



Sexual Health of Canadian Youth: Findings from the *Canadian Youth, Sexual Health and HIV/AIDS Study*

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Abstract: The *Canadian Youth, Sexual Health and HIV/AIDS Study* conducted in 2002-2003 surveyed a national sample of over 10,000 students in grades 7, 9 and 11. This paper presents the key findings on sexual behaviour including number of steady boyfriend/girlfriend relationships in the past year, sexual behaviours experienced, and for grades 9 and 11 only, experience of oral sex and sexual intercourse, reasons for having or not having had intercourse, experience of non-consensual sexual intercourse, contraception use at last intercourse, condom use and attitudes, experience of unintended pregnancy, and sense of self-efficacy in HIV/AIDS prevention. Compared to the last such national study conducted in 1988, males but not females were less likely to have had intercourse and all students were significantly more likely to believe they could protect themselves from HIV/AIDS.

Key words: Teen sexual behaviour, national Canadian survey.

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Introduction

Few large-scale studies of adolescent sexual health have been conducted in Canada. In 1988, the *Canada Youth and AIDS Study (CYAS)* (King, Beazley, Warren et al., 1989) was administered during a time of insecurity and concern over a new epidemic. Since then, some national level evaluations of sexual health education curricula have been undertaken (Council of Ministers of Education, Canada, 1999), and some provinces have revised their health education curricula to include a sexual health component. However, in the past decade there have been no cross-Canada studies focusing explicitly on younger adolescents' sexual health.

Behaviours that promote sexual health can result in the prevention of sexual health problems, e.g., unintended pregnancy, sexually transmitted infections

(STI, HIV/AIDS), sexual coercion, and the enhancement of sexual health, e.g., positive self-image, satisfying relationships, and desired parenthood (Health Canada, 2003). According to the *Canadian Guidelines for Sexual Health Education*, these outcomes are facilitated by educational programs that help young people to acquire knowledge, develop motivation, personal insight, and behavioural skills, and that foster creation of an environment conducive to sexual health (Health Canada, 2003).

From a population health perspective, sociodemographic determinants of sexual health have been linked to sexual behaviours and the sexual health of adolescent populations. Parental income, occupation, educational achievement, degree of religiosity, gender identity and disability have all been found to be related to sexual activity during the teenage years. The school context represents another



environmental variable that has been linked to the health of youth (King, Boyce, & King, 1999). Further, adolescents with emotional and mental health difficulties, as indicated by a lack of coping skills, are more likely to engage in risk behaviours related to eating disorders, as well as smoking, alcohol, and drug use. Such risk behaviours are associated with early initiation of sexual experiences (Taylor-Seehafer, & Rew, 2000; Tonkin, Murphy, & Poon, in press).

Family structures and the nature of relationships among family members are also determinants of sexual health (Kotchik, Shaffer, Forehand, & Miller, 2001; Turner, Irwin, Tschann, & Millstein, 1993). Parental communication, role modeling, and trust of adolescents has been related to depression and risky sexual behaviour among teens (Feldman & Brown, 1993). Adolescent interactions within peer groups, and their perceptions of these interactions, constitute another important factor. Peer groups offer adolescents access to health information, as well as collective frameworks for interpreting this information. Further, the extent to which an adolescent is integrated into a peer group is related to whether he or she will manifest physical or emotional problems (Page, Scanlan, & Deringer, 1994). Finally, the presence of health and social organizations in a community, and adolescent awareness of information associated with these services, has been associated with adolescent sexual health behaviours. Indeed, some limited evidence indicates that access to community health services and sexual education reduces adolescent pregnancy rates (Orton & Rosenblatt, 1991).

To update the Canadian data on youth sexual health and its determinants, the *Canadian Youth, Sexual Health and HIV/AIDS Study (CYSHHAS)* was conducted in Canada in 2002-2003.

Methods

Sample and recruitment

To understand how the above determinants influence adolescent sexuality and sexual health at different developmental stages, the study included students in grades 7, 9, and 11 (approximately ages 12, 14, and 16) from all Canadian provinces and territories, with the exception of Nunavut.

A systematic, stratified sampling method utilized a single stage cluster design that selected classrooms in identified schools. Stratification variables were: (a) Public/Roman Catholic designation, (b) language of instruction (particularly in Quebec and New Brunswick), (c) urbanicity, or size of city, (d) geographic location, and (e) school size.

The final selection of classes was made by randomly selecting one class per grade per sampled school. The samples in Prince Edward Island, the Yukon and the North-West Territories were the entire student populations at the target grade levels.

The *CYSHHAS* surveys were administered to whole school classes by their teachers during one 40-minute session. Teachers were asked to follow a specific set of instructions regarding survey administration, especially regarding confidentiality. Active parental/guardian consent was obtained for all study participants. The students were guaranteed anonymity and sealed their surveys in individual envelopes for return to the researchers.

Survey instruments

Most items on the *CYSHHAS* questionnaire were previously validated measures employed in surveying these age groups, although new items were developed for certain concepts. Two grade-specific versions of the instrument were developed. The grade 7 questionnaire included only a single, three-item question on sexual experiences. The grade 9 and 11 version of the instrument included these three items plus oral sex and sexual intercourse. This report will include data from the grade 7 sample only for the three items on sexual experiences and for a question on experience of boyfriend/girlfriend relationships.

The instruments were translated into French by francophone researchers, and then back-translated into English, as a check to ensure that item meanings were preserved in both official languages. The instruments are available from the corresponding author on request.

Sample Size

A sample size of 1150 students per grade per province, using the class unit as the sampling cluster, was required for precision of $\pm 4\%$ on most items. However, realities in gaining consent from school



jurisdictions (particularly in Alberta and British Columbia) prevented the recruitment of samples of the desired size for all provinces and territories (Table 1). The overall consent rate at the student level was 67.7%; 8.9% of students were absent, 5.2% of students refused, and 18.2% failed to return the parent consent form or the parents denied participation. The entire study sample, after refusals, was 11,125 students (3,587 grade 7, 3,841 grade 9, and 3,697 grade 11). At each grade level, more females than males participated in *CYSHHAS* with the greatest gender discrepancy among grade 11s (Table 2). The national weighted sample includes proportional weighting of provincial samples, other than British Columbia and Alberta. The small samples from Alberta and British Columbia were simply added to the file with a weight of 1. As such the *CYSHHAS* sample can be considered to be a very large sample of Canadian students, while not being completely representative of Canadian youth in all jurisdictions.

Based on demographic information provided by all grade 7, 9 and 11 students of both sexes: the language usually spoken at home was English (63-64%), French (30-32%) and other (5-6%) and religious affiliation was

none (17-22%), Catholic (52-54%), Protestant (14-18%) and other (10-11%). Parental employment for fathers (90% employed) was predominantly professional or skilled workers (above 75%) while for mothers (80% employed) about half were in the above category with 40% semi-skilled or unskilled work. Most students perceived their family to be average in wealth (62-68%), with fewer below average (about 9-14% said “not so” or “not at all” wealthy) than above (20-28%, “quite” or “very” wealthy).

Results

Relationships and sexual attraction

About 40% of grade 9 students and 35% of grade 11 students reported no steady boyfriends/girlfriends in the past 12 months while approximately 28% and 38% respectively in these grades had one such relationship in that time period. (Table 3). Overall, about two thirds of both males and females in grade 9 and almost three quarters in grade 11 reported either no partner or one partner in the past year. In contrast, about 15% in grade 9 and around 10% in grade 11 reported three or more such “steady” relationships in the past 12 months with younger female students being more likely than older to fall in this relationship category. If one considers only students who had a steady boyfriend/girlfriend in the last 12 months, the data in Table 3 make it possible to test the expectation that longer term relationships will increase with age as reflected in grade level. Among such students, the percentages who said they had one partner in the last 12 months were approximately 42%, 48% and 59% respectively for grade 7, 9, and 11 females and 43%, 45%, and 58% for grade 7, 9 and 11 males (data not shown).

Students were asked a question intended to indicate their sexual orientation, as measured by their attraction

Table 1 Sample size.

Province/Territory	Grade 7	Grade 9	Grade 11
Alberta	9	52	51
British Columbia	50	82	84
Manitoba	231	199	194
Newfoundland	746	602	595
New Brunswick	271	244	358
Northwest Territories	22	0	0
Nova Scotia	498	512	615
Ontario	953	1156	1107
Prince Edward Island	173	221	113
Quebec	308	482	270
Saskatchewan	239	265	286
Yukon Territory	87	26	24
Total	3,587	3,841	3,697

Table 2 Gender distribution.

Gender	Grade 7		Grade 9		Grade 11	
	n	%	n	%	n	%
Male	1,691	47.3	1,786	46.6	1,694	45.9
Female	1,885	52.7	2,050	53.4	2,000	54.1

Table 3 Number of steady boyfriends/girlfriends in past 12 months (%).

	Grade 7		Grade 9		Grade 11	
	Males	Females	Males	Females	Males	Females
None	42	46	42	37	38	32
One	25	23	26	30	36	40
Two	16	17	18	18	16	20
Three +	18	15	14	16	12	7



to members of the same, opposite, or both sexes. Among grade 9 and 11 females, 4.9% and 5.1% respectively reported attraction to either females or both sexes with attraction to both sexes being the most common response (2.9% and 3.4% respectively) (Table 4). Males were about half as likely as females to report attraction to the same sex or both sexes (2.8% in grade 9 and 2.4% in grade 11).

Adolescent sexual activity

To develop a better understanding of Canadian adolescent sexual behaviour, students were asked to indicate which of several sexual activities they had ever engaged in. High percentages of both sexes in grade 9 and more so in grade 11 reported having engaged in sexual activities such as deep (open-mouth) kissing, touching above the waist, or touching below the waist. This was also true to a lesser extent for grade 7 students. For example, 33% of male and 23% of female grade 7 students reported touching below the waist compared to 57% and 54% respectively in grade 9 and 75% and 74% respectively in grade 11 (Table 5).

Only students in grades 9 and 11 were specifically asked whether or not they had ever experienced oral sex or vaginal sexual intercourse. About one third of grade 9 students and more than one half of grade 11 students reported having had oral sex at least once. Among grade 9 students, 23% of males and 19% of females reported

having had sexual intercourse, while 40% of males and 46% of girls in grade 11 had had sexual intercourse.

Students who reported having had sexual intercourse were asked for more detailed information including lifetime frequency of intercourse and number of intercourse partners. In terms of frequency of sexual intercourse, grade 9 students were more likely than grade 11 students to have had intercourse once (29-30% versus 13-19%) and less likely to report often (37-39% versus 48-59%) (Table 6). These results are consistent with the lower percentage of grade 9 students who have had intercourse and their more recent experience of having done so for the first time. Grade 11 males were less likely than females to report intercourse often and also less likely to report having had intercourse.

Approximately one half of the students who have had sexual intercourse reported having only one sexual partner with no grade difference in this respect but with a sex difference in both grades 9 and 11 in

Table 4 Sexual attraction (%).

	Grade 9		Grade 11	
	Males	Females	Males	Females
Attracted to males	1.7	93.3	0.9	93.8
Attracted to females	95.5	2.0	97.3	1.7
Attracted to both males and females	1.1	2.9	1.5	3.4
Attracted to no one	1.7	1.8	0.2	1.1

Table 6 Frequency of intercourse and number of intercourse partners among students who have had intercourse (%).

	Grade 9		Grade 11	
	Male	Female	Male	Female
Percent ever had intercourse	23	19	40	46
Frequency of intercourse				
Once	30	29	19	13
A few times	32	34	33	28
Often	39	37	48	59
Number of intercourse partners				
One	45	53	43	54
Two	15	19	21	18
Three	11	14	9	11
Four to ten	22	14	22	14
Eleven +	7	1	5	2.5

Table 5 Sexual behaviour experienced by students at least once in their lives (%).

	Grade 7		Grade 9		Grade 11	
	Male	Female	Male	Female	Male	Female
Deep kissing	49	35	65	67	81	82
Touching above waist	46	34	67	64	81	81
Touching below waist	33	23	57	54	75	74
Oral sex	—	—	32	28	53	52
Intercourse	—	—	23	19	40	46



which females were more likely than males to have had one partner (53-54% versus 43-45%) (Table 6). Overall, 60-72% reported either one or two partners. At the other end of the spectrum among those who had ever had intercourse, 15-16.5% of females and 27-29% of males reported four or more partners. These percentages did not differ between grades although the absolute number of students involved would be greater in grade 11. For example, considering all students in grade 11, including those who had not had intercourse, about 10% of males and 8% of females reported 4 or more partners.

Reasons for having sex

Students who had ever had intercourse were asked to choose one of seven reasons for having their first experience of sexual intercourse. Overall, the reasons cited most often were “love for the person” and “curiosity/experimentation” which together accounted for 55-61% of grade 9 responses and 60-74% of grade 11 (Table 7). “Influence of alcohol/drugs,” accounted for 6-10% of responses across grades. In grades 9 and 11, females were more likely than males to choose “love for the person” (49-60% versus 32-39%) with a somewhat higher percentage of both sexes in grade 11 citing this reason. On average, grade 11 students are older and also more removed in time from this first experience and may thus assess it differently in retrospect. Other apparent sex differences in both grades were that males were more likely than females to cite curiosity/experimentation (21-23% versus 12-14%) and to cite “desire to lose virginity” (9-12% versus 3-4%) as their main reason. Desire to “have a relationship and “loneliness” were infrequently picked

Table 7 Reasons for having first sexual intercourse (%).

	Grade 9*		Grade 11**	
	Male	Female	Male	Female
Love for the person	32	49	39	60
Curiosity/experimentation	23	12	21	14
Influence of alcohol/drugs	10	9	9	6
Got carried away	8	14	11	7
To lose my virginity	12	4	9	3
To have a relationship	5	5	5	1.7
Loneliness	0.9	0	0.4	0.5
Other	9	6	5	8

* 23% of males and 19% of females had had intercourse.
 ** 40% of males and 46% of females had had intercourse.

as main reasons for both males and females having their first sexual intercourse.

Reasons for not having sex

Students who had not had sexual intercourse were asked to choose one of ten reasons for their not having done so. Overall, the most common reasons were “not ready”, “not had opportunity”, and “haven’t met right person” which collectively accounted for 70-71% of female responses and 81-84% of males responses (Table 8). While not being ready was more frequently cited by females than males in both grades, lack of opportunity was much more frequently cited by males (32-42%) than females (11% in both grades). Males less often than females cited “want to be virgin at marriage” (3-5% versus 11-13%). Religious beliefs were infrequently cited for not having had intercourse (2.9-6%), as were fear of disapproval by either parent (1.1%-2.2%), and fear of HIV/AIDS or STI (1.5-1.9%). Although fear of pregnancy was seldom listed as a first reason it was more often by females than males in both grades (6% versus 2.7%). It is noteworthy that possible negative health-related outcomes such as STI and unintended pregnancy, which are often cited as reasons for postponing first intercourse, were rarely overtly cited as main reasons for not having had intercourse.

Non-consensual sexual activity

Among females in grades 9 and 11, 5% and 11% respectively “strongly agreed” or “agreed” that they had sex (i.e. sexual intercourse) when they “did not

Table 8 Reasons for not having had intercourse (%).

	Grade 9*		Grade 11**	
	Male	Female	Male	Female
Not ready	29	40	12	30
Not had opportunity	32	11	42	11
Haven’t met right person	23	20	27	29
Want to be virgin at marriage	5	11	3	13
Fear of pregnancy	2.7	6	2.7	6
Religious beliefs	2.9	4	6	6
Parents’ disapproval	1	1.7	0.6	1.3
Friends’ disapproval	0.1	0.5	0.7	-
Fear of HIV/AIDS	1.7	1.0	1.0	1.9
Fear of other STIs	0.2	0.3	0.2	-
Other	2.9	4	4.0	2.5

* 77% of males and 81% of females had not had intercourse
 ** 60% of males and 54% of females had not had intercourse



want to” and 12% and 17% respectively reported having been “pressured to have sex” when they did not want to (Table 9). Comparable percentages for males were 2.7 and 6% having had sex when they did not want to and 5% in both grades having been pressured to do so. Females were more likely to report pressure than occurrence of unwanted sex in both grades. They were also about 2-3 times more likely than males to report being pressured and about twice as likely to have had sex when they did not want to.

Contraception and STI prevention at last intercourse

Between 84% and 90% of grade 9 and 11 females and males who had ever had intercourse reported being protected from pregnancy by using either the birth control pill, condom, or both the last time they had sexual intercourse (Table 10). Discounting those who used pill only at last intercourse (and the few reporting pill and other), 75-80% of grade 9 students and 64-75% of grade 11 students reported being protected from STI by condom use at last intercourse. The lower level of STI prevention than pregnancy prevention at last intercourse is notable in grade 9 among females (89% versus 75%) and in grade 11 among males (90% versus 78%) and females (88% versus 64%). The tendency toward less condom use with increased pill use is reflected particularly in the findings for grade 11 females.

Among this sample, 8-10% of grade 9 and 5-6% of grade 11 males and females did not report using any type of contraceptive measure the last time they had sexual intercourse (Table 10). Among the 7% and 11% in grades 9 and 11 respectively who used withdrawal as a method of contraception at last intercourse, most did so in concert with other methods, some of which may have also been less reliable than the pill and condom.

Table 9 Non-consensual sexual activity (%).

	Grade 9		Grade 11	
	Male	Female	Male	Female
Pressured to have sex when did not want to	5	12	5	17
Had sex when did not want to	2.7	5	6	11

Students who did not use a condom at last intercourse were asked for one main reason for not doing so. Responses to the question thus apply to this subsample. One main reason for non-use cited by 28-29% of males and 21-36% of females in grades 9 and 11 who did not use a condom at last intercourse was that they “did not expect to have sex” (Table 11). The other similarly common reason for non-use was that they “used of some other method of birth control”. This was cited more often by grade 11 students who had not used a condom at last intercourse (36-38%) than by grade 9 (18-23%). Only a few among other reasons in Table 11 reached this level of frequency including “too much alcohol and drugs” (17% of grade 9 males), “have a faithful (safe) partner” (14% and 24% respectively of grade 9 and 11 females), and personal or partner dislike of using condoms (16% of grade 9 females, 13% of grade 11 males). Females were decidedly more likely than males in both grades to cite having a faithful partner.

With respect to the attitudes and intentions toward condom use reported by all students (Table 12), a large majority of both sexes in both grades “strongly agreed” or “agreed” that they plan to use a condom with their sexual partner(s) (83-90%) and feel confident they could do so properly (71-90%). Females appeared to be less confident than males in this regard. Also, high percentages of females agreed that they would ask a partner about condom use before sex (68-78%) and that it was the responsibility of both partners to be sure a condom was available (83-85%). However, across sexes in both grades, 13-26% would be too embarrassed to buy condoms with

Table 10 Method of contraception used at last intercourse (%).

	Grade 9		Grade 11	
	Male	Female	Male	Female
No birth control	10	8	5	6
Pill + condom	24	25	31	30
Pill only	3	13	11	20
Pill + other	1	1	1	4
Condom only	51	45	42	28
Condom + other	5	5	5	6
Other	7	4	5	6
Withdrawal*	7	7	11	11

* Withdrawal may be in combination with other methods.



females being more likely than males in both grades to feel this way. Males were more likely than females to agree that condoms interfere with sexual pleasure and notably more likely to agree that they would have intercourse with a partner who did not want to use a condom (21% versus 6% of females in grade 9 and 10% versus 23% in grade 11).

Alcohol and/or drug use is known to impair judgment and to be associated with sexual activity. Although this was not cited often by students as a main reason for not using condoms at last intercourse (except for 17% of grade 9 males), we examined whether condom use might be affected by the use of these substances prior to intercourse. We found that among students who had ever had intercourse, 28% and 39% of grade 9 females and males respectively had used alcohol/drugs before their last intercourse. Comparable figures for grade 11 were 21% and 38% (data not shown). Tables 13 shows the likelihood of condom use at last intercourse among students who had and had not used alcohol prior to last intercourse. Among males in both grades, condom use at last

intercourse was reported by 73% who used alcohol/drugs beforehand and by 74% who did not. Among females the comparable figures were 50% and 63% indicating that females who used alcohol/drugs prior to their last intercourse were less likely to have used condoms and might thus have been at greater risk of unplanned pregnancy and/or STI.

Pregnancy

Among the grade 9 and females 11 females who had ever had intercourse, 6% and 8% respectively reported having ever been pregnant (Table 14). In the case of grade 9 and 11 males who had ever had intercourse, 8% and 4% respectively reported having caused a pregnancy. Because different percentages in these groups had ever had intercourse, it was of interest to determine the percentage of the total sample in each age and sex cohort who had such experiences. Among all grade 11 females, 3.7% reported having been pregnant 3.4 times the percentage of 1.1% for grade 9 females. In contrast, 1.6% of all grade 11 males, compared to 1.8% of grade 9 males reported having caused a pregnancy

Table 11 Reasons condom not used last time had sexual intercourse (%).

	Grade 9		Grade 11	
	Males	Females	Males	Females
Did not expect to have sex	29	36	28	21
Used some other method of birth control	23	18	36	38
Had too much alcohol/drugs	17	6	6	6
Not enough money to buy condoms	8	2.2	0.6	0.6
Did not want to spoil the moment	6	7	3	2.7
Did not know how to use a condom	6	—	1.3	0.3
Have a faithful (safe) partner	5	14	10	24
I (or partner) do not like to use condoms	5	16	13	8
Did not want to show distrust of partner	3	—	0.6	—
Too embarrassed to talk about using condoms	—	2.2	0.6	—

Table 12. Intentions and attitudes about condom use (% strongly agree and agree).

	Grade 9		Grade 11	
	Males	Females	Males	Females
I plan to use a condom with my sexual partner(s)	86	90	86	83
Feel confident that I could use condom properly	84	71	90	77
Before having sexual intercourse I would ask partner about using a condom	68	78	68	77
Making sure a condom is available is the responsibility of both partners	75	83	82	85
I would be too embarrassed to buy condoms	18	26	13	21
Condoms interfere with sexual pleasure	23	11	26	18
Would have intercourse with a partner who didn't want to use a condom	21	6	23	10



Table 13 Condom use at last sexual intercourse, by use of alcohol/drugs, grades 9 and 11 (% used condoms).

	Males	Females
Did use alcohol/drugs at last sexual intercourse	73	50
Did not use alcohol/drugs at last sexual intercourse	74	63

Table 14 Sexually active students who have been or gotten someone pregnant (%).

Been pregnant or caused pregnancy	Grade 9*		Grade 11*	
	Males (n=390)	Females (n=339)	Males (n=800)	Females (n=943)
Ever had intercourse	8.0%	5.9%	4.0%	8.0%
Total sample	1.8%	1.1%	1.6%	3.7%

*Percentage ever had intercourse: grade 9 male 23%, female 19%; grade 11 male 40%, female 46%.

reflecting either no difference between the grades or a slightly lower percentage in grade 11. We do not know what percentage of males who had ever had intercourse were unaware of pregnancies they may have been involved in.

Confidence of self protection against HIV/AIDS

A large majority of students in both grades 9 and 11 “strongly agreed” or “agreed” (81.7% and 83.5% respectively) that they were confident that they could protect themselves from getting the HIV virus (Table 15). This contrasts notably with students in the Canada Youth and AIDS Study in 1988, in which 54% of students expressed this level of confidence. The CYAS was conducted during the mid 1980s during a period of heightened attention given to HIV/AIDS when educational resources and services were emerging.

Peer influence and sexual activity

To determine the role of the influence of peers on decisions to engage in sexual activity, Grade 9 and 11 students were asked how many of their close friends had ever had sexual intercourse. Students who stated that more than half or all of their friends had done so were more likely to themselves have had intercourse (Table 16). For example, among students who said that more than half of their friends had

Table 15 I can protect myself from catching HIV/AIDS (% strongly agree and agree).

By survey year	Grade 9	Grade 11
1988*	54.7	54.4
2002	81.7	83.5

*Data from *Canada Youth & AIDS Study* (King et al. 1989).

Table 16 Sexual activity, by peer sexual activity (% have had sexual intercourse).

	Grade 9		Grade 11	
	Males	Females	Males	Females
Peers have had sex:				
None or less than half of friends	15	8	19	23
About half of friends	47	36	44	54
More than half of friends	81	74	78	76

intercourse, 74-81% across grades and sexes had also had intercourse. Since this question asked about the intercourse experience of close friends, the responses may have been more accurate than had they been asked about other students in their grade. Given that 54%-81% in these sex and age groups had not had intercourse, the findings suggest that students who had had intercourse are more likely to interact with peers in which this experience is more common.

Discussion

The first *Canada Youth and AIDS Study* (King et al., 1989) and our more recent *Canadian Youth, Sexual Health and HIV/AIDS Study* represent significant sources of national information on adolescent sexual and reproductive health in Canada. Given the infrequency of such national studies and the limitations of routinely collected national data on the sexual behaviour of Canadian adolescents (see Maticka-Tyndale, Barrett, & McKay, 2000), the dissemination and use of such research is important.

In comparison to King et al. (1989), the present study was able to include more questions about the sexual and relationship activity of grade 7 students and to add questions not previously asked of older students. We found that 55%-68% of female and male students



across grades 7, 9 and 11 had one or more steady boyfriend/girlfriend relationships in the past year and that grades 7 and 9 students in this group were less likely to report one and more likely to report two or more such relationships than were grade 11 students. Adolescent relationships have been characterized as serially monogamous and of short duration (Kotchick et al., 2001) shifting in the later teens to more committed relationships of longer duration (Nieder & Seiffge-Krenke, 2001; Shulman & Seiffge-Krenke, 2001). This pattern, which fits our findings, has been associated with a reduced likelihood of condom use and a concomitant increased risk of STI as this transition takes place (Boyce et al., 2003; SIECCAN, 2004).

About 5% of females and 2.5% of males reported some attraction to the same sex or both sexes. It is difficult to know how to assess these numbers in that students at this age may be uncomfortable in identifying such attractions or not fully aware of their own feelings. Some may also have identified the study as more geared toward heterosexual students. At a minimum, it would appear that one student in most classrooms in Canada will have such attractions and/or be gay or lesbian.

With respect to sexual behaviour, the present study was able to ask grade 7 students about ever having experienced non-intercourse behaviours (i.e., deep kissing and touching above and below the waist, but not about oral sex or sexual intercourse). In terms of frequency of experience, both grades 9 and 11 showed the expected hierarchy from high frequency of deep kissing through declining frequencies of other behaviours but with oral sex always more common than intercourse for both sexes. Grade 11 females were also more likely than males to have had intercourse than grade 11 males which reflects a trend reported from other national databases (Maticka-Tyndale et al., 2000). With respect to grade 7 students, 28% had ever experienced touching below the waist compared to 56% in grade 9. Since grade 9 is the next closest age cohort, it is of interest to note that about 30% reported ever having had oral sex (30%) with about 22% ever having had intercourse. This pattern might be used to infer proportionately lower occurrences of both in grade 7 students but we have no national data on these behaviours for younger students. Given the level of public discourse about

younger teens and oral sex (McKay, 2004), reliable national data would be preferable to inference.

In terms of intercourse experience, our findings reflect the trend to lower percentages of males in both grades having had intercourse in 2002 compared to the King et al. (1989) national study (40% versus 49% in grade 11 and 23% versus 31% in grade 9). Females showed little or no change over this period (46 % for both studies in grade 11 and 19% versus 21% in grade 9). Those who have had intercourse most commonly cited personal rather than external influences for their decision (love and curiosity/experimentation) as is the case for those who have not (not ready, no opportunity, haven't met right partner).

Among those who had ever had intercourse, about 9% in grade 9 and 5% in grade 11 reported using no protection against pregnancy at last intercourse. Overall contraception at last intercourse was common (84-90%) with condom use less so (64%-80%) and notably lower in grade 11 students of both sexes who were also more likely than grade 9 to cite "having a faithful (safe) partner" as a reason for not using a condom at last intercourse. This pattern of favouring the pill over condoms with increasing relationship duration (Cheesbrough, Ingham, & Massey, 1999; McMahan, Hansen, Mann et al., 2004) has been used to explain the increases in teen STI rates during an extended period of declining teen pregnancy rates in Canada (SIECCAN, 2004).

Decisions about sexual activity made during adolescence can result in patterns that foster or impede the prevention of unintended pregnancy, STIs, and HIV/AIDS and the development of satisfying sexual relationships. From an educational perspective, our findings reinforce the need for a broadly based and sustained focus on Canadian students' sexual health. In addition to work on knowledge, attitudes, and behaviour our interventions should more fully explore the contexts in which students engage in sexual activities, the belief systems that inform their actions, and the strategies required for continued development of sexual health services that meet their diverse needs.



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