# Socioeconomic Disadvantage and Adolescent Women's Sexual and Reproductive Behavior: The Case of Five Developed Countries

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**Context:** Differences among developed countries in teenagers' patterns of sexual and reproductive behavior may partly reflect differences in the extent of disadvantage. However, to date, this potential contribution has received little attention.

**Methods:** Researchers in Canada, France, Great Britain, Sweden and the United States used the most current survey and other data to study adolescent sexual and reproductive behavior. Comparisons were made within and across countries to assess the relationships between these behaviors and factors that may indicate disadvantage.

Results: Adolescent childbearing is more likely among women with low levels of income and education than among their better-off peers. Levels of childbearing are also strongly related to race, ethnicity and immigrant status, but these differences vary across countries. Early sexual activity has little association with income, but young women who have little education are more likely to initiate intercourse during adolescence than those who are better educated. Contraceptive use at first intercourse differs substantially according to socioeconomic status in some countries but not in others. Within countries, current contraceptive use does not differ greatly according to economic status, but at each economic level, use is higher in Great Britain than in the United States. Regardless of their socioeconomic status, U.S. women are the most likely to give birth as adolescents. In addition, larger proportions of adolescents are disadvantaged in the United States than in other developed countries.

**Conclusions:** Comparatively widespread disadvantage in the United States helps explain why U.S. teenagers have higher birthrates and pregnancy rates than those in other developed countries. Improving U.S. teenagers' sexual and reproductive behavior requires strategies to reduce the numbers of young people growing up in disadvantaged conditions and to help those who are disadvantaged overcome the obstacles they face.

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ver the past two decades, researchers and advocates in the United States have examined the experience of Canada and of countries in western Europe in an attempt to learn why adolescents in those countries have fewer pregnancies and are less likely to acquire a sexually transmitted disease (STD).1 Some researchers suggest that the answers lie in other developed countries' more comprehensive sexuality education, greater societal openness regarding sexuality and adolescents' greater ease of access to reproductive health services.<sup>2</sup> In addition, researchers have suggested that cross-country differences in the extent of social and economic disadvantage may contribute to differences in rates of teenage pregnancy, childbearing and STDs.<sup>3</sup> However, to date, this potential contribution has received little attention.

Disadvantage has been characterized by such factors as living in poverty; being poorly educated; having poorly educated parents; being raised in a single-parent family or in an economically strug-

gling neighborhood; and lacking educational and job opportunities. In some contexts, such as in Great Britain and the United States, belonging to a racial or ethnic minority group and being foreign-born have strong links to socioeconomic disadvantage. These characteristics frequently are used as proxies for disadvantage or as indicators of disadvantage because of social discrimination.4 The extent to which race, ethnicity or immigrant status indicates social and economic disadvantage varies by subgroup and by country, depending not only on economic status, but on factors such as main language spoken, level of education (which is closely linked to occupation and income) and the extent of discrimination.

Disadvantage is associated with several factors that can influence teenage sexual and reproductive behavior and outcomes, including lowered personal competence, skills and motivation; limited access to health care and social services; lack of successful role models; and living in dangerous environments.<sup>5</sup> Some re-

searchers have argued that among disadvantaged adolescents in the United States, particularly black adolescents, accepting or even wanting a pregnancy is normative—it is a rational response to their lack of alternative opportunities—and that their families and communities are realistic in accepting adolescent childbearing and in providing social support for young and single mothers. However, in other research, the majority of all women who gave birth before age 20 reported that the birth was not wanted at that time (66% of all women, 46% of Hispanics, 67% of whites and 77% of blacks).

Researchers in the United States have identified several associations between disadvantage and adolescent sexual and reproductive behavior. Whether measured at the individual, family or community level, being disadvantaged is associated with an early age at first intercourse;8 less reliance on or poor use of contraceptives;9 and lower motivation to avoid, or ambivalence about, having a child.<sup>10</sup> Once pregnant, disadvantaged adolescents are less likely than other adolescents to have an abortion, and are more likely to have a child and have a premarital birth. 11 Exactly how disadvantage affects these behaviors, however, is still not fully understood.

Although there is much less research on the association between disadvantage and adolescents' sexual and reproductive behavior in other countries, some patterns and relationships similar to those in the United States have been identified. In Canada, an analysis that used geographic mapping at the census tract level showed a strong association between low

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income and high adolescent birthrates and high STD rates among 15–24-year-olds in Toronto, while a study of high school students in Toronto found that those who had higher educational aspirations had their first birth at a later age. <sup>12</sup>

In Great Britain and France, researchers have identified an association between living in a disrupted family and beginning sexual activity and parenthood at a young age. <sup>13</sup> Researchers in France also have found that the teenage birthrate is highest in *departements* (administrative areas) in the north, where poverty and unemployment are highest; in-depth qualitative research has shown that many adolescents who have a baby are reacting to problems in their family, including poverty and abuse. <sup>14</sup>

The association between socioeconomic deprivation and teenage pregnancy and childbearing is well established in Great Britain.<sup>15</sup> A longitudinal study there shows that the risk of becoming a teenage mother is almost 10 times higher among women whose family is in the lowest social class than among those whose family is in the highest class. In addition, teenagers who live in public housing are three times more likely to become mothers than their peers in owner-occupied housing.<sup>16</sup> Throughout Scotland, from the early 1980s to the early 1990s, pregnancy rates increased in the most deprived areas and, on average, either remained the same or decreased in the most affluent areas. But the relationship between disadvantage and teenage pregnancy can also vary over time. In Scotland, socioeconomic deprivation explained a larger proportion of local variation in teenage pregnancy rates in the 1990s than it did in the 1980s.<sup>17</sup>

One study in Sweden concluded that pregnant teenagers are much more likely

\*In the early 1990s, rising unemployment resulted in higher levels of postponement of childbearing among low-income women than among employed or highly educated women, in large part because Swedish policy bases parental leave benefits on income in the year before a child's birth. The birthrate and early childbearing rates declined overall, and the declines were largest and most rapid among poor and less-educated women. (Sources: Landgren Möller E and Hoem B, Lowly educated women postpone childbearing, *Välfärdsbullentinen Nr 2*, SCB, Statistics Sweden, 1997 [in Swedish]; and Statistics Sweden, *Childbearing and Female Employment: The Rise and Fall of Fertility in 1985–1997*, SCB, Statistics Sweden, 1998:1 [in Swedish].

†In the United States, differences across income levels are smaller for teenage pregnancy rates than for birthrates, primarily because higher-income adolescents who become pregnant are more likely than lower-income adolescents to have abortions. (Source: The Alan Guttmacher Institute [AGI], Sex and America's Teenagers, New York: AGI, 1994.)

than teenagers who are not pregnant to be from broken homes and to be of low socio-economic status. <sup>18</sup> Another large-scale Swedish study, of women who had their first child between 1954 and 1989, found that women whose parents either were not gainfully employed or were blue-collar workers were more likely than other women to have given birth in adolescence.\*<sup>19</sup>

Many factors can mitigate the effects of socioeconomic disadvantage on adolescent behaviors, including adolescents' biological and developmental characteristics; the quality of their communication and relationship with their parents, peers and partners; family stability, availability of parental time and supervision, and level of parental authority and control; adolescents' values, beliefs, attitudes, sense of control over their life, motivation and expectations; and their receipt of sexuality education and access to reproductive health services.<sup>20</sup> The extent to which these factors vary across countries may contribute to differences in adolescent sexual and reproductive behavior.

In this article, we explore the relationship between disadvantage and adolescents' sexual and reproductive behavior across five developed countries: Canada, France, Great Britain, Sweden and the United States. Our investigation of these five countries is part of a larger investigation of the wide and continuing variations in teenage childbearing in developed countries. While the five countries are all highly developed and industrialized, they differ in their current levels of teenage childbearing, trends over the last two decades, and policies and programs to address teenage pregnancy and childbearing. They also differ in their levels of social and economic disadvantage, and in government policies and programs to address disadvantage—factors likely to affect adolescent reproductive behavior and health.

In general, in western European countries, and to some extent in Canada, the proportion of the population that is poor or otherwise disadvantaged is smaller than the proportion in the United States. In addition, Canada and countries in western Europe are committed, though to varying degrees, to the philosophy of the welfare state. Although government policies have varied over recent decades, these countries offer considerable assistance to youth—including vocational training, assistance with finding a job and unemployment benefits-to ease the transition from adolescence to adulthood. By comparison, government plays a more limited role in the United States, and that role varies greatly across the country.

Building on current data, we go beyond previous research to address three questions. First, within these five countries, are there differences in adolescent childbearing among socioeconomic subgroups, and to what extent are differences explained by variation in sexual behavior and contraceptive use across subgroups? Second, how similar is the sexual and reproductive behavior of adolescents in comparable socioeconomic subgroups across countries? Finally, do differences socioeconomic composition across countries help to explain national differences in teenage reproductive behaviors and outcomes?

We examine teenage childbearing and two of its proximate determinants, sexual activity and contraceptive use. Because comparative information on pregnancy rates and abortion ratios by socioeconomic subgroup is not available, we do not directly address the relationship between socioeconomic status and adolescent pregnancy and abortion. † In addition, because of a lack of comparative information on the relationship between socioeconomic status and STD incidence, we are unable to analyze this relationship. <sup>21</sup>

# Data and Methodology

A team of researchers in each country prepared an in-depth case study on adolescent sexual behavior, contraceptive use, and pregnancy and abortion rates, with each measure broken down according to available socioeconomic variables. For each country, the study team followed the same protocol for gathering information and presenting data. This article synthesizes key findings from these case studies as well as from two project workshops and study leaders' field visits to the countries. The data presented are descriptive and document bivariate relationships, using the most recent data available from surveys and official government sources.

For data on sexual activity, timing of first birth and contraceptive use, we relied on the most recent surveys that interviewed adolescents on reproductive behaviors. The surveys we used are documented elsewhere in this issue.<sup>22</sup>

Great variation across the countries in the availability of data on socioeconomic variables and in how these variables are defined and categorized limited the aspects of disadvantage we could include and the comparisons we could make. More measures of socioeconomic characteristics were available for the United States and Great Britain than for Canada, France and, especially, Sweden. For each variable, we matched categories as closely as possible. For example, for each of the four countries with measures of income or poverty, we created three categories to reflect low, medium and high economic status. Similarly, we developed a three-tiered classification of low, medium and high educational attainment.

Race, ethnicity and immigrant status do not translate easily or directly into comparative measures of disadvantage, because minority groups in the study countries originate from different countries and cultures; may differ in values, attitudes and behaviors; and may or may not be socially or economically disadvantaged relative to the majority group. For race and ethnicity, we compared the white and nonwhite categories used in Canada and Great Britain with the three categories used in the United States: non-Hispanic white, non-Hispanic black and Hispanic. For immigrant status, we used two categories-foreign-born and native-bornin the four countries with these data.

Lacking exactly comparable measures of disadvantage for the five countries, we made approximate comparisons based on relative differences within societies using data and definitions available in each country. Overlap between dimensions of disadvantage complicates interpretation of simple differentials within and between countries. For example, race and ethnicity often correlate highly with income and education, and racial and ethnic differentials often are proxies for socioeconomic differences. Furthermore, minorities may face discrimination even when they are not poor; large numbers of the majority white population also are poor; and values and attitudes vary among racial and ethnic groups and may influence adolescent behavior independently of income and social status.

Measurement of social and economic disadvantage in a society is itself a function of the extent to which disadvantage exists. Where disadvantage is minimal, as in Sweden, it is often not measured. Moreover, the existence of data on variables that researchers use to characterize socioeconomic status and disadvantage in a particular country often depends on these variables' political relevance. For example, in France, and to some extent in Canada and Great Britain, race and ethnicity are perceived to be less important than other measures, such as income and occupation, and information on race is often not collected. However, the historical and politi-

Table 1. Population indicators of socioeconomic disadvantage and percentage distributions of women aged 20–24, by selected socioeconomic characteristics, five developed countries, mid- to late 1990s

Measure	Sweden	France	Canada	Great Britain	United States
POPULATION INDICATORS					
% of population at					
<50% of median income	8.7	8.4	10.6	10.6	17.3
Income distribution					
% going to richest 20%	34.5	40.2	39.3	43.0	46.4
% going to poorest 20%	9.6	7.2	7.5	6.6	5.2
Ratio of richest to poorest	3.6	5.6	5.2	6.5	8.9
Unemployment rate					
Males 15-24	17.5	21.9	16.6	13.8	11.1
Females15-24	16.1	30.0	13.7	10.5	9.8
Total population	8.2	11.7	8.3	6.3	4.5
% of population 16-65					
functionally illiterate	7.5	u	16.6	21.8	20.7
% of population 15–19					
foreign-born*	4.5	6.6	13.2	6.5	9.5
% DISTRIBUTIONS OF WOME	N 20-24				
Economic status†					
Low	u	47.0	24.6	17.3	31.2
Medium	u	37.5	33.4	62.9	35.8
High	u	15.6	42.0	19.8	33.0
School/work status‡					
In school only	39.7	34.2	9.6	7.8	11.2
In school and working	u	u	30.1	u	20.9
Working only	40.4	57.6	49.3	62.3	48.1
Neither	19.8	8.2	11.0	29.8	19.9
Educational attainment§					
Low	10.2	25.9	21.4	11.3	13.9
Medium	66.4	51.1	37.0	43.1	32.4
High	23.4	23.0	41.6	45.6	53.7
Race/ethnicity**					
White	98.1	u	87.6	93.9	67.3
Hispanic	u	u	u	u	12.8
Black	u	u	u	u	14.6
Other	1.8	u	12.4	6.1	5.3

\*For Sweden and Great Britain, the value presented is the percentage of the total population who hold foreign citizenship. †For France, economic status is based on monthly family income: Low=less than Fr 8,000, middle=Fr 8,000-15,000, high=Fr 15,000 or more per month. For Canada, economic status is based on family income: Low=first and second quintiles, middle=third quintile, high=fourth and fifth quintiles. For Great Britain, economic status is based on parents' occupation: Low-semiskilled or unskilled, medium-skilled, high-intermediate or professional. For the United States, economic status is based on family income, as a percentage of the federal poverty level: Low=less than 149%, medium=149–299%, high=300% or more. ‡For Great Britain, "working only" denotes working for pay at least 10 hours a week. For Great Britain and Sweden, "neither" includes respondents who were in school and working. For France, "working only" includes those who were both working and in school. §For Sweden, low=nine years of public school or upper secondary technical line, medium=upper secondary or theoretical line, high=university; data are based on both men and women. For France low=nine years of schooling or first technical qualification, medium=high school diploma, high=university or other postsecondary training. For Canada, low=less than complete secondary education, medium=complete secondary, high=any postsecondary education. For Great Britain, low=no certificate or formal qualifications, medium=O levels, high=A levels or university. For the United States, low=less than high school diploma, middle=grade 12 or high school diploma, high=any postsecondary education or training. \*\*For Great Britain and Canada, other=nonwhite. For Sweden, other=any non-European origin. For countries other than the United States, data include both men and women. Notes: Countries are ordered according to their adolescent birthrate, from lowest to highest, in this and all tables and figures. u=unavailable. Sources: Income distribution, unemployment and illiteracy: United Nations Development Programme, Human Development Report, 2000, New York: Oxford University Press, 2000. Race, ethnicity and immigrant status: Sample surveys and Council of Europe, Recent Demographic Developments in Europe, 1999, Strasbourg, France: Council of Europe Publishing, 1999. Educational attainment: Data for Canada and Sweden are based on special tabulations of Family and Fertility Surveys; all others are from country case study reports (see references 23, 34 and 38)

cal relevance of race is quite different in the United States than in the other countries and is reflected in the wide practice of incorporating race and ethnicity as variables in most U.S. data collection efforts.

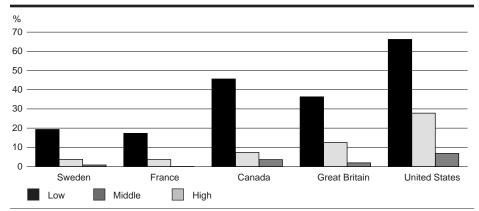
#### Results

## Extent of Disadvantage

We examined relative differences among countries in the extent of disadvantage by using both specific indicators for the gen-

eral population and percentage distributions of women aged 20–24 on key measures of socioeconomic status. The level of economic disadvantage in the five countries, as measured by the proportion of the population with an income below 50% of the median, varies substantially. Seventeen percent of the U.S. population has an income at this level, compared with 8–9% in France and Sweden, and 11% in Canada and Great Britain (Table 1). An-

Figure 1. Percentage of 20–24-year-old women who gave birth before age 20, by educational attainment



Note: For definition of categories, see Table 1, page 253

other indicator of income distribution is the ratio of the proportion of income received by the richest 20% of the population to the proportion received by the poorest 20%. The higher this ratio, the greater the inequality in income distribution. This ratio is 3.6 in Sweden; 5.2–6.5 in Canada, France and Great Britain; and 8.9 in the United States. In the four countries with data on the economic status of women aged 20–24, there are substantial proportions of young women in all three categories of economic status.

The available data on youth unemployment show a mixed picture across countries. The proportions of men and women aged 15-24 who are in the labor force but are not working are extremely high in France (22-30%), moderate in Canada (14–17%) and Sweden (16–18%), and lower in Great Britain (11-14%) and the United States (10-11%). This variation is partly a reflection of overall national differences in unemployment rates (which range from 5% in the United States to 12% in France). In addition, the proportion of youth who are in the labor force and employed varies across countries, depending on the proportion who are enrolled in school, apprenticeships, university or other sources of further education.

The proportion of women aged 20–24 who have a high level of education (some years of university or other postsecondary school) is larger in Canada, Great Britain and the United States (42–54%) than in France (23%). In Sweden, 23% of young women have attended university, but the proportion who have obtained other postsecondary education is unavailable. How-

ever, the proportions with low educational attainment are more similar across the five countries, spanning a narrower range (from 10% in Sweden to 26% in France). For a more standard measure of basic educational competency in a country, we also examined the proportion of persons aged 16-65 who are functionally illiterate. Compared with data for high educational attainment across countries, this measure (available for all countries except France) shows a different pattern: The proportion of the population that is illiterate is smallest in Sweden (8%), much larger in Canada (17%) and even larger in the United States and Great Britain (21-22%).

The proportion of adolescents aged 15–19 who are foreign-born is larger in Canada and the United States (13% and 10%, respectively) than in the other three countries (5–7%). However, there is greater variation across countries in the proportions of their populations who are racial and ethnic minorities. Moreover,

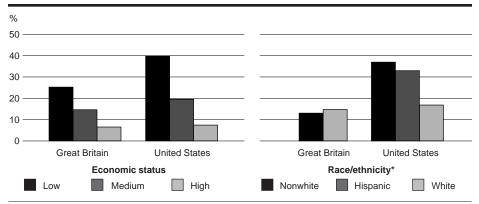
classification according to race and ethnicity, and availability of such statistics, varies from country to country. The proportion of young women who are classified as nonwhite, and, in the United States, as black or Hispanic, ranges from 2% in Sweden and 6% in Great Britain to 12% in Canada and 33% in the United States. A substantial proportion of the minority populations in Canada and Great Britain come from South Asia, while the minority population in the United States is primarily black or Hispanic.

The presence of just one of these aspects of disadvantage in an adolescent's life can be associated with poor reproductive health outcomes. However, it is important to take into account that often in adolescents' lives, several aspects of disadvantage coincide, compounding the impact of disadvantage and increasing the probability of such outcomes.

## **Adolescent Childbearing**

In all five countries, there is a strong negative association between level of educational attainment and having a child before age 20 (Figure 1). In Sweden and France, fewer than 1% of the best-educated 20-24-year-old women had a child before they were 20, compared with almost 20% of those with the least schooling.\* In Great Britain and Canada, the proportions are somewhat higher: 2-4% among women with the most education and 36-46% among the least educated. At all levels of educational attainment, U.S. women had the highest levels of adolescent childbearing: Seven percent of young women with some college education, 28% of those with a middle level of educational attainment and 66% of those with less than a high school education had had a child before age 20.

Figure 2. Percentage of 20–24-year-old women who gave birth before age 20, by economic status and by race and ethnicity



<sup>\*</sup>For the United States, "nonwhite" signifies non-Hispanic black. Other nonwhite non-Hispanics are not shown. *Note:* For definition of categories, see Table 1, page 253.

<sup>\*</sup>In France, other data show that 2% of adolescent women in academic programs had ever been pregnant, compared with 15% of adolescent women in vocational programs (source: Bajos N and Durand S, 2001, reference 38).

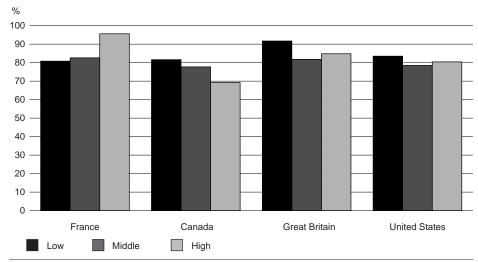
Women in the United States also had the highest levels of childbearing before age 18 at all three levels of educational attainment. Among women aged 20-24 with less than a high school education, 34% gave birth before they were 18, compared with 6–19% in the other countries (not shown). Nine percent of American women aged 20-24 with a middle level of educational attainment gave birth before they were 18, compared with 3% or fewer of these women in the other countries. Finally, 3% of 20-24-year-old women in the United States with the highest level of education gave birth before age 18, compared with 1% or fewer in the other countries.

In the United States and Great Britain, which have data on adolescent childbearing according to economic status and race and ethnicity, there is a strong negative association between economic status and having a child before age 20 (Figure 2). The difference in childbearing levels among women in the lowest and highest income groups is much wider in the United States than in Great Britain. However, at all three economic levels, U.S. teenagers have higher levels of childbearing than their peers in Great Britain. At the low economic level, U.S. teenagers are 79% more likely to have a child by age 18 (18% vs. 10%—not shown) and 58% more likely to have given birth by age 20 (40% vs. 25%). The differential is smaller but continues among those in the high economic status group: U.S. teenagers in this group are 36% more likely to have had a child by age 18 (3.4% vs. 2.5%—not shown) and 14% more likely by age 20 (7.4% vs. 6.5%).

The proportion of black and Hispanic 20–24-year-old women in the United States who had a birth before age 20 is much larger than the proportion of non-whites in Great Britain (33–37% vs. 13%, Figure 2). Among whites, the difference is smaller, but in the same direction (17% in the United States and 15% in Great Britain).\*

Available data also show substantial differences in adolescent childbearing according to immigrant status. In the United States and Sweden, adolescents who are recent immigrants have higher levels of childbearing than native-born adolescents. However, in Canada and Great Britain, recent immigrants have lower levels of adolescent childbearing than women who were born there. These different patterns reflect differences in the cultural background of immigrants in each country. In Sweden, the birthrate among adolescents was seven per 1,000 for citizens, while it was 30 per 1,000 for

Figure 3. Percentage of 20–24-year-old women who had first intercourse before age 20, by economic status



Note: For definition of categories, see Table 1, page 253.

women who were not citizens; the birthrate ranged from 18 per 1,000 among noncitizen adolescents from Finland to 34 per 1,000 among those of Turkish origin.<sup>23</sup>

In the United States, 29% of foreignborn women aged 20-24— a majority of whom are from Latin America and the Caribbean, where premarital and early childbearing occur at moderate to high levels—had a child before age 20, compared with 21% of those born in the United States. In Great Britain, 15% of nativeborn young women have a child during adolescence—twice the proportion among foreign-born women, a large fraction of whom are from South Asia. In these communities, premarital sex and childbearing are strongly censured. In Great Britain, the proportion of households with children in which the parents are cohabiting or in which only one parent is present is much smaller among households headed by persons of Asian origin than among households headed by whites or blacks.<sup>24</sup>

Within countries, certain geographic areas are likely to have greater than average concentrations of people who are disadvantaged, whether because of poor resources, lack of educational and employment opportunities, migration patterns or discrimination. Comparisons of regions within and across countries provide further illustration of differences by disadvantage and by country. We also found large regional differences in adolescent childbearing within countries. In Great Britain, the poorest districts—principally the inner-city areas of London and several large, old industrial cities of northern England-have teenage pregnancy

rates and birthrates up to six times higher than the most affluent areas.<sup>25</sup> In Sweden, there is relatively little difference by area in socioeconomic levels or in adolescent birthrates, except for somewhat higher teenage birthrates in remote northern areas with few inhabitants.<sup>26</sup> In Canada, the teenage birthrate in the Northwest Territories (87 per 1,000 teenage women per year) is much higher than the national average (23 per 1,000 in 1996). This region has the highest concentration of aboriginal people, who are one of the most disadvantaged groups in Canada. The teenage birthrate also is quite high (34 per 1,000) in the Prairie Provinces (Alberta, Manitoba and Saskatchewan), which are predominantly rural and are the most conservative provinces.

In the United States, differences in adolescent pregnancy rates and birthrates across regions and across states are large, but rates in states with the lowest levels exceed rates in all the other study countries. For example, in 1996, the teenage birthrate ranged from roughly 30 per 1,000 in some states in the Northeast and Midwest to more than 70 per 1,000 in several states in the South, which generally have larger proportions of residents who are black or Hispanic and low-income. Teenage pregnancy rates ranged from about 50–60 per 1,000 in a handful of states to more than 90 per 1,000 in 24 states.<sup>27</sup>

<sup>\*</sup>Adolescent birthrates for the United States show similarly large racial and ethnic differences. The rate is highest among Hispanic teenagers (102 per 1,000 in 1996), slightly lower among black non-Hispanic teenagers (91 per 1,000) and much lower among white non-Hispanic teenagers (38 per 1,000). (Source: reference 27.)

Table 2. Percentage of 20–24-year-olds who began sexual activity before age 20, by various measures of disadvantage

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Measure	France	Canada	Great Britain	United States
Educational attainment				
Low	91.4	u	u	95.3
Medium	78.8	u	u	89.0
High	80.3	u	u	71.8
School/employment*				
In school only	u	55.2	76.3	70.3
In school and employed	u	66.3	u	70.8
Employed only	u	80.2	83.3	82.6
Neither	u	89.6	90.3	92.2
Race/ethnicity†				
White	u	80.1	86.2	81.1
Hispanic	u	na	na	74.2
Nonwhite	u	38.4	62.3	89.2
Immigrant status				
Foreign-born	u	42.2	67.0	70.1
Native-born	u	79.0	85.4	81.7

<sup>\*</sup>Educational and school/employment categories are defined in Table 1, page 253. †For the United States, "nonwhite" signifies black non-Hispanic. *Notes*: u=unavailable. na=not applicable.

#### Sexual Activity

Four countries have data on timing of first intercourse according to economic status. In Canada, Great Britain and, especially, the United States, differences in the initiation of sexual activity according to economic status are relatively small, and women in the lowest economic group are somewhat more likely than those of higher economic status to have initiated intercourse before age 20 (Figure 3, page 255). By contrast, in France, a larger proportion of women in the highest income group than in the lowest-income group became sexually active before age 20. The small sample size of the highest income group in France may explain this unexpected finding, especially considering that the opposite pattern is found according to educational attainment (discussed below).\*

Differences in initiation of sexual activity across levels of educational attainment are large and are consistent in the two countries with relevant data (Table 2). In the United States, 95% of 20–24-year-old women with less than a high school education became sexually active before age 20, compared with 72% of those with some postsecondary education. In France, the proportion was 91% among those with the least education and 79–80% among those who had completed high school or who had some postsecondary education.

Data on young women's sexual activity before age 20 according to their current school and employment status are avail-

able for Canada, Great Britain and the United States. The findings are similar to those for educational attainment: In three countries, young women aged 20-24 who were continuing their education were less likely to have begun sexual activity before age 20 than those who were working only or who were neither working nor in school.

Variations in young women's initiation of sexual activity according to race and ethnicity and immigrant status also are substantial. In Canada, nonwhite women

aged 20-24 are much less likely than white women to have become sexually active before age 20 (38% vs. 80%); the differential between foreign-born women and native Canadians is about the same (42% vs. 79%). In Great Britain, the differences are in the same direction: Nonwhite and foreign-born women are less likely to have become sexually active by age 20 (62% and 67%, respectively) than are white and native-born women (86% and 85%, respectively). Differences in the United States are smaller: The proportion of young women who had sexual intercourse before age 20 ranges from 74% among Hispanics to 81% among whites and 89% among blacks; similarly, 70% of foreign-born and 82% of native-born women were sexually active as adolescents.

#### Contraceptive Use

In both Great Britain and the United States, economic disadvantage is linked to a low level of contraceptive use at first intercourse. Seventy percent of the most disadvantaged sexually experienced 16–19-year-olds in Great Britain and 15–19-year-olds in the United States used a method on this occasion, compared with 81–86% of better-off groups in Great Britain and 78% in the United States.

Data on French 15–18-year-olds' contraceptive use at first intercourse indicate no difference according to educational level; at all three levels of education, 88–90% used a method. However, in the United States, 72% of 15–19-year-olds who have less than a high school education used contraceptives at first intercourse, compared with 80–83% of adolescents who have at least completed high school. In

Great Britain, differences by level of educational attainment are even larger: Fortynine percent of 20–24-year-olds with low levels of educational attainment used a method at first intercourse, compared with 80% of those with high levels of attainment.

Differences in current or recent contraceptive use within each country according to socioeconomic status are smaller than for use at first intercourse. However, British adolescents at all income levels are much less likely to not use contraceptives than are their American counterparts. In Great Britain, 5% of currently sexually active 16-19-year-old women of the lowest socioeconomic status, 4% of middle status and virtually none of the highest status did not use a method at last intercourse (Figure 4). In the United States, 20% of the poorest sexually active 15-19year-old women and 17-23% of those in the two higher-income groups used no method at last intercourse.

In Canada, data are available only on condom use at last intercourse. They indicate that lower-income adolescent women are somewhat more likely than their better-off peers to use condoms. Among lowest-income, single, sexually experienced 15–19-year-old women, 81% used a condom at last intercourse, compared with 76% of those in the highest-income households.<sup>28</sup>

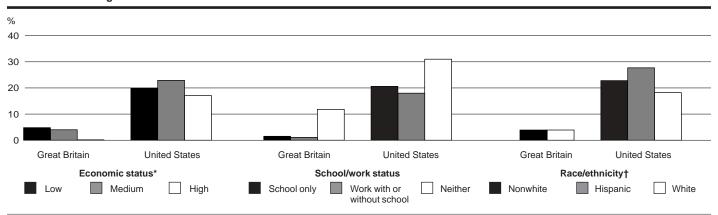
Great Britain and the United States are the only countries with national data on contraceptive use at last intercourse according to adolescents' school and employment status. In Great Britain, only 2% of all sexually active adolescent women who are in school full-time and 1% of those who are working did not use a contraceptive method at last intercourse, while 12% of those engaged in neither of these activities did not use a method (Figure 4). In the United States, those who are neither working nor in school also are the most likely to have used no method at last intercourse.

Comparable data are not available for Canadian adolescents. However, among single, sexually experienced 15–19-year-old women participating in a national survey, those who were in school only or were in school and working were more likely to report having used a condom at last intercourse (70–80%) than those who were not in school (a group that included adolescents who were working only as well as neither in school nor working—61%).<sup>29</sup>

Finally, white and nonwhite adolescents in Great Britain are equally likely to report using no method at last intercourse (4%—

<sup>\*</sup>The number of unweighted cases at the highest income category was 66 women. The sample size for the two lowest education groups combined was 99 women.

Figure 4. Percentage of 15–19-year-old sexually active women who did not use a contraceptive method at last intercourse, by various measures of disadvantage



\*For definition of categories, see Table 1, page 253. †For the United States, "nonwhite" signifies black non-Hispanic. Other nonwhite non-Hispanics are not shown. *Notes:* Percentages are based on those who had intercourse in the past three months. For the United States, data are for 15–19-year-olds at risk of pregnancy—that is, those who were sexually active in the past three months who were not pregnant, postpartum (gave birth less than two months ago), seeking pregnancy, infecund or sterile. For Great Britain, data are for 16–19-year-olds who were sexually active in the recent three-month period. Those groups that should have been excluded because they are not at risk of pregnancy (that is, women who were pregnant, postpartum, seeking pregnancy, infecund or sterile) are included, because they could not be separately identified. Because these groups are likely to be nonusers, the impact is to make the proportion of nonusers higher than it would otherwise be.

Figure 4). In the United States, black or Hispanic teenagers are more likely than white adolescents to have used no method the last time they had intercourse: Twenty-eight percent of Hispanic teenagers did not use a method at last intercourse, compared with 23% of black teenagers, and 18% of white teenagers.

## Discussion

Despite being significantly limited by a lack of comparable information on all measures for all five countries, we have found consistent patterns of relationships between socioeconomic disadvantage and adolescent sexual behavior. There are large differences in early childbearing across income and educational attainment levels, with poorer and less-educated young women being more likely to have a child during adolescence. We also found large differences across racial and ethnic groups and immigrant status groups within countries, but the nature of these differences varies by country because of differences in culture and values of the particular minority or immigrant groups in each country. Public opinion surveys in a range of developed countries show that the large majority of people now consider premarital intercourse to be acceptable.30 Immigrants, particularly those from developing countries, may have very different views on sexuality than those held by the majority in their new country.

Differences in initiation of sexual activity across socioeconomic subgroups are relatively small and in most cases are unlikely to contribute significantly to subgroup differences in adolescent pregnancy rates and birthrates. In the United States

and Great Britain, poor teenagers are more likely than better-off teenagers to initiate sexual activity before age 20. In the United States, black adolescents, many of whom are poor, are more likely to initiate sexual activity before age 20 than are white and Hispanic teenagers. These differences are consistent with differences in levels of pregnancy and childbearing across socioeconomic and ethnic and racial groups, but the differences in initiation of sexual activity are much smaller.

In Canada and Great Britain, differences in initiation of sexual activity among adolescent women by immigrant status and by race and ethnicity are large and are consistent with differences in adolescent childbearing: Both sexual activity and childbearing before age 20 are less common among foreign-born adolescents and among nonwhite adolescents than among native-born and white adolescents.

We also found substantial differences in adolescents' sexual activity according to educational attainment. This finding is consistent with the findings of multivariate studies showing that adolescents who have greater motivation to obtain an education and better access to educational opportunities also are motivated to delay sexual activity and childbearing.<sup>31</sup>

Adolescents' use of contraception at first intercourse varies substantially according to income or social class in the United States and Great Britain, but very little in France. In the United States and Great Britain, differences in recent contraceptive use are much smaller than those in use at first intercourse. However, at all socioeconomic levels, adolescents in the United States are much more likely than

adolescents in Great Britain to report that they do not use contraceptives, which could be an important factor in explaining differences in teenage pregnancy levels across the two countries. In addition, data available only for the United States show that poor and minority adolescent women (and older poor and minority women) are less-successful contraceptive users.<sup>32</sup> This also could contribute to higher teenage pregnancy rates in disadvantaged groups in the United States.

The large size of disadvantaged groups in the U.S. population, combined with disadvantaged teenagers' greater likelihood of having a child, is an important factor in explaining national differences in teenage childbearing. The proportion of the U.S. population that is poor (those whose income is less than half the median income) is at least two-thirds larger than that of the other four study countries. Onethird of American adolescents are black or Hispanic, and a large proportion of these minority groups are disadvantaged in many respects. This proportion is at least twice the proportion of racial and ethnic minorities in the populations of the other four study countries.

However, a large concentration of socioeconomic disadvantage in the U.S. population is not the only factor in the country's higher adolescent pregnancy rate. When we compared adolescents of similar status across countries, we found large differences in almost all measures of sexual behavior and disadvantage. A larger proportion of low-income 20–24-year-old women in the United States than of British women in the lowest social status group had their first child during adolescence

(40% compared with 25%). Moreover, the birthrate for white teenagers alone in the United States is much higher than the rate for all teenagers in Great Britain (38 per 1,000 vs. 28 per 1,000), and the rate for all adolescents in the United States is even larger (54 per 1,000 in 1995).<sup>33</sup>

Other factors that could influence crosscountry differences in adolescent childbearing rates include differences in public perceptions of the social and economic costs of early childbearing, societal attitudes and openness regarding sexuality, and the ease of access to information and services.<sup>34</sup> In France and Sweden, there appears to be a strong and universal perception that having a child during adolescence is undesirable, while in the United States, this attitude is much less strong and much more variable across groups and areas of the country. Canada and Great Britain fall somewhere between these two situations.35

Unlike the United States, the other countries have national health care systems, facilitating adolescents' access to contraception. In addition, whereas the U.S. population is heterogeneous and spread over a large geographic area, the populations of the other four countries are concentrated in relatively small areas,\* which increases accessibility to services and the likelihood that policies and programs will be implemented uniformly.

Nevertheless, socioeconomic disadvantage correlates strongly with adolescent reproductive behaviors and outcomes, and is worthy of policymakers' attention. Improving adolescents' socioeconomic status is a way to prevent their having poor reproductive health outcomes—not only unplanned or early pregnancies or births, but also STDs. While becoming a teenage mother may not have devastating consequences and may even be positive in some respects for some teenagers, it is likely to "compound the handicaps imposed by social disadvantage."36 Approaches to lowering teenage birthrates in the United States should include both reducing the numbers of young people growing up in disadvantaged conditions and helping those who are disadvantaged overcome the obstacles they

Over the past two decades, policymakers in Europe have recognized the need to prepare young people for a labor market that is increasingly technology-driven and that requires education and training beyond the high school level.<sup>37</sup> They now are paying even more attention to the challenge of improving education and training to better prepare young people for adulthood. While governments vary substantially in their approach and in the extent to which they support such programs, 38 policymakers' expectation is that when young people have training and job opportunities, their transitions to adulthood are easier, and they are more likely to see the value of delaying parenthood. By contrast, rather than providing comprehensive choices that would motivate young people to delay childbearing, the U.S. government's recent efforts to reduce teenage pregnancy and childbearing include increasing funding for abstinence education and reducing benefits and support payments to mothers on welfare.<sup>39</sup>

Differences in government policies and programs to assist teenagers in making a smooth transition from school and college into the labor force probably make a difference in teenagers' motivation to delay pregnancy and childbearing and in their ability to plan for the future.<sup>40</sup>

Countries in Europe prioritize the need to reduce "social exclusion" as a means of reducing socioeconomic disadvantage. By contrast, in the United States, with its high levels of disadvantage, government programs to assist young people are less comprehensive and probably play a smaller role in redressing the imbalances in the life prospects of disadvantaged adolescents—the very imbalances that condition these adolescents' reproductive choices, decisions and behavior.

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(continued on page 289)

<sup>\*</sup>Although Canada is immense in area, most of the population reside in urban areas just north of the border with the United States.

# Socioeconomic Disadvantage...

(continued from page 258)

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