

Source: United Nations
Population Division.

Figure A.I. Proportion of teen-age birth's to total births (recent data)

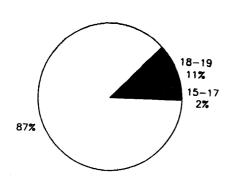


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

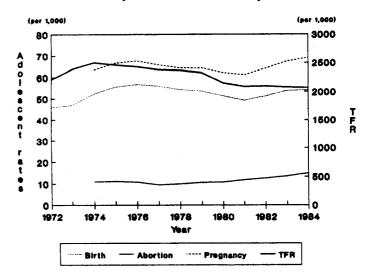


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents

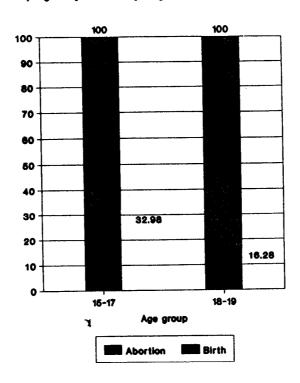


Table A.1. Population estimates (thousands)

	10-14	years	15-19 years		
Year	Male	Female	Male	Female	
1950	160	155	148	144	
1955	196	188	158	153	
1960	213	204	195	186	
1965	190	181	213	202	
1970	189	180	191	181	
1975	201	192	190	180	
1980	200	190	202	193	
1985	187	179	202	190	
1990	162	154	189	179	
1995	143	136	165	155	
2000	145	138	145	137	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR		Pregnancy	TFR
V	-00	44.46				rate	
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	39.9	2582.5	1973	28.2			2046.0
1951	38.5	2504.0	1974	26.1			1929.0
1952	40.9	2538.5	1975	25.6			
1953	40.5	2592.5	1976	26.9	25.0	52.0	
1954	40.6	2542.5	1977	23.1	26.0		
1955	41.5	2575.0	1978	22.0	25.5		
1956	42.2	2591.0	1979	19.9			
1957	42.4	2555.5	1980	17.6	22.5		1600.5
1958	40.6	2534.5	1981	16.3	22.1		
1959	41.1	2494.5	1982	13.7	20.4		
1960	41.8	2544.0	1983	12.1	18.2		1422.5
1961	42.1	2527.5	1983	10.6	17.6	28.2	1374.0
1962	42.6	2537.5	1984	10.5	17.4	27.9	1397.0
1963	46.5	2630.5	1985	9.8			
1964	48.4	2599.0					
1965	49.6	2601.0					
1966	51.9	2622.5					
1967.	48.5	2382.0					
1968	44.8	2130.0					
1969	39.0	2013.5					
1970	32.5	1967.5					
1971	29.0	2062.0					

<u>Sources</u>: See introductory note.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female						
1950	0.2	4.6						
1955	0.3	5.2						
1960	0.4	4.9						
1965	0.6	5.9						
1970	0.3	4.1						
1975	0.2	2.6						
1980	0.2	1.1						

<u>Source</u>: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

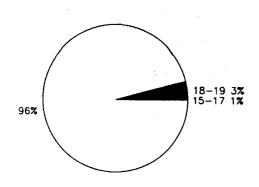


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

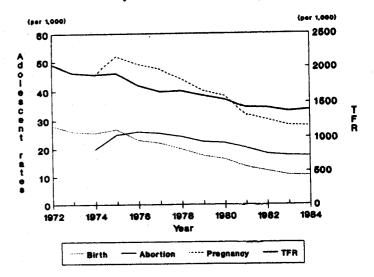


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents

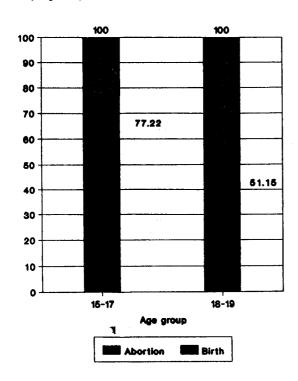


Figure A.V. Type of contraception used, as a percentage of sexually experienced women

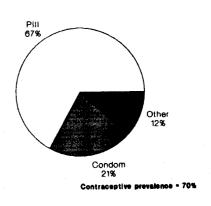


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19	years
	Male	Female	Male	Female
1950	166	161	157	153
1955	183	176	166	161
1960	251	241	182	175
1965	223	215	247	237
1970	205	197	218	208
1975	196	189	204	195
1980	179	172	195	187
1985	154	147	182	177
1990	164	157	155	150
1995	164	157	166	16
2000	158	152	166	160

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR		Pregnancy rate	TFR
'ear	<20	14-49	Year	<20	15-19	15-19	14-49
950	27.4	3163.5	1973	28.6	••		1592.
951	24.8	3009.0	1974	26.2		••	1504.
952	26.4	3059.5	1975	27.2	18.5	45.7	1624.
953	27.1	2953.0	1976	27.5	21.2	48.7	1688.
954	27.9	2922.5	1977	26.1	20.4	46.5	1716.
1955	28.4	2919.0	1978	24.2	19.6	43.8	1691.
956	28.3	2890.0	1979	21.3	19.8	41.1	1652.
1957	29.8	2824.5	1980	19.2	19.5	38.7	1642.
1958	29.4	2631.5	1981	18.9	19.4	38.2	1634.
1959	29.6	2683.5	1982	16.9	17.9	34.8	1648.
1960	28.4	2713.5	1983	16.9	17.9	34.9	1720.
1961	27.8	2689.0	1983	15.7	17.1	32.8	1739.
1962	27.8	2636.5	1984	15.2	16.9	32.1	1697.
1963	30.3		1985	13.8			1644.
1964	31.6	2533.0					
1965	33.7						
1966	35.1						
1967	35.5	2240.0					
1968	35.0	2067.5					
1969	32.7						
1970	32.2	1827.5					
1971	29.8						

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	1.0	4.3
1955	1.1	4.7
1960	1.1	5.1
1965	1.1	5.3
1970	1.1	5.4
1975	0.5	3.9
1980	0.3	2.3

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

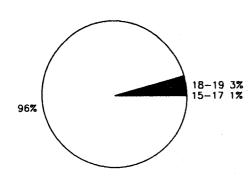


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

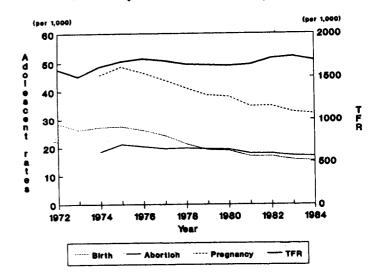


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents

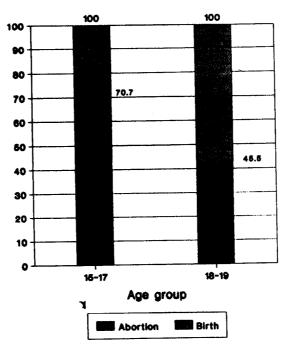


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19 years		
	Male	Female	Male	Female	
1950	1418	1398	1588	1541	
1955	1392	1341	1433	1403	
1960	2054	1978	1421	1361	
1965	2108	2032	2122	2029	
1970	2112	2039	2135	2058	
1975	2195	2103	2156	2080	
1980	2132	2041	2187	2100	
1985	2098	2006	2125	2040	
1990	1878	1797	2092	2005	
1995	1958	1902	1873	1797	
2000	1887	1830	1954	1902	

 $\underline{\text{Source}}$: United Nations Population Division, 1984 Assessment.

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20		15-19	14-49
1950	24.1	2921.0	1973	29.0			2414.0
1951	23.0	2769.0	1974				
1952	22.4	2729.0	1975	27.8	••	•••	2148.5
1953	22.1	2657.5	1976	25.7		• • • • • • • • • • • • • • • • • • • •	1957.5
1954	21.2	2708.5	1977	23.1	•••	•••	1867.5
1955	21.0	2699.0	1978	22.1		•••	1900.5
1956	21.7	2685.0	1979	20.1		• • • • • • • • • • • • • • • • • • • •	1861.5
1957	20.9	2694.5	1980	18.3	•	•••	1896.0
1958	21.0	2670.0	1981	18.1		•••	1985.5
1959	21.7	2729.0	1982	16.4	•••	• • • • • • • • • • • • • • • • • • • •	1964.5
1960	22.8	2721.5	1983	15.6	•••	••	1921.0
1961	24.1	2807.0	1983	13.9	•••	•••	1792.0
1962	23.2	2771.0	1984	13.1	•••	••	1811.0
1963	23.2	2859.5	1985	11.6	•••	•••	1831.0
1964	24.5	2870.5				••	1051.0
1965	27.8	2815.0					
1966	26.7	2753.0					
1967	25.8	2637.5					
1968	25.8	2561.5					
1969	26.0	2519.0					
1970	26.4	2469.5					
1971	27.7	2490.0					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female					
1950	••	••					
1955	••	••					
1960	0.3	2.9					
1965	0.3	3.2					
1970	0.3	3.3					
1975	0.4	3.5					
1980	0.2	5.2					

<u>Source</u>: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

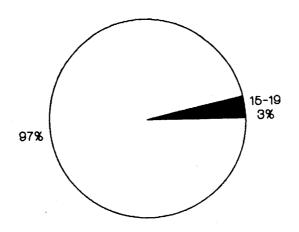


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

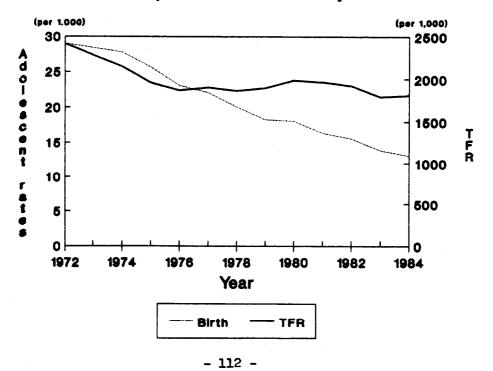
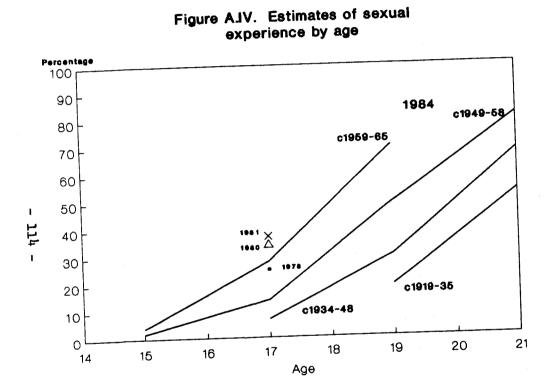


Table A.4. Estimates of sexual experience among teen-age women

Survey		Cohort	Perc	centage	who ever	had	intercourse	by/at	age				Sample		
date	type		14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N
1978	С	•	••		••	25	••	•••		••	15-18	NM	National	Students	2,882
1980	С		••	• •	••	34	••	••		••	15-18	NM	National	Students	2,105
1981	С			••		37		••			15-18	All	National	-	~ 500
1984	R	1919-35					••	19		53	18+	ALL	National	-	~ 500
		1934-48				7	••	30	••	68					
		1949-58		2	• •	14		49		81					
		1959-65		4		28		70							

Source: Les Dossiers de l'Etudiant (1978-79); Les Dossiers de l'Etudiant (1980); Parents (1982); and Le Nouvel Observateur (1984).

Figure A.V. Type of contraception used, as a percentage of sexually experienced women



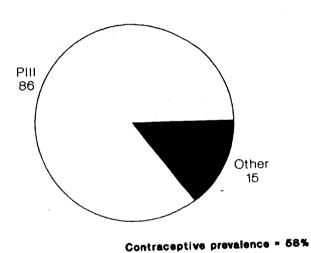


Table A.1. Population estimates (thousands)

Year	10-14	4 years	15-19 years		
rear	Male	Female	Male	Female	
1950	874	844	669	670	
1955	689	667	810	789	
1960	488	472	633	617	
1965	670	636	471	452	
1970	675	642	671	636	
1975	732	697	678	644	
1980	628	598	730	696	
1985	501	476	626	597	
1990	555	527	499	476	
1995	609	578	554	526	
2000	606	575	607	577	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950			1973	72.1	••		1771.5
1951	• •	••	1974	66.9	20.4	87.3	1566.5
1952	47.5	2385.0	1975		19.2		
1953	49.5	2357.0	1976	61.6	17.3	78.9	1536.5
1954	52.6	2326.0	1977	60.3	16.9	77.2	1627.5
1955	55.4	2346.5	1978	61.7			1834.0
1956	53.7	2247.5	1979	48.8			1898.0
1957	55.8	2233.0	1980	50.0		••	1898.5
1958	58.7	2208.5	1981	53.7			1953.5
1959	69.1	2355.0	1982	51.1			1869.0
1960	75.8	2374.5	1983	51.5			1864.5
1961	83.9	2483.0	1983	48.5			1806.5
1962	85.0	2489.0	1984	46.4			1758.0
1963	89.1	2534.0	1985	43.8			1756.0
1964	85.3	2530.0					
1965	71.1	2455.0					
1966	65.8	2393.0					
1967	68.2	2297.0					
1968	67.7	2251.5					
1969	72.8	2205.5					
1970	77.6						
1971	80.0	2121.0					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	• •	
1955	••	
1960		
1965	2.3	17.4
1970	1.3	6.8
1975	1.1	5.8
1980	0.9	4.9

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

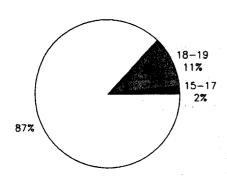


Figure A.I. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

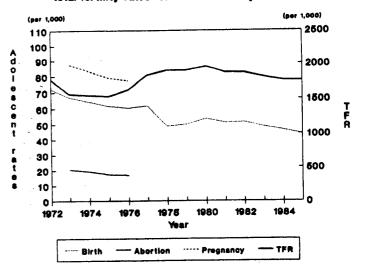


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents

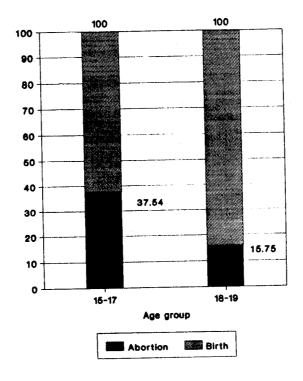


Table A.1. Population estimates (thousands)

Year	10-14	4 years	15-19 years		
	Male	Female	Male	Female	
1950	2279	2197	1831	1764	
1955	1987	1908	2333	2244	
1960	1825	1744	2069	1987	
1965	2011	1911	1893	1786	
1970	2240	2124	2046	1956	
1975	2589	2463	2286	2162	
1980	2498	2372	2687	2531	
1985	1727	1654	2489	2368	
1990	1498	1426	1722	1652	
1995	1558	1483	1494	1425	
2000	1628	1549	1555	1481	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR		Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950			1973	31.8	••		1714.0
1951	32.1	2050.0	1974	27.2			1538.5
1952	30.8	2067.0	1975	24.9			1511.5
1953	29.4	2016.5	1976	21.4			1451.0
1954	17.1	2058.0	1977	19.9			1457.5
1955	16.3	2067.0	1978	17.9		••	1403.0
1956	17.1	2161.0	1979	16.6			1381.5
1957	19.0	2253.5	1980	15.4			1385.0
1958	19.7	2243.0	1981	15.3	••		1457.0
1959	21.7	2327.5	1982	13.9			1441.0
1960	22.4	2344.0	1983	12.5			1414.5
1961	24.5	2435.5	1983	10.3			1339.0
1962	26.7	2401.0	1984	9.1			1306.5
1963	27.6	2470.5	1985	8.6		••	1295.5
1964	27.8	2481.0					
1965	32.0	2502.5					
1966	34.0	2533.0					
1967	34.9	2487.0					
1968	35.6	2379.0					
1969							
1970	35.9	2013.5					
1971	35.8	1916.0					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	0.2	2.5
1955	0.3	8.4
1960	0.4	14.2
1965	0.4	12.1
1970	0.8	8.1
1975		
1980	• •	3.6

<u>Source</u>: United Nations Population Division.

<u>Sources</u>: See introductory note.

Figure A.I. Proportion of teen-age births to total births (recent data)

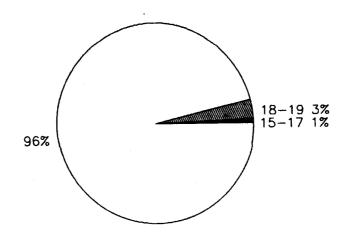
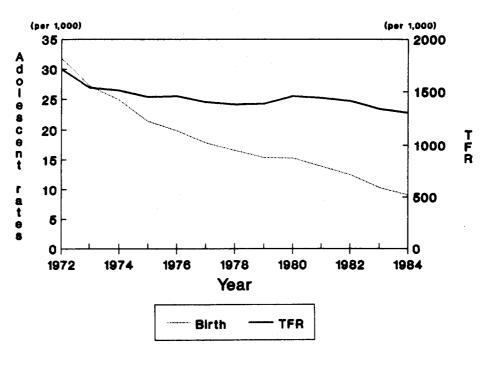


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old



GERMANY, FEDERAL REPUBLIC OF

Table A.4. Estimates of sexual experience among teen-age women

date type	Perc	Percentage who ever had intercourse by/at age						Sample							
	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N			
1966 <u>a</u> /	R	1936-46	1	1	1	2	6	11	•••	•••	19-30	All	National	Students	778
1968 <u>a</u> /	R	1947-48	5	5	7	19	33	53		••	20-21		6 large cities	Workers	150
1970	R	1953-54	0	2	10	30	••	••	••		16-17		5 large cities	-	300
1974	С		5 <u>b</u> /	22 <i>c_/</i>	40 <u>d</u> /	••	••	••	••	••	11-16			Students	860
1980	С		3 <u>b</u> /	9 <u>c</u> /	28 <u>d</u> /	56	••	••			14-17	NM	National	-	1,037

Sources: Schmidt and Sigusch (1972); Sigusch and Schmidt (1973); Schoof-Tams, Schlaegel and Walczak (1976); and Schmid-Tannwald and Urdze (1983).

a/ It is assumed that the age indicated in the presentation of cumulative experience of first intercourse refers to events during the given year of age and earlier, rather than events occurring before the start of that year of age.

b/ At age 14.5.

c/ At age 15.5.

<u>d</u>/ At age 16.5.

e/ At age 17.5.

Figure A.IV. Estimates of sexual experience by age

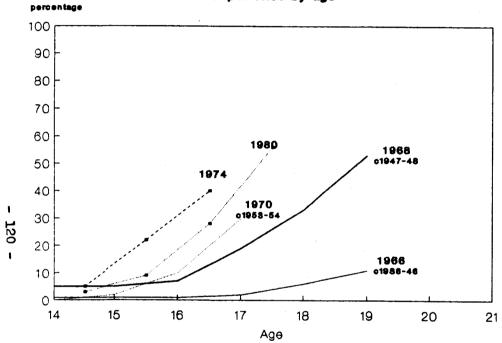


Figure A.V. Type of contraception used, as a percentage of sexually experienced women

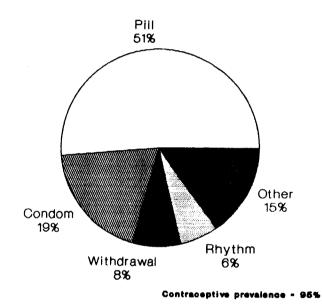


Table A.1. Population estimates (thousands)

Year	10-1	4 years	15-19 years			
rear	Male	Female	Male	Female		
1950	395	382	389	395		
1955	330	312	389	379		
1960	373	358	315	311		
1965	370	347	368	355		
1970	369	347	337	323		
1975	366	345	361	343		
1980	402	377	374	351		
1985	363	340	401	376		
1990	370	346	361	339		
1995	361	346	368	345		
2000	358	344	360	346		

 $\underline{\text{Source:}}$ United Nations Population Division, 1984 Assessment.

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950		••	1973	38.1			2314.0
1951			1974	39.6			2254.5
1952		••	1975	44.7		••	2367.0
1953			1976	45.1		••	2319.5
1954			1977	48.4	••		2350.5
1955		••	1978	48.6		• 4	2276.0
1956	14.3	2326.5	1979	51.4	••		2291.5
1957	14.8	2266.0	1980	53.9			2285.0
1958	15.0	2229.5	1981	53.1			2226.5
1959	18.0	2272.5	1982	48.9	••		2091.0
1960	17.5	2220.5	1983	46.0	••	••	2024.0
1961	16.3	2145.0	1983	43.7	••		1939.5
1962	16.3	2173.5	1984				
1963	18.1	2148.5	1985				
1964	21.9	2250.5					
1965	25.6	2246.5					
1966	28.1	2305.5					
1967	31.4	2422.0					
1968	33.0	2388.0					
1969	34.6	2331.5					
1970	37.0	2397.5					
1971	36.2	2322.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female		
1950	2.9	8.8		
1955	2.8	9.6		
1960	2.6	10.4		
1965	1.9	10.8		
1970	1.2	11.2		
1975				
1980	••	13.8		

<u>Source</u>: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

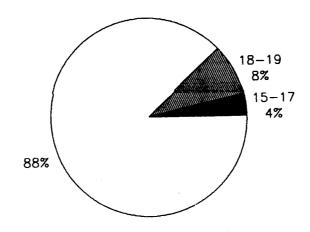


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

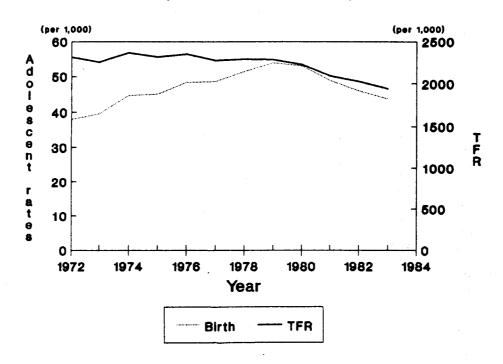


Table A.1. Population estimates (thousands)

	10-14	years	15-19 years			
Year	Male	Female	Male	Female		
1950	373	366	384	381		
1955	389	378	370	363		
1960	409	395	377	373		
1965	467	450	407	396		
1970	410	388	476	453		
1975	330	312	407	387		
1980	367	345	333	313		
1985	407	384	366	344		
1990	433	409	407	384		
1995	344	330	432	409		
2000	323	311	344	330		

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR		Pregnancy rate	TFR
Year	<20	14-49	Year	<20		15-19	14-49
1950	51.6	2619.0	1973	53.8	53.0	106.8	1930.5
1951	51.6	2546.0	1974	57.8	38.3	96.1	1951.0
1952	48.3	2477.0	1975	67.5	26.6	94.2	2306.0
1953	50.2	2753.0	1976	72.6	26.5	99.1	2383.0
1954	52.2	2968.5	1977	75.0	26.6	101.6	2258.5
1955	54.3	2814.5	1978	74.2	27.8	102.0	2170.5
1956	55.2	2607.5	1979	74.0	27.3	101.3	2080.5
1957	56.1	2291.0	1980	73.5	26.7	100.2	2024.5
1958	54.8	2174.0	1981	68.7	26.5	95.6	1925.0
1959	54.0	2078.5	1982	63.0	26.0	89.0	1879.5
1960	52.4	2018.5	1983	59.0	26.4	85.4	1787.5
1961	52.3	1941.0	1983	53.9	26.2	79.7	1728.5
1962	46.7			52.7	27.7	80.4	1735.5
1963	43.5	1819.5	1985				1834.0
1964	42.1	1806.5					
1965	42.2	1808.0					
1966	46.1	1880.0					
1967	50.7	2010.0					
1968	52.4	2060.0					
1969	53.1	2029.0					
1970	50.5	1963.5					
1971	50.8	1914.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female		
1950	1.1	11.5		
1955				
1960	1.2	14.7		
1965				
1970	1.4	12.5		
1975				
1980		17.1		

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

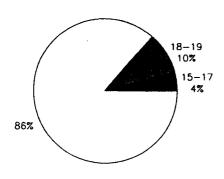


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

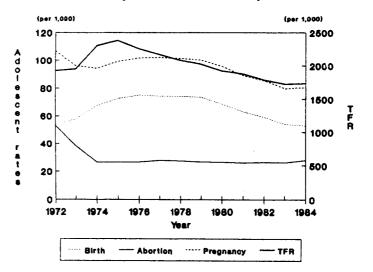
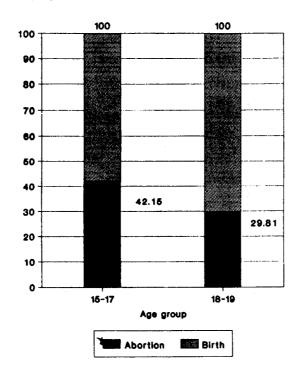


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents



HUNGARY

Table A.4. Estimates of sexual experience among teen-age women

Survey Data Cohort date type			Percentage who had intercourse by/at age						Sample						
date type		14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N	
1986	С	a/ b/		15.3 6.9		49.8 31.3	63.7 39.7	••	••	•••	14-18	NM	National	-	324

Source: Hungarian Central Statistical Office (unpublished tabulations).

a/ Ever had.

b/ Previous month.

Figure A.IV. Estimates of sexual experience by age

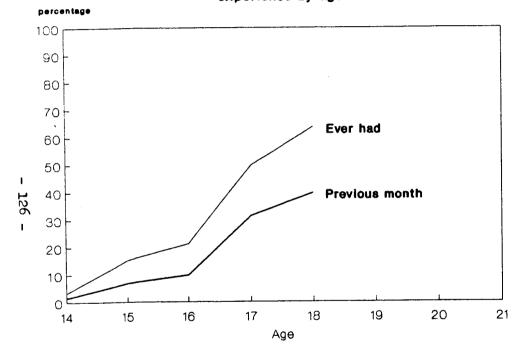


Figure A.V. Type of contraception used, as a percentage of sexually experienced women

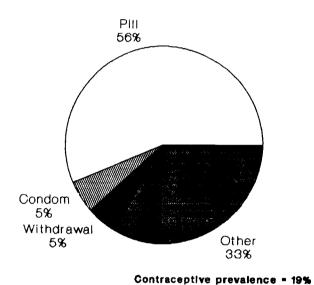


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19 years			
rear	Male	Female	Male	Female		
1950	133	129	126	116		
1955	141	137	122	112		
1960	149	141	121	114		
1965	145	139	133	126		
1970	151	145	132	126		
1975	164	157	151	144		
1980	174	166	164	157		
1985	181	172	174	166		
1990	177	169	181	172		
1995	189	178	177	169		
2000	202	191	189	178		

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	••		1973	21.4		••	3914.0
1951			1974	22.6	••	••	3816.0
1952			1975	22.9	••	••	3717.0
1953			1976	23.1	••		3518.0
1954			1977	21.9			3505.0
1955	10.3	3394.5	1978	21.2			3269.5
1956	9.6	3409.0	1979	21.7			3240.0
1957	9.3	3516.5	1980	22.7			3229.0
1958	7.8	3523.0	1981	23.0	••	• •	3227.5
1959	8.2	3638.5	1982	22.2	••	••	3069.5
1960	8.9	3760.5	1983	20.7			2958.0
1961	9.5	3791.0	1983	18.8		• •	2740.0
1962	11.2	3920.5	1984	18.3	••	• •	2581.0
1963	12.3	4010.5	1985			• •	••
1964	13.1	4065.0					
1965	14.0	4031.0					
1966	13.5	3954.0					
1967	14.5	3843.5					
1968	14.3	3770.0					
1969	15.8	3835.0					
1970	16.9	3859.0					
1971	19.1	3976.0					

<u>Sources</u>: See introductory note.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	0.1	1.1
1955	0.1	1.1
1960	0.2	1.2
1965	0.3	1.6
1970	0.5	2.1
1975	0.6	2.3
1980	0.7	2.7

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

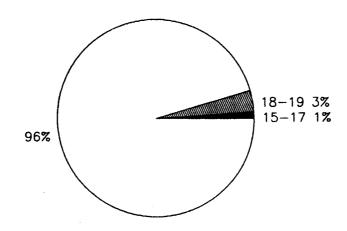


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

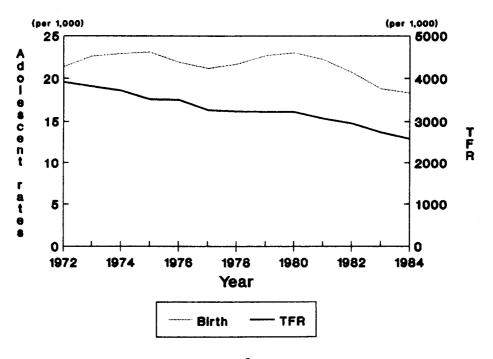


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19 years				
	Male	Female	Male	Female			
1950	2121	2054	1996	1976			
1955	1908	1848	2055	2002			
1960	2192	2086	1865	1789			
1965	2006	1935	2109	2047			
1970	2058	1972	1979	1908			
1975	2327	2215	2112	2023			
1980	2340	2228	2344	2238			
1985	2214	2102	2334	2227			
1990	1870	1779	2209	2101			
1995	1603	1538	1866	1778			
2000	1674	1604	1600	1538			

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

					44		
	ASFR	TFR		ASFR		Pregnancy	TFR
						rate	1.1.1.1.1
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950		••	1973	29.7		••	2352.5
1951	15.7	2367.0	1974	30.4			2309.5
1952		••	1975	32.6		••	2286.5
1953	15.2	2253.5	1976	31.9			2168.0
1954	15.5	2316.0	1977	30.0			2038.5
1955	15.7	2307.5	1978	26.2		••	1927.5
1956	16.3	2316.0	1979	24.4			1837.0
1957	16.8	2281.5	1980				
1958	16.6	2238.0	1981	19.9			1636.0
1959	18.0	2294.5	1982	17.8			1574.0
1960	18.6	2311.5	1983		• •		
1961	18.7	2427.0	1983				
1962	19.0	2446.0	1984		••	••	
1963	20.2	2491.5	1985		••		
1964	23.6	2654.5					
1965	24.6	2599.5					
1966	25.2	2579.0					
1967	24.9	2495.0					
1968	25.3	2443.5					
1969	25.4	2452.5					
1970	26.6	2381.5					
1971	27.7	2403.0					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female								
1950	0.4	3.8								
1955	0.4	4.1								
1960	0.5	4.4								
1965	0.6	5.4								
1970	0.6	6.4								
1975										
1980	:	4.6								

<u>Source</u>: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

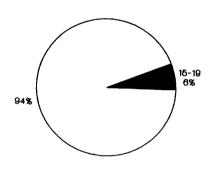
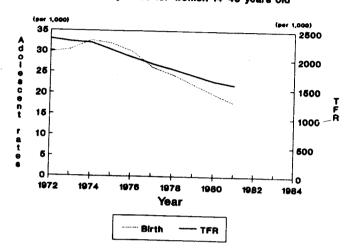


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old



ITALY

Table A.4. Estimates of sexual experience among teen-age women

Survey date	Data type	Cohort -	Perc	Percentage who ever had intercourse by/at age							Sample				
			14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N
1986	С		••		34 <u>a</u> /	••	••	•••	••		13-19	NM I	lational		12,770

Source: Associazione Italiana per l'Educazione Demografica (1986). a/ At age 16.5.

Table A.1. Population estimates (thousands)

	10-14	years	15-19 years			
Year	Male	Female	Male	Female		
1950	4452	4344	4354	4283		
1955	4883	4758	4383	4320		
1960	5548	5372	4742	4648		
1965	4802	4643	5437	5339		
1970	4054	3899	4608	4530		
1975	4227	4036	4069	3938		
1980	4582	4352	4220	4045		
1985	5108	4862	4574	4349		
1990	4389	4174	5100	4859		
1990	3961	3748	4382	4171		
2000	3833	3628	3955	3746		

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion	Pregnancy	TFR
					rate	rate	
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	13.3	3637.5	1973	4.8			2147.0
1951	10.7	3245.5	1974	4.9		••	2175.0
1952	8.8	2965.0	1975	4.7		••	2087.5
1953	7.4	2681.0			3.1		
1954	6.4	2468.0	1977	3.7	3.4	7.5	1840.0
1955	5.9	2364.5	1978	3.4	3.5	7.2	1800.5
1956	5.1	2217.5	1979	3.5	3.9	7.4	1798.0
1957	4.3	2037.5	1980	3.5	4.4	7.9	1778.5
1958	4.0	2106.0	1981	3.6	4.8	8.4	1735.5
1959	4.0	2043.0	1982	3.9	5.5	9.4	1710.5
1960	4.3	2006.0	1983	4.1	5.9	10.0	1741.5
1961	4.4	1951.5	1983	4.3	6.2	10.5	1773.0
1962	4.1	1960.0	1984	4.5			1781.5
1963	3.8	1981.0	1985	4.1			1729.0
1964	3.3	2026.5					
1965	3.3	2138.5					
1966	3.5	1597.5					
1967	4.3	2222.0					
1968	4.2	2098.0					
1969	4.4	2057.5					
1970	4.4	2069.0					
1971	4.7	2171.0					

<u>Sources</u>: See introductory note.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	¥	•••
1955	0.1	1.8
1960	0.2	1.4
1965	0.4	1.5
1970	0.7	2.2
1975	0.5	1.4
1980	0.4	1.0

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

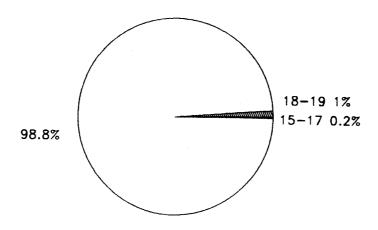
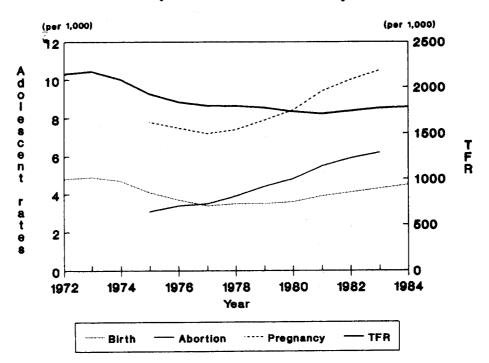


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old



JAPAN

Table A.4. Estimates of sexual experience among teen-age women

Survey Data Cohort date type	Cohort	Per	Percentage who ever had intercourse by/at age							Sample					
	type	•	14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N
1974	R		0.9	1.8	2.4	4.6	6.7	6.8	11.2	••••	15-23	NM		School children	
1981	R		0.7	2.4	5.3	7.6	10.4	17.1	28.0	••	15-23	NM		School children	

Source: Hayashi (1983).

Figure A.IV. Estimates of sexual experience by age

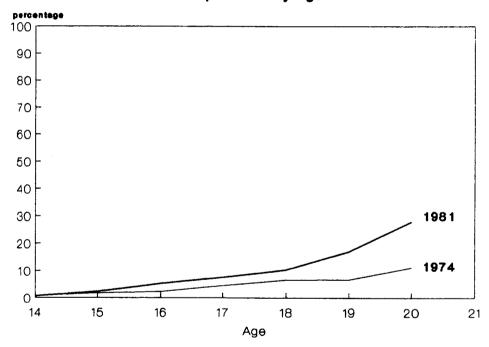


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19 years			
real	Male	Female	Male	Female		
1950	10	10	13	11		
1955	10	10	10	10		
1960	10	10	10	10		
1965	12	12	11	11		
1970	13	12	12	12		
1975	14	14	14	13		
1980	14	13	14	14		
1985	11	11	14	13		
1990	11	10	-11	11		
1995	11	10	11	10		
2000	10	10	11	10		

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950			1973	29.2			1741.0
1951			1974	27.2	••		1576.0
1952	••	••	1975	24.1		••	1576.5
1953	••		1976				
1954		••	1977			••	••
1955			1978	19.3			1523.5
1956	20.4	2078.5	1979	16.7			1488.0
1957	21.2	2128.5	1980	17.7		••	1472.0
1958	18.6	2126.0	1981	•••	••	•••	
1959	25.9	2158.5	1982	17.1	••	••	1559.0
1960	23.4	2285.0	1983		••	••	
1961			1983	14.1	•••	•••	1448.0
1962			1984	10.8	•••	••	1437.5
1963	24.5	2315.0	1985	10.7	••	•••	1397.0
1964					••		1377.0
1965		•••					
1966	29.3	2330.5					
1967	30.1	2239.0					
1968	27.2	2123.5					
1969	27.5	2017.5					
1970	28.0	1962.5					
1971	32.4	1941.5					

<u>Sources</u>: See introductory note.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	•••	•••
1955		
1960	0.3	5.0
1965	0.4	6.3
1970	0.6	6.7
1975		
1980		4.4

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

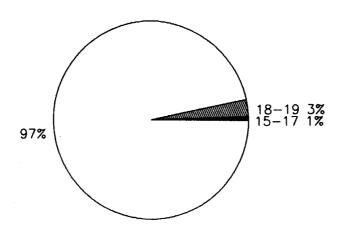


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

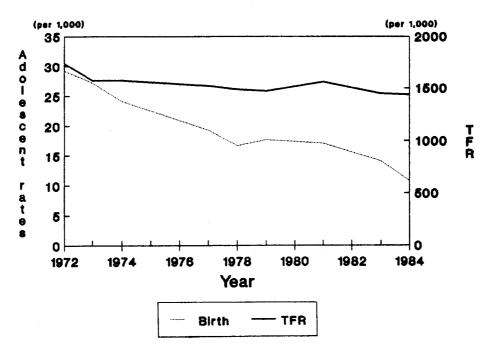


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19	years
Tear	Male	Female	Male	Female
1950	16	16	14	14
1955	15	15	14	15
1960	22	21	14	15
1965	19	17	18	18
1970	18	17	17	17
1975	16	15	14	16
1980	13	13	16	15
1985	14	14	13	13
1990	16	15	14	14
1995	17	16	16	15
2000	16	15	17	16

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950			1973	12.6	••		2007.0
1951			1974	15.2	• ••		2217.0
1952			1975	14.2			2226.0
1953			1976	18.5			2274.0
1954			1977	15.5	••		2205.0
1955		••	1978	15.7			2179.5
1956			1979	14.4	••		2118.0
1957	31.6	3779.0	1980	15.9			2158.5
1958	27.4	3666.0	1981	13.1			2059.5
1959	25.4	3613.5	1982	15.3			1930.0
1960	22.5	3619.5	1983	16.7	••		2042.5
1961	17.3	3273.5	1983	15.3			1964.5
1962	18.7	3237.0	1984				
1963	17.2	2904.0	1985		••		
1964	16.3	2790.0					
1965	13.4	2469.5					
1966	13.6	2325.5					
1967	14.0	2236.0					
1968	13.6	2119.5					
1969	13.0	2018.5					
1970	13.4	2024.5					
1971	12.8	2060.0					

<u>Sources</u>: See introductory note.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	0.8	7.2
1955	0.4	6.1
1960		• •
1965	0.3	2.7
1970	• •	••
1975		• •
1980	• •	••

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

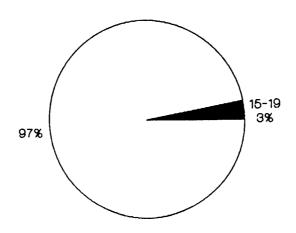


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

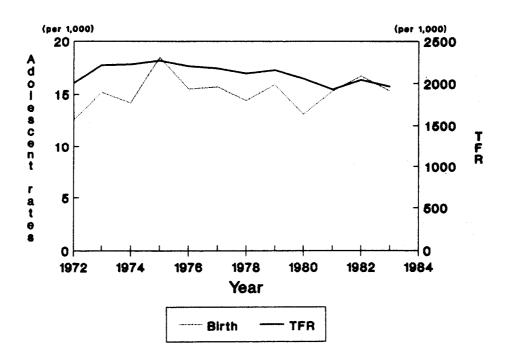


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19 years		
	Male	Female	Male	Female	
1950	421	404	414	397	
1955	470	448	416	401	
1960	607	576	467	446	
1965	568	539	606	577	
1970	591	564	569	542	
1975	636	607	604	580	
1980	626	598	642	613	
1985	541	518	629	603	
1990	458	438	542	520	
1995	457	444	459	441	
2000	433	421	458	447	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion	Pregnancy	TFR
					rate	rate	
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	12.5	3097.5	1973	20.0			2169.0
1951	13.4	3058.5	1974	17.3			1918.5
1952	13.8	3254.0	1975	15.2	• •		1785.5
1953	13.5	3046.0	1976	12.6		••	1669.0
1954	13.0	3042.5	1977	11.3			1635.5
1955	13.7	3045.0	1978	10.1	••	• •	1588.5
1956	13.8	3052.5	1979	9.4		14.1	1592.0
1957	14.5	3077.0	1980	8.9	4.8	13.7	1567.5
1958	14.8	3100.5	1981	9.2	5.7	14.9	1600.0
1959	15.8	3159.0	1982	9.0	5.8	14.8	1558.5
1960	16.3	3106.0	1983	8.2	5.5	13.7	1495.5
1961	17.3	3199.5	1983	7.7	5.4	13.1	1477.0
1962	17.7	3159.5	1984	7.4	4.7	12.1	1493.0
1963	18.9	3178.0	1985	6.8	••	• •	1512.0
1964	19.6	3147.5					
1965	21.0	3028.0					
1966	22.3	2889.5					
1967	22.5	2790.5					
1968	21.7	2694.0					
1969	22.7	2739.5					
1970	22.6	2584.5					
1971	22.3	2381.0					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950		
1955		
1960	0.5	3.7
1965	0.6	4.2
1970	0.6	4.6
1975	0.4	4.5
1980	0.3	2.7

Source: United Nations Population Division.

<u>Sources</u>: See introductory note.

Figure A.I. Proportion of teen-age births to total births (recent data)

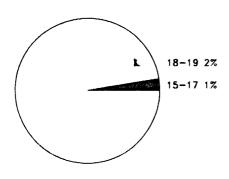


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

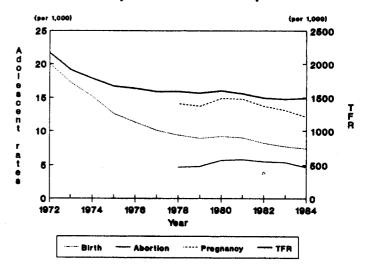
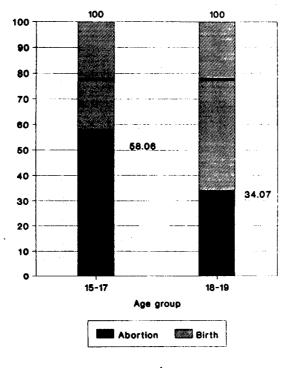


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents



NETHERLANDS

Table A.4. Estimates of sexual experience among teen-age women

Survey		Cohort	Per	centage	who ev	er had i	ntercour	se by/at	age				Sample		
date	type	-	14	15	16	17	18	19	20	21 As	ges	Marital status	Area	Other	N
1979/80 1981		1961-63 1964-65	1.7 0	3.4 3.8	8.5 15.3	31 <u>b</u> / 22.2 34.4	43 <u>c/</u> 36.6 	58 <u>d/</u> 61.6 	71 <u>e</u> / 	17- 16-			iational iational	- -	578 260

<u>Sources:</u> Netherlands Institute for Sociosexological Research, unpublished tabulations; and Jones and others (1986). a/ Question referred to sexual intercourse during the previous six months.

b/ At age 17.5.

c/ At age 18.5.

d/ At age 19.5.

e/ At age 20.5.

Figure A.IV. Estimates of sexual experience by age

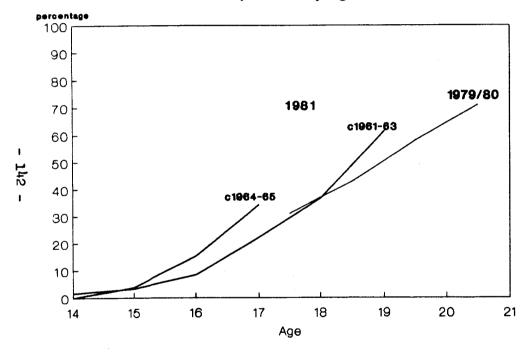


Figure A.V. Type of contraception used, as a percentage of sexually experienced women

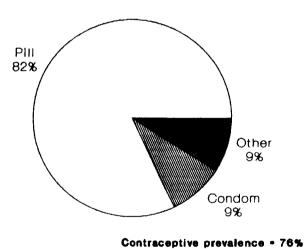


Table A.1. Population estimates (thousands)

Year	10-14	4 years	15-19 years			
Year	Male	Female	Male	Female		
1950	74	72	68	65		
1955	93	89	76	73		
1960	121	116	94	89		
1965	134	127	124	119		
1970	150	145	134	128		
1975	163	156	153	145		
1980	156	149	157	150		
1985	149	142	156	150		
1990	131	125	149	143		
1995	133	126	131	126		
2000	137	130	133	126		

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950			1973			• •	
1951			1974	63.1			2695.5
1952		••	1975	60.6		• •	2570.0
1953			1976	53.7		• •	2330.5
1954			1977	50.8	10.1	60.9	2273.0
1955			1978	47.5	11.9	59.4	2228.5
1956		••	1979	44.0	3.8	47.8	2088.5
1957			1980	41.6	6.6	48.2	2134.5
1958			1981	38.7	10.8	49.5	2046.0
1959			1982	38.1	12.7	51.0	2015.5
1960		••	1983	34.6	13.1	47.7	1945.5
1961		••	1983	32.7	13.3	46.0	1916.5
1962	52.2	4106.5	1984	30.6	••		1934.5
1963	87.2	3988.5	1985	30.6			1927.0
1964	84.7	3732.5					
1965	•••	••					
1966	64.8	3439.0					
1967	67.2	3354.0					
1968	66.6	3332.0					
1969	64.7	3268.5					
1970	64.3	3158.0					
1971	69.1	3193.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	0.7	6.3
1955	0.8	7.1
1960	1.2	8.3
1965	1.7	9.7
1970		
1975		
1980	• •	6.6

<u>Source</u>: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

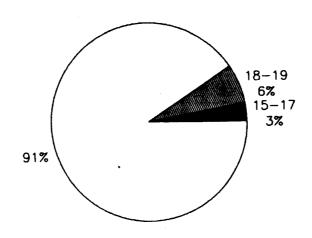


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

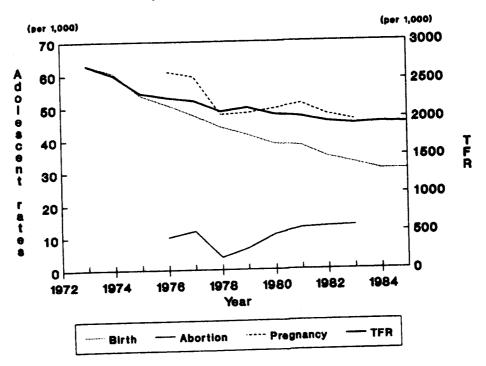


Table A.1. Population estimates (thousands)

Year	10-14	4 years	15-19 years		
	Male	Female	Male	Female	
1950	109	105	104	100	
1955	132	126	107	103	
1960	163	154	134	128	
1965	155	147	163	154	
1970	158	150	155	147	
1975	160	152	158	151	
1980	171	162	161	153	
1985	160	153	172	163	
1990	135	129	161	154	
1995	133	128	136	129	
2000	126	122	134	129	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	17.5	2532.5	1973	47.0			2371.5
1951	18.6	2468.5	1974	44.3	• •		2237.5
1952	20.1	2580.5	1975	42.5			2137.0
1953	21.7	2640.0	1976	40.3			1990.5
1954	23.2	2674.0	1977	35.7	22.7	58.4	1870.5
1955	25.6	2756.0	1978	32.4	25.5	57.9	1760.0
1956	26.9	2829.5	1979	29.0	25.4	54.4	1774.5
1957	27.5	2826.0	1980	27.4	24.4	51.8	1754.5
1958	27.5	2856.0	1981	25.3	22.6	47.9	1725.0
1959	27.9	2878.5	1982	23.8	23.3	47.1	1702.0
1960	26.5	2845.5	1983	22.0	21.1	43.1	1710.0
1961	35.2	2912.5	1983	19.8	20.8	40.6	1657.0
1962	35.8	2886.5	1984	19.2	21.0	40.2	1653.0
1963	37.3	2906.0	1985			• •	• •
1964	39.6	2963.5					
1965	41.0	2932.0	,				
1966	43.0	2893.0					
1967	42.3	2799.5					
1968	43.9	2751.0					
1969	44.8	2699.0					
1970	44.6	2502.5					
1971	45.7	2498.0					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	0.3	3.1
1955	0.5	3.8
1960	0.6	4.8
1965	0.7	5.2
1970	0.8	5.6
1975	0.6	4.8
1980	• •	2.4

Source: United Nations
Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

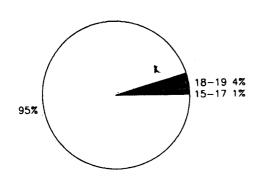


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

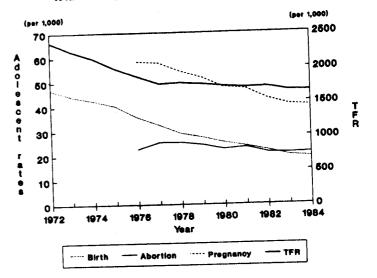
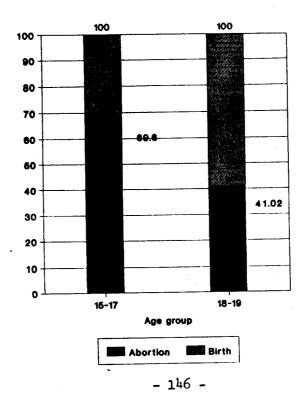


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents



NORWAY

Table A.4. Estimates of sexual experience among teen-age women

Survey		Cohort	Pei	centag	e who ev	ver had	intercou	rse by/at	age				Sample		
date	type	• •	14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N
1973/74	R/C	1928-32	1	1	1	7	18	42	63	77 2	20-44	ALL 3	location	ıs	1,088
		1948-52	0	1	6	16	43	68	79	87					
		1955	1	6	18	47	65	72 <u>a</u> /	• •	••	18				186

Source: Walloe and others (1978), chap. 5. a/ At age 18.5.

Figure A.IV. Estimates of sexual experience by age

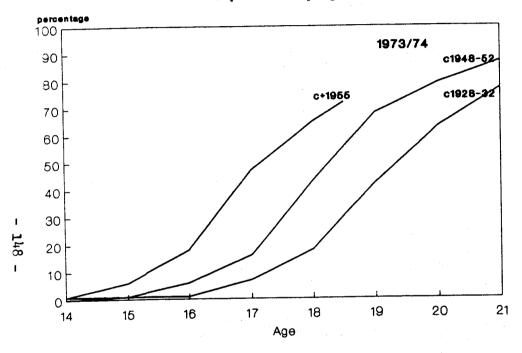


Figure A.V. Type of contraception used, as a percentage of sexually experienced women

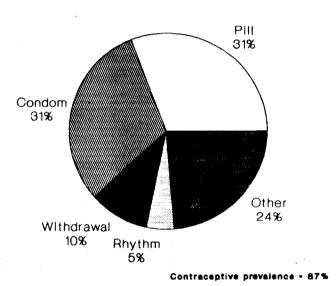


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19 years		
	Male	Female	Male	Female	
1950	1171	1152	1204	1208	
1955	1014	986	1158	1139	
1960	1475	1425	985	964	
1965	1778	1710	1471	1421	
1970	1758	1692	1757	1691	
1975	1419	1356	1747	1676	
1980	1290	1232	1425	1348	
1985	1462	1398	1285	1231	
1990	1651	1578	1458	1396	
1995	1685	1605	1647	1576	
2000	1559	1485	1682	1604	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

W	ASFR	TFR	V	ASFR	rate	Pregnancy rate	
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	39.0	3636.0	1973	27.0	••	• •	2238.0
1951	38.7	3742.0	1974	28.1	••	• •	2250.5
1952	37.6	3664.5	1975	29.7	••		2259.0
1953	36.5	3610.0	1976	31.4			2270.0
1954	39.3	3564.5	1977	33.0	••		2302.5
1955	41.9	3606.0	1978	33.5		• •	2229.5
1956	42.9	3507.5	1979	33.6		••	2204.5
1957	45.2	3462.0	1980	34.0			2274.5
1958	46.7	3356.5	1981	32.9		• •	2275.0
1959	48.1	3212.0	1982	32.1			2234.5
1960	45.8	3005.0	1983	34.2		••	2335.5
1961	42.3	2830.0	1983	34.9		••	2416.0
1962	36.6	2711.5	1984	35.7		• •	2371.5
1963	33.6	2696.5	1985	35.1		••	2329.5
1964	30.5	2572.0					
1965	31.5	2512.0					
1966	31.7	2429.5					
1967	31.2	2336.5					
1968	30.4	2245.5					
1969	30.4	2205.5					
1970	30.0	2232.5					
1971	29.3	2255.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	••	•••
1955 1960	0.9	8.3
1965	0.6	6.4
1970 1975	0.4	4.5
1980	•	4.9

Source: United Nations Population Division.

<u>Sources</u>: See introductory note.

Figure A.I. Proportion of teen-age births to total births (recent data)

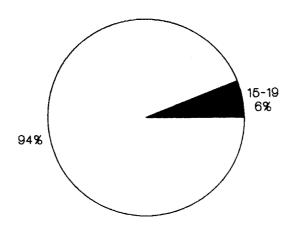


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

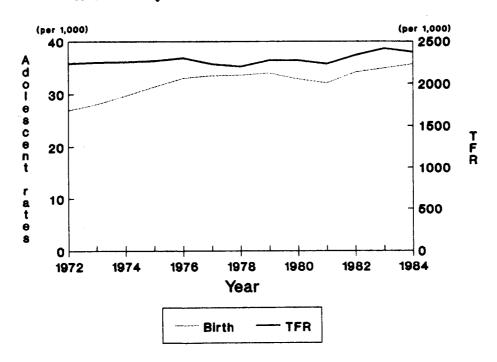


Table A.1. Population estimates (thousands)

Year	10-14	years	15-19 years		
	Male	Female	Male	Female	
1950	404	392	403	405	
1955	388	379	388	382	
1960	420	413	363	378	
1965	440	431	355	372	
1970	407	403	350	376	
1975	463	443	417	408	
1980	445	428	465	450	
1985	425	411	442	425	
1990	422	413	422	409	
1995	425	402	420	411	
2000	428	406	423	401	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	22.4	3148.5	1973	32.8			2902.0
1951	22.8	3168.5	1974	33.2	••	••	2849.5
1952	23.5	3181.5	1975	35.1	••	• •	2716.5
1953	23.1	3006.0	1976	36.9	••		2617.0
1954	22.7	2900.5	1977	47.9	••	• •	2582.0
1955	25.3	3045.0	1978	48.6			2479.5
1956			1979	44.8	••		2279.5
1957	26.4	3008.5	1980	41.4	••		2174.5
1958	27.5	3048.5	1981	40.0	••	••	2058.5
1959	26.1	3012.5	1982	39.7	••	••	2131.0
1960	27.0	3005.0	1983	39.3	••		2075.5
1961	26.3	3125.0	1983	37.4	••		1947.5
1962	27.6	3220.0	1984	36.9	••		1873.0
1963	28.1	3098.5	1985	32.4		••	1702.0
1964	29.1	3162.0					
1965	28.0	3034.0					
1966	29.5	2983.5					
1967	31.4	2890.5					
1968	31.9	2792.0					
1969	31.6	2707.0					
1970	29.4	2881.0					
1971	32.8	3160.0					

Table A.3. Proportion of teen-age

women who are married

Year	Male	Female
1950	0.6	4.1
1955	0.6	4.4
1960	0.7	4.7
1965	1.0	5.0
1970	1.2	5.3
1975	1.4	7.1
1980	1.6	8.9

Source: United Nations Population Division.

<u>Sources</u>: See introductory note.

Figure A.I. Proportion of teen-age births to total births (recent data)

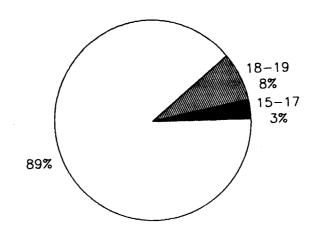


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

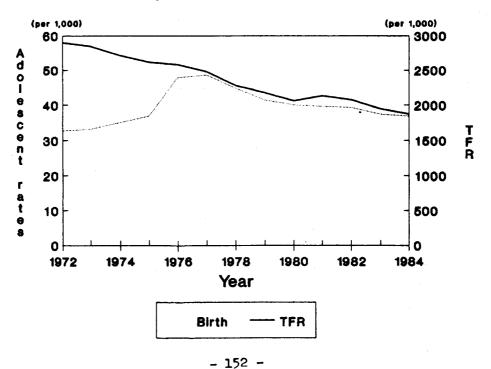


Table A.1. Population estimates (thousands)

Year	10-14	4 years	15-19 years		
	Male	Female	Male	Female	
1950	807	823	826	812	
1955	692	673	799	814	
1960	794	768	683	665	
1965	916	880	785	761	
1970	922	882	926	891	
1975	724	689	911	874	
1980	1024	983	731	698	
1985	973	930	1020	981	
1990	1017	972	970	928	
1995	972	923	1014	970	
2000	986	939	969	922	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	•••		1973	61.6			2547.5
1951			1974	60.9			2439.0
1952	••		1975	69.7	••	••	2724.5
1953		••	1976	69.5			2623.5
1954			1977	70.4		••	2582.5
1955			1978	71.7	••	• •	2600.0
1956		••	1979	73.4	••		2541.0
1957			1980	73.0		••	2498.5
1958		•	1981	72.9			2452.0
1959		••	1982	71.8	••		2372.0
1960			1983	69.8			2170.5
1961			1983	58.2			2006.5
1962	58.6	2039.5	1984	56.7			2194.5
1963	61.8	2008.0	1985			••	
1964	57.0	1962.5					
1965	52.6	1907.0					
1966	50.6	1881.0					
1967	80.1	3659.5					
1968	82.8	3636.0					
1969	73.0	3197.0					
1970	66.0	2888.0					
1971							

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950		
1955	3.0	15.8
1960		
1965	2.5	21.6
1970	2.7	21.1
1975	2.9	16.0
1980	••	
	. 	

<u>Source</u>: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

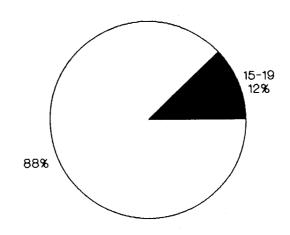


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

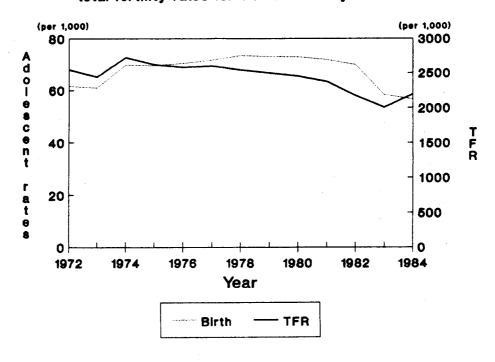


Table A.1. Population estimates (thousands)

V	10-14	4 years	15-19 years		
Year	Male	Female	Male	Female	
1950	1171	1133	1299	1312	
1955	1244	1236	1157	1120	
1960	1328	1295	1188	1221	
1965	1403	1297	1324	1295	
1970	1534	1467	1333	1322	
1975	1647	1575	1492	1456	
1980	1687	1606	1618	1554	
1985	1687	1610	1683	1605	
1990	1724	1617	1683	1609	
1995	1390	1325	1721	1616	
2000	1488	1417	1387	1324	

 $\underline{\text{Source}}$: United Nations Population Division, 1984 Assessment.

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

				• • • • • • •			
	ASFR	TFR		ASFR		Pregnancy	TFR
					rate	rate	
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	• •	••	1973	15.9	••		2858.0
1951	7.9	2469.0	1974	16.9	• •	••	2839.5
1952	8.6	2563.0	1975	20.8	••	••	2881.0
1953	9.2	2525.0	1976	21.6			2789.0
1954	8.9	2453.5	1977	24.9			2788.0
1955	9.0	2524.5	1978	22.9		••	2534.0
1956	10.2	2550.5	1979	26.7		••	2522.0
1957	8.6	2720.5	1980	26.9			
1958	8.6	2755.0	1981	25.3		••	
1959	9.5	2764.5	1982	22.6		••	••
1960	9.6	2808.5	1983	21.2			
1961	9.7	2773.0	1983				
1962	12.7	2815.5	1984				
1963	10.4	2896.0	1985				
1964	11.3	3032.5					
1965	11.2	2960.5					
1966	11.5	2933.0					
1967	11.7	2962.0					
1968	13.1	2890.0					
1969	13.1	2876.5					
1970	14.0	2854.5					
1971	15.4	2878.0					

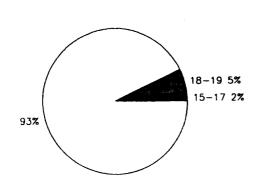
Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	0.2	1.4
1955	0.3	1.7
1960	0.4	2.1
1965	0.5	2.7
1970	0.6	3.4
1975	1.4	4.6
1980	2.2	6.1

Source: United Nations Population Division.

Figure A.II., Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

Figure A.I. Proportion of teen-age births to total births (recent data)



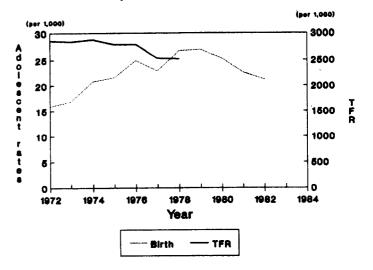


Figure A.V. Type of contraception used, as a percentage of sexually experienced women

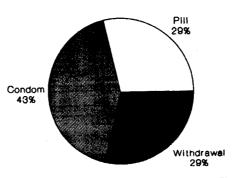


Table A.1. Population estimates (thousands)

	10-14	years	15-19	9 years	
Year	Male	Female	Male	Female	
1950	229	221	210	205	
1955	292	279	227	221	
1960	312	297	303	291	
1965	277	262	320	306	
1970	273	258	283	270	
1975	289	274	275	261	
1980	300	284	291	278	
1985	286	273	306	295	
1990	250	238	290	280	
1995	242	234	253	244	
2000	215	208	245	240	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion	Pregnancy	TFR
					rate	rate	
Year	<20	14-49	Year	<20		15-19	14-49
1950	39.1	2317.5	1973	33.6		55.0	1926.5
1951	38.1	2205.0	1974	31.1	23.2	54.3	1880.0
1952	37.6	2226.0	1975	32.0	28.6	60.6	1887.5
1953	38.4	2251.0	1976	28.8	29.7	58.5	1779.0
1954	36.6	2172.0	1977	25.0	28.5	53.5	1688.0
1955	37.9	2245.0	1978	22.1	26.2	48.3	1648.0
1956	38.8	2281.0	1979	19.2	23.9	43.2	1600.5
1957	38.4	2275.0	1980	17.3	22.7	40.0	1657.0
1958	36.5	2244.0	1981	15.8	22.2	38.0	1677.5
1959	35.8	2228.5	1982	14.5	20.9	35.3	1632.5
1960	33.5	2173.5	1983	13.2	19.6	32.7	1617.5
1961	36.5	2213.0	1983	11.7	17.9	29.5	1609.5
1962		2246.0	1984	10.7	17.6	28.3	1652.0
		2328.0		11.1			
1964	47.3	2474.0					
	49.3						
1966	50.2	2367.0					
1967	48.0	2281.0					
		2067.0					
		1942.5					
		1938.5					
1971		1977.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
4050		
1950	0.3	3.7
1955	0.3	3.2
1960	0.2	2.7
1965	0.3	3.7
1970	0.2	2.3
1975	0.1	1.3
1980	0.1	0.6

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

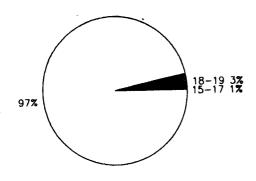


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

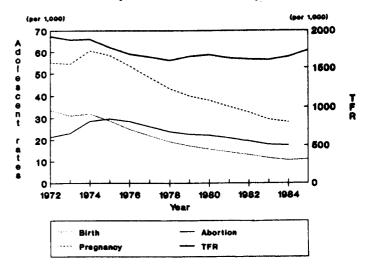
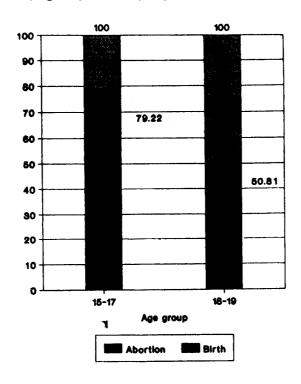


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents



SWEDEN

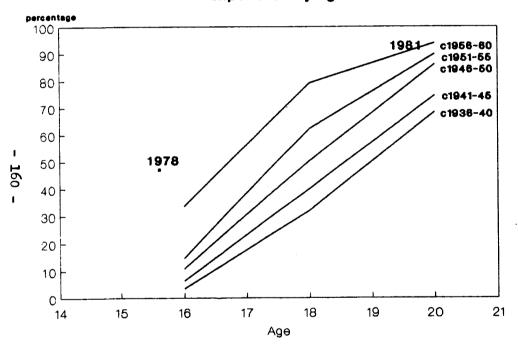
Table A.4. Estimates of sexual experience among teen-age women

Survey Data Cohort		Cohort	Perc	Percentage who ever had intercourse by/at age						Sample					
date	type	<u>-</u> .	14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N
1978	С			47a/		•					15-16	NM	Uppsala	Students	93
1981	R	1936-40			3.6		31.9		68.4		20-44	All	National	-	4,300
.,		1941-45	••		6.4		39.9		74.5						
		1946-50			10.9		50.3		86.1						
		1951-55			14.7		62.3		89.9						
		1956-60			33.5		79.2		93.9						

Sources: Lewin (1982); and Jones and others (1986). a/ Median age for females is 15.6.

Figure A.V. Type of contraception used, as a percentage of sexually experienced women

Figure A.IV. Estimates of sexual experience by age



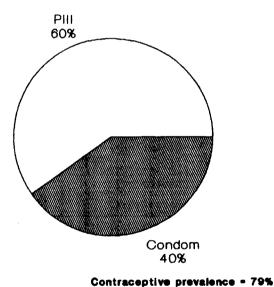


Table A.1. Population estimates (thousands)

Year	10-14	14 years 15-19) years	
	Male	Female	Male	Female	
1950	155	150	163	163	
1955	196	189	163	159	
1960	216	206	214	206	
1965	225	218	245	241	
1970	236	227	231	219	
1975	259	250	243	236	
1980	248	237	258	247	
1985	209	198	247	236	
1990	182	173	208	198	
1995	186	175	181	17.	
2000	176	166	185	17	

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	12.8	2398.0	1973	21.0	••	••	1922.5
1951	13.1	2344.5	1974	20.1	••		1823.0
1952	13.6	2349.0	1975	17.6	••		1731.0
1953	13.3	2296.0	1976	15.1			1597.5
1954	13.7	2292.0	1977	12.5			1531.0
1955	14.2	2328.0	1978	10.4			1521.0
1956	14.3	2384.5	1979	9.9	••		1492.5
1957	15.9	2438.0	1980	9.6	••		1504.5
1958	15.4	2342.5	1981	9.8			1540.5
1959	15.9	2372.0	1982	9.7		••	1546.0
1960	16.1	2336.0	1983	9.4			1536.5
1961	18.0	2484.0	1983	8.0			1517.0
1962	17.8	2463.5	1984	7.8	••		1528.5
1963	20.6	2680.0	1985	6.7		• •	1514.0
1964	20.8	2852.0					
1965	22.0	2567.5					
1966	22.0	2471.5					
1967	22.4	2373.5					
1968	21.9	2287.0					
1969	21.9	2122.5					
1970	22.8	2086.5					
1971	21.9	2032.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female		
1950	0.1	1.2		
1955	0.1	1.5		
1960	0.1	1.9		
1965	0.2	2.8		
1970	0.3	3.7		
1975	0.2	1.6		
1980	••	1.6		

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

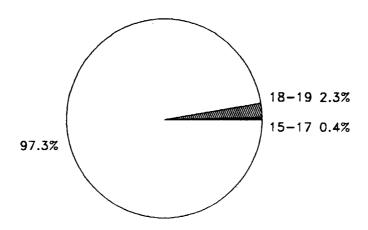


Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

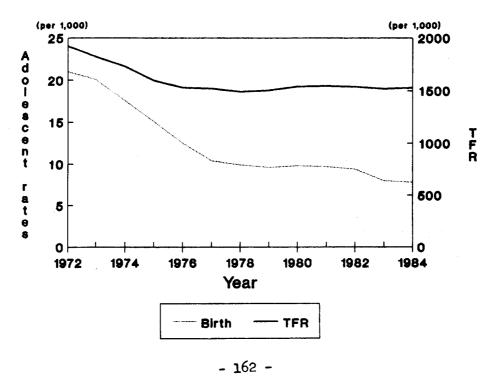


Table A.1. Population estimates (thousands)

	10-14	years	15-19	years	
Year	Male	Female	Male	Female	
1950	11057	10980	8718	8812	
1955	6667	6499	10893	10931	
1960	9396	9115	6646	6489	
1965	11560	11147	9381	9097	
1970	12722	12238	11405	10962	
1975	12496	11936	12745	12111	
1980	10323	9972	12434	11906	
1985	10863	10332	10271	9959	
1990	11650	11277	10815	10321	
1995	12506	12396	11605	11268	
2000	12777	12606	12463	12389	

Source: United Nations Population Division,

1984 Assessment.

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

				4050	*h	D	TC0
	ASFR	TFR		ASFR		Pregnancy	TFR
					rate	rate	
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950-51	••	• •	1972-73	32.4	••	••	2433.0
1951-52		••	1973-74	33.3	••	••	2412.0
1952-53	••		1974-75	34.3	••	• •	2407.0
1953-54	• •		1975-76	35.0	• • •	••	2389.0
1954-55	15.6	2900.0	1976-77	35.7	••	••	2367.0
1955-56			1977-78	36.7	••	••	2320.0
1956-57			1978-79	39.4	••	• •	2285.0
1957-58	23.9	2822.0	1979-80	40.9	••		2259.0
1958-59	29.2	2810.0	1980-81	41.0	••	• •	2252.5
1959-60	34.4	2838.0	1981-82	40.6	••		2290.0
1960-61	35.2	2799.0	1982-83	41.6		••	2367.0
1961-62	29.6	2682.0	1983-84	42.5	••		2411.5
1962-63	24.1	2596.0	1984-85	43.5	••		2406.5
1963-64	22.7	2529.0					
1964-65	23.7	2456.0					
1965-66	25.5	2461.0					
1966-67	26.9	2431.0					
1967-68	27.7	2394.0					
1968-69	28.9	2369.0					
1969-70	30.4	2389.0					
1970-71	32.0	2412.0					
1971-72	32.4	2469.0					

Sources: A.G. Vishnevsky and A.G. Volkov, eds., Vosproizvodstvo Naselenya, SSSR (Reproduction of the population of the USSR), (Moscow, Finansi i Statistiki, 1983); USSR, Central Statistical Board, Vestnik Statistiki, 1983 and 1986, No. 11, pp. 54 and 74, respectively.

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950		•••
1955		
1960	• •	• •
1965		
1970		
1975		
1980		9.5

Source: United Nations Population Division.

Figure A.II. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

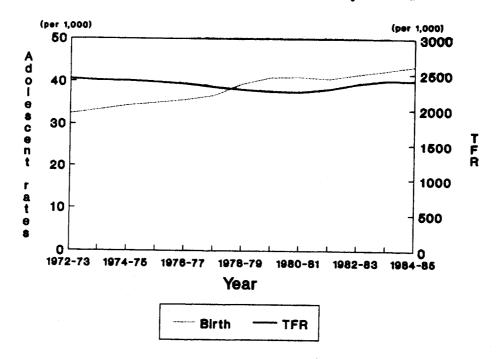


Table A.1. Population estimates (thousands)

	10 - 1	14 years	15 - 19 years		
Year	Male	Female	Male	Female	
1950	1,702	1,646	1,675	1,641	
1955	1,823	1,747	1,669	1,643	
1960	2,180	2,083	1,824	1,761	
1965	1,940	1,855	2,191	2,096	
1970	2,182	2,066	1,991	1,891	
1975	2,373	2,252	2,128	2,017	
1980	2,275	2,160	2,332	2,232	
1985	1,992	1,882	2,282	2,144	
1990	1,709	1,618	2,000	1,867	
1995	1,893	1,798	1,718	1,604	
2000	1,838	1,746	1,902	1,784	

Table A.2.a. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

•	ASFR	TFR		ASFR	Abortion		TFR
Year	<20	14-49	Year	<20	15-19	rate 15-19	14-49
1950	22.2	2188.5	1972	48.1	15.0	63.1	2198.0
1951	21.3	2150.5	1973	43.9		60.1	
1952	21.3	2161.0	1974	40.5	16.4	56.9	1894.5
1953	22.0	2216.5	1975	36.5		52.7	1791.0
1954	22.7	2206.5	1976	32.4	15.6	48.0	1719.5
1955	23.6	2221.0	1977	29.8	15.7	45.5	1677.0
1956	27.3	2358.0	1978	29.9	16.1	46.0	1749.5
1957	29.7	2453.5	1979	30.8			1860.0
1958	31.1	2515.5	1980	30.9			1898.0
1959	31.6	2538.0	1981	28.4	17.6	46.0	1810.5
1960	34.1	2668.0	1982	27.5	17.5	45.0	1757.0
1961	37.9	2769.5	1983	26.9	17.6	44.5	1756.5
1962	39.0	2826.5	1984	27.6		46.6	1757.0
1961	40.0	2847.0	1985	29.5			1785.5
1964	42.3	2890.5					
1965	44.8	2812.5					
1966	47.5	2743.5					
1967	48.6	2632.5					
1968	48.8	2548.0					
1969	49.4	2451.5					
1970	49.7	2383.5					
	50.4						

Sources: See introductory note.

Table A.3.a. Proportion of teen-age women who are married

Male	Female			
0.5	4.4			
0.6	5.0			
1.0	6.7			
1.7	7.9			
2.8	10.8			
2.0	7.7			
1.1	4.5			
	0.5 0.6 1.0 1.7 2.8 2.0			

Source: United Nations Population Division.

Table A.2.a. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR	Abortion rate	Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19		14-49
1950	20.6	2553.0	1972	46.9		••	2272.0
1951	19.6	2395.5	1973	44.6		• •	2136.5
1952	19.6	2425.0	1974	42.9			1973.0
1953	20.3	2434.0	1975	40.0			1903.5
1954	21.4	2491.5	1976	35.7	11.5	59.5	1787.0
1955	22.5	2527.5	1977	32.6	12.5	45.1	1710.5
1956	25.9	2630.0	1978	32.7	11.1	43.8	1754.0
1957	27.5	2729.0	1979	32.6	10.9	43.5	1850.0
1958	28.9	2783.0	1980	32.6	12.1	44.7	1839.
1959	30.2	2783.0	1981	30.9	13.0	43.9	1855.0
1960	32.0	2871.5	1982	30.3	12.5	42.8	1728.0
1961	33.9	2908.5	1983		••	• •	
1962	35.3	3058.0	1984	28.8		• •	1685.0
1961	36.0	3015.0	1985				
1964	38.8	3072.5					
1965	41.0	2982.0					
1966	44.3	2878.5					
1967	47.3	2848.0					
1968	46.7	2781.0					
1969	46.6	2625.5					
1970	47.3	2509.5					
1971	47.7						

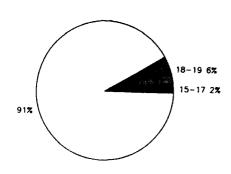
Sources: See introductory note.

Table A.3.a. Proportion of teen-age women who are married

Year	Male	Female
1950	0.4	3.5
1955	0.8	4.7
1960	1.2	5.8
1965	1.9	6.8
1970	3.2	9.9
1975	1.9	6.5
1980	1.6	5.0

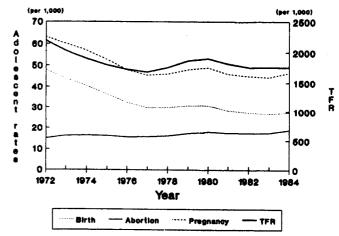
Source: United Nations Population Division

Figure A.I.a. Proportion of teen-age births to total births (recent data)



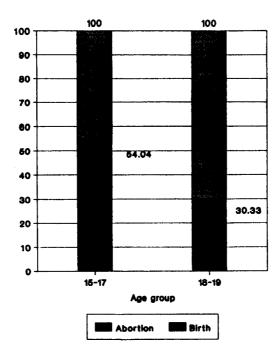
England and Wales

Figure A.II.a. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old



England and Wales

Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents



United Kingdom of Great Britain and Northern Ireland

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

Table A.4. Estimates of sexual experience among teen-age women

Survey		a Cohort	Per	centage	who ev	er had	intercour	se by/at	age				Sample		
date type -	14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N		
1974	R		••		13.2	28.8	48.7	62.8	•••	•••	16-19		England and Wales	-	1362
1976	C			• •	21.5a/	35.8b/	54.2c/	57 <u>d</u> /	66.7e/		16-19	NM	G.Britain	-	903
1982	R	1926-30		0	1	4	5	11	18		16-54	All	Scotland	•	3400
		1931-35		0	1	4	8	15	27						
		1936-40	1	1	1	2	9	17	28						
		1941-45		0	1	4	11	22	46						
		1946-50			2	8	17	31	46						
		1951-55	1	1	4	11	26	41	56						
		1956-60	0	1	6	15	30	44	56						
		1961-65		1	4	17	32	48	62						

Sources: Farrell (1978); Dunnell (1979); and Bone (1986).

a/ At age 16.5.

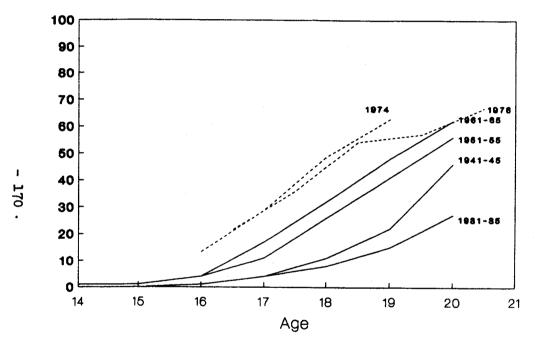
b/ At age 17.5.

<u>c</u>/ At age 18.5.

d/ At age 19.5.

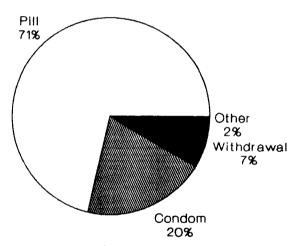
e/ At age 20.5.

Figure A.IV. Estimates of sexual experience by age



United Kingdom of Great Britain and Northern Ireland

Figure A.V. Type of contraception used, as a percentage of sexually experienced women



Contraceptive prevalence = 91%

United Kingdom of Great Britain and Morthern Ireland

Table A.1. Population estimates (thousands)

V	10-1	4 years	15-19	9 years
Year	Male	Female	Male	Female
1950	5707	5506	5381	5294
1955	6944	6694	5558	5482
1960	8602	8322	6809	6646
1965	9696	9360	8633	8380
1970	10622	10230	9816	9517
1975	10534	10112	10817	10468
1980	9309	8921	10767	10365
1985	8578	8204	9381	9034
1990	8585	8224	8657	8320
1995	9723	9305	8666	8342
2000	9995	9566	9803	9424

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

	ASFR	TFR		ASFR		Pregnancy rate	TFR
Year	<20	14-49	Year	<20		15-19	14-49
1950	80.2	3024.0	1972	63.6		••	2021.0
1951	85.6	3203.0	1973	61.0	23.9		1895.5
1952	84.4	3295.5	1974	59.3	28.2	••	1856.5
1953	86.6	3363.0	1975	57.5	32.5	89.4	1799.5
1954	89.1	3481.0	1976	54.6	35.8	89.7	1767.5
1955	89.1	3520.5	1977	54.8	39.0	92.9	1826.5
1956	93.7	3631.0	1978	53.5	41.1	93.6	1802.0
1957	95.8	3710.0	1979	54.5	43.9	97.3	1854.0
1958	91.3	3646.0	1980	54.0	44.3	98.5	1839.0
1959	90.6	3662.0	1981	53.6	44.5	97.8	1815.0
1960	89.6	3642.5	1982	53.9	44.4	98.0	1831.5
1961	89.1	3630.0	1983	53.1	••	• •	1802.5
1962	82.2	3474.5	1984	52.0		• •	1809.5
1963	77.4	3334.0					
1964	73.9	3202.0					
1965	71.3	2928.0					
1966	71.5	2735.5					
1967	68.9	2573.5					
1968	67.2	2480.0					
1969	67.3	2468.0					
1970	69.2	2463.5					
1971	66.1	2273.5					

Table A.3. Proportion of teen-age women who are married

Year	Male	Female
1950	3.3	17.1
1955	3.6	16.6
1960	3.9	16.1
1965	4.0	14.0
1970	4.1	11.9
1975	3.5	10.3
1980	2.8	8.8

Source: United Nations Population Division.

Figure A.I. Proportion of teen-age births to total births (recent data)

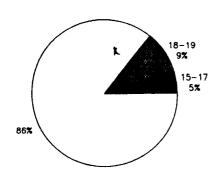


Figure A.I. Trends in fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old

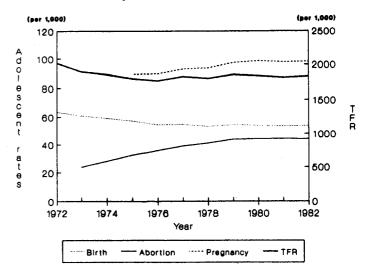
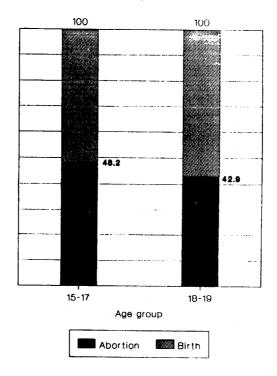


Figure A.III. Abortion rates as a percentage of pregnancy rates for younger and older adolescents



Survey date	Data type	Cohort	Percentage who ever had intercourse by/at age							Sample					
			14	15	16	17	18	19	20	21	Ages	Marita status	l Area	Other	N
1971	С		•••	13.8 <u>a</u> /	21.2 <u>b</u> /	26.6c <u>/</u>	36.8d/	46.8 <u>e</u> /	•••		15-19	NM	National	Living in household	3972
1976	C		••	18.0 <u>a</u> /	25.4 <u>b</u> /	40.9 <u>c</u> /	45.2 <u>d</u> /	55.2 <u>e</u> /	••	••	15-19	NM	National	Living in household	1886
1979	C		••	22.5 <u>a</u> /	37.8 <u>b</u> /	48.5c/	56.9 <u>d</u> /	69.0 <u>e</u> /	••	••	15-19	NM	Metro. areas	Living in household	1571
1982 <u>f</u> /	R/C g	!	••	11.7	22.6	37.0	52.8	66.3	69.3	••	15-19	ALL	National		1888

Sources: Zelnik and Kantner (1977); Zelnik and Kantner (1980); and Pratt and Hendershot (1984).

173

<u>a</u>/ At age 15.5.

b/ At age 16.5.

c/ At age 17.5.

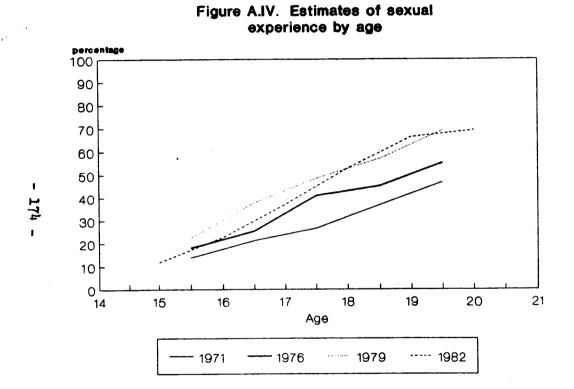
d/ At age 18.5.

e/ At age 19.5.

f/ Cumulative proportion having had intercourse is calculated as the average of proportions given by single year of age at interview for persons having reached the given age.

g/ Question referred to pre-marital intercourse.

Figure A.V. Type of contraception used, as a percentage of sexually experienced women



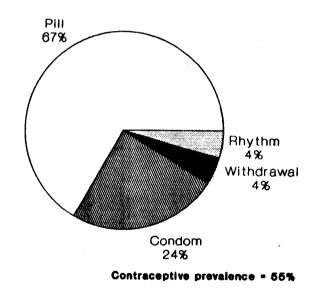


Table A.1. Population estimates (thousands)

Year	10-14	4 years	15-19 years				
rear	Male	Female	Male	Female			
1950	904	872	903	881			
1955	764	732	860	834			
1960	875	836	728	698			
1965	1014	970	871	838			
1970	975	931	1015	969			
1975	949	904	973	930			
1980	923	882	944.	901			
1985	926	876	920	881			
1990	980	926	924	874			
1995	926	867	978	925			
2000	893	838	924	867			

Table A.2. Fertility, abortion and pregnancy rates for adolescent women and total fertility rates for women 14-49 years old (per 1,000 women)

Table A.3. Proportion of teen-age women who are married

	ASFR	TFR		ASFR		Pregnancy rate	TFR
Year	<20	14-49	Year	<20	15-19	15-19	14-49
1950	39.6	3809.5	1972	56.5			2366.5
1951	35.5	3328.5	1973	55.1			2315.0
1952	38.8	3622.5	1974	55.0	• •	••	2296.0
1953	39.3	3421.5	1975	55.0	••	••	2279.0
1954	40.8	3465.0	1976	53.7	••	••	2265.5
1955	41.6	3179.0	1977	50.9	••	••	2196.0
1956	41.7	3052.0	1978	50.2		••	2159.0
1957	42.4	2780.0	1979	48.8	••	••	2128.0
1958	43.8	2793.5	1980	48.2	••	••	2140.0
1959	48.3	2730.0	1981	43.6		••	2083.5
1960	34.0	2667.0	1982		••	••	••
1961	52.1	2784.5	1983	••	••	••	••
1962	49.7	2708.0	1984		• •	••	
1963	46.5	2669.5	1985			••	
1964	44.6	2624.0					
1965	48.5	2695.0					*
1966	54.6	2640.0					
1967	54.8	2556.5					
1968	55.5	2476.5					
1969	55.7	2455.5					
1970	51.8	2290.5					
1971	54.5	2384.0					

 Year
 Male
 Female

 1950
 7.9
 13.6

 1955
 5.1
 11.2

 1960
 4.8
 15.7

 1965
 ...
 ...

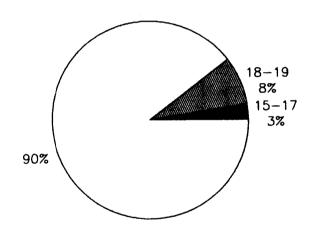
 1970
 3.1
 16.1

 1975
 ...
 ...

 1980
 ...
 11.2

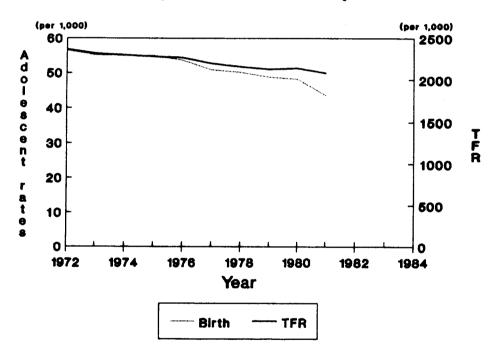
Source: United Nations
Population Division.

Figure A.I. Proportion of teen-age pirtns to total births (recent data)



176

ire A.ll. Trends in fertility, abortion and egnancy rates for adolescent women and tal fertility rates for women 14-49 years old



YUGOSLAVIA

Table 4 4	Fetimates	of sexual	evnerience	SMOD4	teen-age wor	non
I GULT A. 4	csimales	ui sexuat	experience	annonu	teen-age wor	

Survey date	type	Cohont	Percentage who ever had intercourse by/at age						Sample						
			14	15	16	17	18	19	20	21	Ages	Marital status	Area	Other	N
1972-1973	С		••	••	11.4 <u>a</u> /	1,7.9 <u>b</u> /	31.0 <u>c</u> /	38.0 <u>d</u> /	••	••	16-19	NM	Croatia	Students	1,086

Source: Beluhan and others (1972-1973).

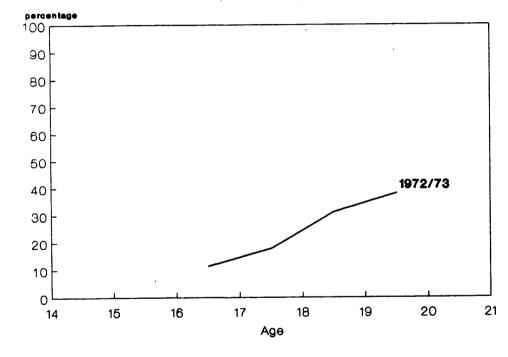
a/ At age 16.5.

<u>b</u>/ At age 17.5.

<u>c/</u> At age 18.5.

<u>d</u>/ At age 19.5.

Figure A.IV. Estimates of sexual experience by age



كيفية الحصول على منشورات الأمم المتحدة

يمكن الحصول على منشبورات الأمم المتحدة من المكتبات ودور التوزيع في جميع أنحباء العالم . استعلم عنها من المكتبة التي تتعاميل معها أو اكتب إلى : الأمم المتحدة ، قسم البيع في نيوبيورك أو في جنيبف .

如何购取联合国出版物

联合国出版物在全世界各地的书店和经售处均有发售。请向书店询问或写信到纽约或日内瓦的 联合国籍集组

HOW TO OBTAIN UNITED NATIONS PUBLICATIONS

United Nations publications may be obtained from bookstores and distributors throughout the world. Consult your bookstore or write to: United Nations, Sales Section, New York or Geneva.

COMMENT SE PROCURER LES PUBLICATIONS DES NATIONS UNIES

Les publications des Nations Unies sont en vente dans les librairies et les agences dépositaires du monde entier. Informez-vous auprès de votre libraire ou adressez-vous à : Nations Unies, Section des ventes, New York ou Genève.

КАК ПОЛУЧИТЬ ИЗДАНИЯ ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ

Издания Организации Объединенных Наций можно купить в книжных магазинах и агентствах во всех районах мира. Наводите справки об изданиях в вашем книжном магазине или пишите по адресу: Организация Объединенных Наций, Секция по продаже изданий, Нью-Йорк или Женева.

COMO CONSEGUIR PUBLICACIONES DE LAS NACIONES UNIDAS

Las publicaciones de las Naciones Unidas están en venta en librerías y casas distribuidoras en todas partes del mundo. Consulte a su librero o diríjase a: Naciones Unidas, Sección de Ventas, Nueva York o Ginebra.

