A B S T R A C T

This article uses vital statistics relating to births by Canadian mothers between 1992 and 1994 to examine the distribution of age of father by age of mother at the birth of the child. Over 77% of births to teenage mothers involved males who were older than the mother.

At the time of birth of the child, the mean difference between age of the teenage mother and the father was 4.1 years, compared with a mean of 2.6 years for all mothers and fathers. For mothers below the age of 18 years, 37% of partners were within 2 years of the woman's age, 39% were 3 to 5 years older, and 24% were six or more years older.

Family planning and sex education programs directed at the prevention of teenage pregnancy, especially if these programs are given in the elementary or high school system, would not necessarily reach older males, who make up the majority of partners in teenage pregnancies.

A B R É G É

Le présent article examine la distribution d'âge du père selon l'âge de la mère à la naissance de l'enfant au moyen des statistiques de l'état civil sur les mères canadiennes qui ont accouché entre 1992 et 1994. Pour plus de 77 % des naissances de mères adolescentes, le père était plus âgé que la mère.

À la naissance de l'enfant, la différence d'âge moyenne entre la mère adolescente et le père était de 4,1 ans, contre 2,6 ans pour l'ensemble des mères et des pères. En ce qui concerne les mères de moins de 18 ans, la différence d'âge entre les deux partenaires était inférieure à deux ans dans 37 % des cas, se situait entre trois et cinq ans dans 39 % des cas et s'établissait à six ans ou plus dans 24 % des cas.

La planification familiale et les programmes d'éducation sexuelle qui ont pour but de prévenir le problème de la grossesse chez les adolescentes ne rejoignent pas nécessairement les hommes plus âgés, qui représentent la majorité des partenaires des adolescentes concernées, surtout lorsqu'ils sont dispensés à l'école primaire ou secondaire.

A Perspective on Canadian Teenage Births, 1992-94: Older men and Younger Women?

Wayne J. Millar, MA, MSc,¹ Surinder Wadhera, MA¹

When teenage pregnancy is considered, most of the attention has tended to be focused on the mother. The assumption is sometimes made that the partners of teenage mothers are also teenagers. In recent years the role played by the male in the problem of teenage pregnancy has received increased attention. A number of studies on parental age have suggested that older men are more likely than teenagers to be involved in teenage pregnancies.^{1,2}

If a majority of teenage pregnancies involve older men, this finding would have implications for sex education, family planning programs, and child support programs. It may also have implications about the possible sexual exploitation of young women by older men. This article reviews the age of the father in births to women in all reproductive age groups in Canada between 1992 and 1994, with special focus on births that occur to teenagers.

METHODS

Data on births are collected by the registries of vital statistics in the 10 provinces and the 2 territories. Copies of the registration documents of vital events are made available to Statistics Canada by the provincial and territorial registrars for compilation of national vital statistics. Because of legal requirements the registration of live births is almost complete. For the purpose of this paper live births are simply called births. A teenage mother is a

female under 20 years of age at the time of the birth of her child.

The data used in this study encompass births registered between 1992 and 1994 and reported to Statistics Canada. During this period there were 1,172,148 births to Canadian residents. For 0.1% of births the mother's age was not stated. These births were removed from the analysis, leaving a total of 1,171,006 births.

Age of father was not reported for 93,219 births (8%). The age of the father was more likely to be missing for teenage births. Among women aged 15 to 17, the age of the father was not reported for 42% of births, among women aged 18 to 19 the figure was 30%, and among women aged 20 to 24 it was 14%.

Although birth registration data are quite complete when the parents are married, the age of the father is not reported on a high proportion of birth certificates for women who are not married at the time. Among married women aged 15 to 49, age of father was not reported for 1% of events, as compared with 24% among single women and 19% among women who were separated, divorced or widowed. The majority of women aged 15 to 19 (82%) were classified as single, and 39% of these did not report the age of the father. Among women aged 15 to 49, 26% were single, and only 4% did not report the father's age.

When the age of the father was not stated, the missing values were imputed by assuming that they were missing at random and that the distribution of unknown cases within each age group was similar to that of the known cases.

Limitations

The assumption that missing fathers' ages may be prorated on the basis of

1. Senior Analyst, Health and Vital Statistics Division, Statistics Canada

Correspondence and reprint requests: W.J. Millar, Health and Vital Statistics Division, Statistics Canada, 18th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, K1A 0T6, Tel. (613) 951-1631, Fax (613) 951-0792, Email: millway@statcan.ca

known paternal ages may lead to conservative estimates of paternal age, especially if the age of the father was not stated because of possible legal implications. An assessment of the problem of missing father's age was undertaken in a U.S. study. Data relating to the age of the father at the national level were missing from 40% of the vital records for the state of California, but revised tabulations at the state level for California provided father's age for 86% of the teenage births. In comparing the two sets of data, the authors noted that the age distributions were virtually identical in aggregate and separately by age and race of the mother. They concluded that the equivalence of age distributions, despite the large differences in response rates, suggested that the ages of fathers in any one age group were no more likely to be missing than those of fathers in any other age group.¹ We are unaware of similar sets of data that could be used to assess the potential bias in the Canadian data. Because of the small number of events in the two territories and the greater variation in rates, the distribution of maternal and paternal age should be interpreted with caution.

RESULTS

Teenage mothers accounted for 71,921 births in Canada in 1992-94. This represented about 6% of all births. Teenage fathers were associated with 16,073 or 1.5% of all births. Although mothers under the age of 25 accounted for 25% of all births, males under the age of 25 were associated with about 12% of the total births.

Among women aged 15 to 17 years, about 54% of the births involved partners who were aged 20 and over. The likelihood that a woman's partner was within the same age range increased with age. About 16% of women below age 20 had a partner within the same age group; in comparison, the proportion rose to 34% among women aged 20-24, 45% among women aged 25-29, and 53% among women aged 30-34 (Table I). Age 17 is the median age of teenage births, and males aged 19-20 accounted for the largest proportion of these births (32%). However, 4% of the

TABLE I
Number of Infants Born to Women Aged 15-49 and Percentage Distribution, by Age of Father, According to Age of Mother, Canada, 1992-94

	Mother's Age							
	Total 1,171,006	15-17 24,852	18-19 47,069	20-24 226,122	25-29 410,690	30-34 337,062	35-39 110,149	>40 15,062
All Births								
Father's Age								
<18	0.3	15.5	2.5	0.1	0.0	0.0	0.0	0.0
18-19	1.2	31.0	16.0	1.4	0.1	0.0	0.0	0.0
20-24	10.3	41.5	56.7	34.2	4.1	0.9	0.5	0.3
25-29	29.2	8.9	18.0	45.1	45.4	11.4	4.4	2.6
30-34	34.9	2.3	5.1	14.7	38.9	52.5	20.8	10.4
35-39	16.8	0.6	1.2	3.3	8.8	27.0	46.6	23.2
>40	7.2	0.2	0.5	1.2	2.7	8.1	27.7	63.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Unknown fathers' ages were distributed within each mother's age group.

Total cases: 13,911

Figure 1. Ages of fathers of infants born to 17 year old mothers, Canada, 1992-94

births involved males aged 30 or older (Figure 1).

For all births, the mean age difference between father and mother was 2.6 years. For women below age 25, the age difference was about 4 years. With increasing maternal age, the difference in age declined. Near the end of their reproductive period, mothers tended to be slightly older than fathers.

For births to women aged 15-49, the age of the father was within two years of the mother's age in 48% of cases, three to five years less in 5%, and six or more years less in only 2%. The father was three to five years older in 26% of births and six or more years older in 19% of births. Fathers were more likely to be six or more years older for women under the age of 25. Among women aged 15-19, 26% of

TABLE II
Percentage Distribution of Births to Women Aged 15-49 by Age Difference of Father, According to Age of Mother

Age of Mother (years)	Age Difference of Father					Mean Age Difference Between Father and Mother (years)
	<6 Years Younger	3-5 Years Younger	0-2 Years Younger or Older	3-5 Years Older	>6 Years older	
	%	%	%	%	%	
All age groups	1.9	4.9	48.3	25.6	19.3	2.63
15-19	0.0	0.2	39.1	34.4	26.3	4.12
15-17	0.0	0.1	37.2	38.6	24.2	4.09
18-19	0.0	0.3	39.9	32.6	27.3	4.14
20-24	0.0	1.2	39.7	30.6	28.5	4.04
25-29	0.5	3.2	49.6	27.6	19.1	2.91
30-34	2.4	7.2	53.7	21.8	15.0	1.93
35-39	8.1	12.3	48.0	17.8	13.8	0.91
>40	16.7	13.2	40.9	15.8	13.4	-0.91

Note: Births to women aged 10-14 are included in the 15-17, and the 15-19 age groups.

Figure 2. Percentage of mothers aged 15-17 with partners who were six or more years older than themselves, by province, Canada, 1992-94

fathers were six or more years older; in contrast, among women aged 40 and over, the proportion declined to 13% (Table II).

With regard to geographic area, the proportion of births to women aged 15-17 that involved partners six or more years older ranged from a low of 17% in

Newfoundland to 37% in the Northwest Territories. The higher proportion in the Northwest Territories should be interpreted with caution because of the smaller number of births in that jurisdiction. In the larger provinces, Quebec (33%) and British Columbia (30%) stood out as above the overall Canadian rate of 24%. In all the other provinces, the proportion was below 24%.

DISCUSSION

The issue of teenage births has received considerable attention in recent years because of concerns about the implications of early childbirth for the health and education of the mother, and the long term economic consequences for the mother, child, and community.³ The findings in this report lend support to the argument that in a large proportion of cases, older males are responsible for teenage births.

Among adolescent women, the broad disparity in age between partners raises questions about possible sexual exploitation and abuse, issues that are not directly addressed in this report. Although it is difficult to obtain reliable estimates of sexual abuse, the findings of a national population survey conducted for the Committee on Sexual Offenses Against Children and Youths suggest that about 22% of females and 11% of males aged 18 and over have been victims of sexual acts.⁴ The survey also indicated that, on average, fewer than one in five persons of both sexes was an adult when he or she was a victim for the first time. The majority of victims were children and youths between 12 and 18 years of age.⁴

National estimates of the onset of sexual intercourse suggest that 60% of Canadians aged 15 and over had sexual intercourse before they were 20 years old. Among teens (age 15-19), 60% of males and 56% of women report having had sexual intercourse.⁵ These estimates correspond closely with data from Quebec indicating that 60% of teenagers aged 15 to 19 have had sexual intercourse.⁶ In a study of a school population in British Columbia, 33% of male students and 28% of female students in grades 7 to 12 (age range is approximately 13-19) reported that they had had sexual intercourse at least once.⁷

Few national or regional surveys on sexual behaviour provide information on the age of the partner. The fact that adolescent males tend to be sexually active at a younger age and that a higher proportion of them than adolescent females claim to have had intercourse in the previous year appears to be at odds with the greater prevalence of older male involvement in teenage pregnancies. It is possible that the claims of sexual behaviour among adolescent males may be exaggerated.

Recently, a number of public health groups have recommended preventive programs for sexual and reproductive health. The Expert Interdisciplinary Advisory Committee on Sexually Transmitted Diseases in Children and Youth recommended in 1991 that programs for the promotion of sexual and reproductive health should be established, based on national guidelines for sex education.⁸ A 1992 resolution of the Canadian Public

Health Association asked provincial ministers of health to make sex education mandatory in high school.⁹

In light of the disparity in the ages of fathers and mothers in teenage births, it is possible that sex education programs targeted through the secondary school system would reach only the adolescent females involved. If teenage pregnancy is to be prevented, for those girls who receive sex education at school the curriculum should perhaps include information about methods of dealing with relationships in which there is an imbalance in age of the partners involved.

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