## **Adolescent Pregnancy**

**Issues in Adolescent Health** and Development



Department of Child and Adolescent Health and Development World Health Organization, Geneva

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### **Preface**

There is widespread acknowledgement that although adolescents share many characteristics with adults, their health-related problems and needs are different in a number of significant respects. Following on from this, there is a growing recognition among clinicians and public-health workers alike that the approaches used to prevent and respond to health problems in adults need to be tailored (to a greater or lesser extent) if they are to meet the special needs of adolescents.

The Department of Child and Adolescent Health and Development (CAH) in collaboration with other WHO departments has initiated a series of literature reviews and discussion papers, in order to identify existing recommendations on clinical management, and to assess how appropriate these are for adolescents across a wide range of health issues. This process has also led to the formulation of new recommendations on clinical management where none existed, or where existing ones are inappropriate.

This same process is also contributing to the improvement of existing WHO guidelines and algorithms and to the development of new ones to enable health-care providers to meet better the special needs of adolescents more effectively and with sensitivity. Even though WHO advocacy statements often draw attention to the particular vulnerabilities of adolescents, its guidelines on clinical management still tend to be directed towards meeting the needs of adults.

The purpose of this current review is to look specifically at data that address various aspects of **pregnancy** in adolescents. It is acknowledged that available data are often not disaggregated to show the special vulnerabilities and issues for adolescents.

In addition to the present work, reviews and discussion papers have also been carried out – and corresponding documents produced – in the areas of:

- Contraception
- · Lung health
- Malaria
- Nutrition
- · Sexually transmitted infections
- · Unsafe abortion

Work is also under way to develop similar documents on HIV/AIDS care; chronic illness; mental health; and substance abuse.

# PART 1 Introduction

#### 1.1 Preamble

In recent decades adolescent pregnancy has become an important health issue in a great number of countries, both developed and developing. However, pregnancy in adolescence (i.e. in a girl < 20 years of age) is by no means a new phenomenon. In large regions of the world (e.g. South Asia, the Middle East and North Africa), age at marriage has traditionally been low in kinship-based societies and economies. In such cases most girls married soon after menarche, fertility was high, and consequently many children were born from adolescent mothers. This was not considered to be a problem. In contrast, in Europe during the 18th and 19th centuries, age at marriage was relatively high, and social control strongly discouraged premarital sex; if conception occurred this was usually followed by an early marriage. Such social control by parents and family declined as economies developed and as the education and training of young people was extended and undermined parental authority. In many Western societies over the last century, the incidence of sexual intercourse among adolescents and the number of pregnancies sharply increased, especially after the Second World War. In the 1960s and 1970s both society at large and health authorities increasingly viewed the growing numbers of adolescent pregnancies as a problem. Comparable developments took place in many developing countries (e.g. in sub-Saharan Africa and Latin America) and in many of these countries there has been a gradual shift away from extended family structures and towards nuclear families. With this change in family structure and way of living, the role of members in the hitherto extended family in educating and acting as role models for young people in sexual behaviours has disappeared (Ojwang & Maggwa, 1991).

Two key events during adolescence have strongly influenced these developments. The first is the changing age at menarche, with median age varying substantially among populations (ranging from about 12.5 years in contemporary Western countries to more than 15 years in poor developing countries; Becker, 1993). Historical data from the USA and several European countries show a clear secular trend, with age at menarche declining at a rate of 2–3 months per decade since the 19th century, resulting in overall declines of about three years (Wyshak & Frisch, 1982; Bongaarts & Cohen, 1998). In developing countries, age at menarche is often inversely correlated with socioeconomic status, and significant differences exist between urban and rural populations, and between high- and low-income groups (Marshall & Tanner, 1986). The timing of menarche in populations is probably affected by a variety of environmental, genetic, and socioeconomic factors, but most analysts consider nutritional status to be the dominant determinant (Bongaarts, 1980; Gray, 1983; Bongaarts & Cohen, 1998).

The second key event influencing adolescence is schooling. Education leads to social and economic benefits for individuals, and in Western countries in the last century, the prevalence of secondary schooling during adolescence has markedly increased, and in developing countries in the past four decades school attendance has also risen substantially. One implication of these trends is that a larger proportion of the period of adolescence for boys and girls is spent in school (Bongaarts & Cohen, 1998). Such increased schooling has made adolescents less dependent on parents and family, and has postponed the age at marriage, and thereby the age of socially sanctioned sexual relations (see also section 3.8).

Both these events (declining age at menarche and increased schooling) have prolonged the period of adolescence. Together with a growing independence from parents and families, this has led in recent decades to more premarital sexual relations and increasing numbers of adolescent pregnancies.

#### 1.2 Aims, content and methodology of this review

This document aims to examine the incidence of adolescent pregnancies and their social background, to identify the possible health problems specific to pregnant adolescents and to discuss their clinical management. In addition, the prevention of unwanted pregnancies in adolescents, the use of contraception and induced abortion are also discussed. To achieve these goals a search of the literature has been made from both developed and developing countries. This literature has been critically reviewed, with special attention given to the differences between adults and adolescents, the complications and outcomes of their pregnancies and to the care received during pregnancy, labour and the postpartum period. Attention has also been given to the literature on the social background of adolescent pregnancies, on unsafe abortion and on the prevention of pregnancies in adolescents. In selecting the relevant literature, preference has been given to population and community-based data and to methodologically sound research. Most studies that meet these conditions are carried out in large centres in the USA, Western Europe and other developed countries, but excellent research data are also available from developing countries such as India, and from some countries in Africa and Latin America. Nevertheless, confining this review to methodologically reliable research alone would still cause a regional imbalance in the available evidence; an effort has therefore been made to include other data from other countries, including hospital-based data. Although such studies (usually confined to patients in a specific hospital) can provide interesting information, they may also be biased because in many developing countries many pregnant women deliver at home and only go to a hospital in case of emergency. Even in developed countries where almost all pregnant women deliver in hospital, there are still referral biases causing differences between hospital populations. Thus hospital-based studies may not be fully representative for the population as a whole.

The contents of the current document can usefully be divided as follows:

- PARTS 1–3 are devoted to background information on adolescent pregnancies. PART 2 deals with incidence in various countries and regions. It is impossible to gain insights into the problems of adolescent pregnancies without knowledge of their incidence. The latest available figures from United Nations organizations are given, supplemented and illustrated by information from regional research and data from local hospitals and clinics. In a number of developed countries exact data from population registries are available, but in many other countries, quantitative population data are less accurate and the incidences given in these countries should be considered as best estimates. In PART 3 various aspects of the social background of pregnant adolescents are described including: social deprivation in developed and developing countries; sexual and family relations; unsafe abortion; physical abuse; risk behaviour; urbanization; and education. The quantitative and qualitative data in this chapter are derived primarily from sound population-based studies, and these are indicated with an asterisk (\*). In some cases, information originating from reviews or from more localized or casual observations is also given.
- PARTS 4-7 identify the health problems encountered by adolescents during pregnancy, labour

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