Public Health

Teenage pregnancy: trends, contributing factors and the physician's role

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Teenage pregnancy is an important public health issue: it is common, largely preventable and associated with negative sequelae, both for the teenagers who become pregnant and for their children. Compared with babies of older mothers, those born to teenagers are more likely to have lower birth weights, increased infant mortality, an increased risk of hospital admission in early childhood,[1] less supportive home environments, poorer cognitive development and, if female, a higher risk of becoming pregnant themselves as teenagers.[2] Teenaged mothers more often than other teenagers are socially isolated, have mental health problems,[1] and have fewer educational and employment opportunities.[3] The evidence used to support these associations, however, has often failed to consider that teenaged mothers may have characteristics (e.g., coming from low-income households) that lead to disadvantaged life trajectories regardless of whether they are pregnant.[2]

Rates of teenage pregnancy vary by country, but because of reporting differences, international comparisons can be difficult. In 2002, the latest year for which international data are available for comparison, Canada had a pregnancy rate of 33.9 per 1000 females aged 15–19,[4] much lower than the rate that year in England and Wales[5] and the United States[6] (Table 1). From 1994 to 2002, the rate of teenage pregnancy declined substantially in both Canada and the United States,[4,6] but it increased slightly in England and Wales[5] (Table 1). In 2002 the rate of therapeutic abortion in Canada was 18.4 per 1000 females aged 15–19,[4] again lower than the rates in England and Wales[5] and the United States,[6] but not substantially so (Table 1). One can conclude, therefore, that Canadian teenagers become pregnant less often than those in England and Wales and the United States but more often choose to terminate the pregnancy.

Reasons for the decline in teenage pregnancy in the United States were examined in a study using data from the National Survey of Family Growth in the years 1995 and 2002. The proportion of females aged 15–19 who reported using an oral contraceptive at last intercourse, alone or in combination with other methods, increased dramatically during this period, from 32% to 49%. The proportion who reported using an injectable long-acting hormonal contraceptive (e.g., Depo-Provera) also increased, from 8% to 10%. Reports of using no contraception at last intercourse decreased, from 34% to 18% of respondents. The authors concluded that improved contraceptive use was the main factor behind decreased rates of teenage pregnancy in the United States; it explained all variability in pregnancy risk among respondents aged 18–19, although decreased sexual activity played a minor role among those aged 15–17.[7] Similar studies have not been conducted in Canada; however, data from a national survey in 2002 suggest that contraceptive use also plays an important role here. In that survey, 39% of Canadian females in grade 9 and 54% in grade 11 reported using oral contraception at last intercourse; 8% and 6% respectively reported using no contraception, and 7% and 11% reported using the withdrawal method, either alone or in combination with other methods.[8]

Table 1: Rates of pregnancy and abortion per 1000 females aged 15-19 years in Canada, England and Wales, and the United States

	Pregnancy rate per 1000		Abortion rate per 1000
Country	1994	2002	2002
Canada	49.2	33.9	18.4
England and Wales	58.7	60.3	24.1
United States	106.1	76.4	21.7

Box 1: Key messages for physicians who provide clinical services to teenagers

- Many teenagers are sexually active, sometimes at quite early ages
- Teenagers may not spontaneously raise questions about their sexual health concerns. Be proactive: ask all teenaged patients about sexual activity, use of contraception and need for information about other sexual health issues
- Prepared "scripts" can be helpful when talking to teenagers about sexual health
- Contraception should be provided when indicated
- Abortion counselling and referral should be provided when needed
- Many adolescents have the emotional and cognitive maturity to receive confidential sexual health services, but many are not aware that they are entitled to patient confidentiality
- If pregnant teenagers choose to continue to term, exemplary care should be provided before, during and after delivery

Teenagers' choices to become sexually active and to use contraception, as well as their ability to obtain and use contraception if this choice is made, are influenced by many factors. These factors operate at the individual level (e.g., knowledge, attitudes and beliefs, future expectations, substance use), the intrafamilial level (e.g., family structure, parent–

DOI:10.1503/cmaj.070352

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child communication, socioeconomic status), the extrafamilial level (e.g., peer influences, sexual health education at school, health services) and the community level (e.g., norms and values concerning teenage pregnancy). Some of these factors are readily modifiable, such as individual knowledge about sexual health, but others are not easily changed or cannot be changed at all.

Although physician groups can lobby for policy initiatives aimed at changing sexual risk behaviours among teenagers, including enhanced sexual education at schools, the most important role for physicians is to provide appropriate sexual health information and services in their practices if they are providing clinical services to youths (Box 1). Physicians must recognize the reality of teenage sexual activity. Studies have shown that, by the end of high school, the majority of teenagers have had sexual intercourse[9,10] and that about 10% have had intercourse before age 15.[9,11] As part of the general enquiry into their well-being, physicians should ask all teenagers about their sexual activity, use of condoms and contraception, history of sexually transmitted infections and pregnancy, and the need for information about other sexual health concerns. Discussions about sexual health issues may not always be initiated by the adolescent, for whom the process of seeking sexual health advice is a complicated one, and therefore physicians must be proactive in making such an enquiry. Scripts for these discussions may be helpful; a useful approach is outlined in the 2006 Canadian Guidelines on Sexually Transmitted Infections.[12]

When contraception, including emergency contraception, is indicated for teenagers, it should be provided. Like other women, adolescents also have a right to abortion services, although the availability of such services is not uniform across the country, and teenaged girls of low socioeconomic status or from visible minorities have particularly limited access.[13] Teenagers have the right to confidential health care, including receiving sexual health services, provided their emotional and cognitive maturity allow for this. Their parents do not have an automatic right to know. The right to confidentiality is not always understood by teenagers and should be appropriately communicated during patient encounters. Finally, when teenagers choose to continue their pregnancy to term, exemplary care should be provided before, during and after delivery, to help minimize the risk of negative outcomes that may occur.

This article has been peer reviewed.

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Competing interests: None declared.

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