Chapter 4

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

A. Summary

The decisions about sexual activity made during adolescence usually result in establishing sexual behavioural patterns for the future that will affect the risks of pregnancy, sexually transmitted infections, and HIV/AIDS.

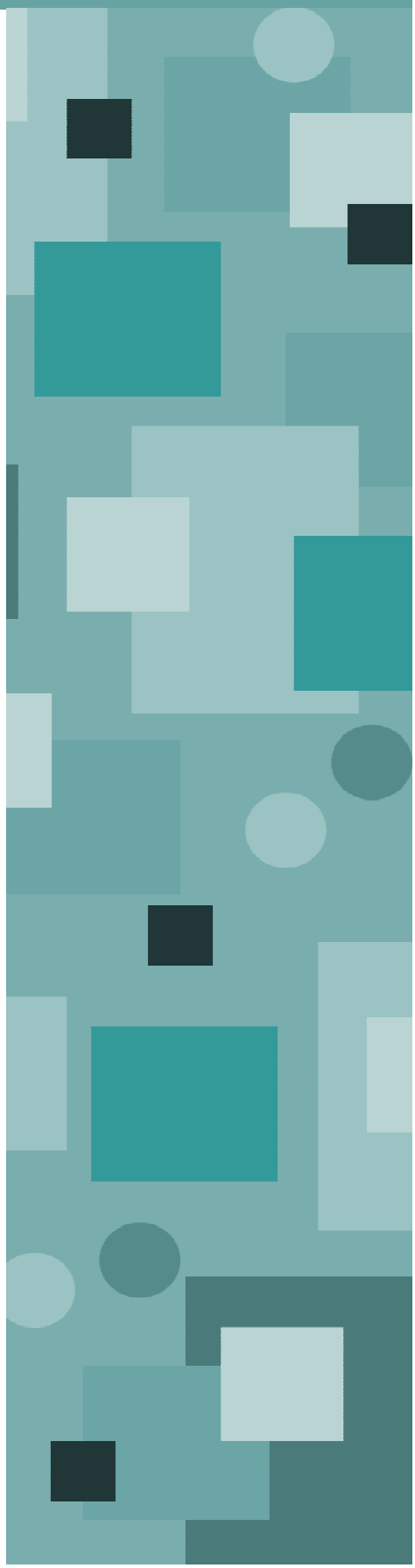
This report presents important information for increasing understanding about the sexuality and sexual health of Canadian youth who were enrolled in Grades 7, 9, and 11 (generally ages 12, 14, and 16). Eleven thousand and eighty-two (11,082) students participated in the study; this can be considered to be a very large sample of Canadian students, but is not completely representative of Canadian youth in all jurisdictions. This limitation should be considered when interpreting the findings.

This final chapter highlights the conceptual framework and summarizes the findings of the three major components and related subcategories that were found to have significant influence. Also included in this discussion, where appropriate, is a comparison of the current findings with those from the 1989 Canada Youth and AIDS Study (CYAS). The conclusion section describes both encouraging aspects and worrisome aspects with examples from the data. Implications for policy, education, and future research conclude the chapter.

Conceptual Framework

A framework that included psycho-social-environmental health determinants, sexuality variables, and sexual health concepts guided this study. Subcategories for the components were developed and items about the subcategories were presented in the research questionnaires. For example, psycho-social-environmental health determinants were determined through questions and/or statements about the following: sociodemographic determinants, school experiences, coping skills and self-esteem, risk behaviours, health risk behaviours, family structure and relationships, peers, and health and education services. Sexuality subcategories included relationships/dating, sexual experiences, and HIV/STI/pregnancy protection. Finally, sexual health was examined through queries about interpersonal relationships, physical well-being, psychological well-being, and resources.

This study reveals that the relationships amongst these major components are interdependent and complex. The following sections highlight the important findings related to each component through a discussion of the relevant related subcategory data.



Health Determinants

The determinants of sexual health assessed in this study included the sociodemographic variables that are linked to sexual and risk behaviours as precursors or enablers of sexual health. Consequently, they are potentially connected to the sexual health of the Canadian adolescent population. The variables comprised the following: sociodemographic determinants, school experiences, coping skills and self-esteem, risk behaviours, health risk behaviours, family structure and relationships, peers, and health and education services. In summary, in relation to health risk behaviours, the relatively rare use of more harmful, addictive drugs among youth and the generally supportive nature of their peers may predict more positive sexual health outcomes for youth in the future. However, the possibility of some very negative sexual health outcomes is suggested by such risk behaviours as the prevalence of alcohol use before having sex and repeated drunkenness, in combination with the reported lack of use of health services to acquire information about STI/HIV/AIDS prevention.

Sexuality and Sexual Health

This study measured students' sexuality and sexual health through inquiry about their knowledge, attitudes, and behaviours. To assess knowledge, the students were asked to respond to statements about transmission, diagnosis, and treatment of HIV/AIDS and other STIs. Their sexual attitudes were examined to gain insight into why they behave in the way that they do. In addition, specific sexual and related behaviours were queried in detail. Because sexual health behaviour needs to be understood within the context of dating and romantic relationships, this context was also studied. The relationship between sexual health determinants and sexual activity was investigated. In particular, parent relationships, disability, school attachment, peer influence, self-esteem, and alcohol, drugs, and condom use were examined to determine whether there were relationships between these determinants and youth sexual activity.

In summary, the students surveyed in the 1989 CYAS were generally more knowledgeable about HIV/AIDS transmission and protection than were the youth who participated in the 2002 study. With respect to diagnosis and treatment, there was very little improvement in knowledge results since 1989. Students in this study who reported the school as a main source of information about HIV/AIDS were slightly more likely to have high knowledge scores, although Grade 7 girls and Grade 11 boys did not show this result. Student responses across the three grades, especially those of the older adolescents, indicated an increase in respect, compared to the 1989 results, for the basic human rights of those living with HIV/AIDS. However, there has been a decrease in youth's feelings of susceptibility to HIV/AIDS since 1989.

The proportions of students in Grades 9 and 11 engaging in deep open-mouth kissing or touching above and below the waist have remained quite consistent since 1989. However, the proportion of youth who have had sexual intercourse has decreased, especially for boys in both grades. Moreover, those students who are having sex tend to be sexually active more frequently. That is, it is more common for sexually active students in 2002 to report having intercourse "often" than in 1989, across both grades and genders (Figures 3D.10 to 3D.13).

Overall, the most common reasons cited by both boys and girls in this study for not having sex were that they were "not ready" or "have not had the opportunity" or "haven't met the right person." As well, only a few students in this study indicated that they were not having sexual intercourse because of the potential negative health outcomes of sex, such as "fear of pregnancy," "fear of contracting HIV/AIDS," or "fear of other STIs."

A quarter of students in Grades 9 and a third of those in Grade 11 reported using both condoms and birth control pills the last time they had sexual intercourse. Very few students reported that they did not use condoms because they did not know how to use them. In general, heterosexual youth reported more positive attitudes

toward condom use than did homosexual or bisexual students. In particular, only homosexual or bisexual Grade 11 male students indicated less intention to use condoms.

Relationships for Grade 11 students appeared to be the most enduring, although slightly more boys than girls in Grade 7 reported having a steady boyfriend/girlfriend. Relationship dynamics related to making decisions about what to do and who pays change between Grade 7 and 11. For example, boys indicated that they were more involved in making decisions about how to spend time, and about one third of the girls reported that their boyfriends usually paid for expenses. Finally, most students agreed that it is acceptable for a girl to take an active role in the initiation of dating.

The relationship between seven health determinants (including parent relationships; disability; school attachment; peer influence; self-esteem; sexual activity; and alcohol, drugs and condom use) on youth sexual activity was examined. Determinants that appeared to influence the decision to engage in sexual intercourse included the following: younger students' relationship with parents, diagnosis of a disability or chronic illness, poor school attachment, and membership in a sexually active peer group. There were inconsistent findings related to self-esteem and sexual activity.

The students, particularly girls, who engaged in risky sexual behaviours had low self-esteem, were often sorry for the things they did, would change how they look if they could, and, similar to boys, were more likely to spend time partying. Among the Grade 9 students, the risk takers had slightly higher knowledge scores.

B. Conclusions

Encouraging Aspects

The findings from a number of health determinants provided encouraging information.

- For example, in relation to sociodemographic variables, it is encouraging that most students who participated in the study perceived their families as possessing average wealth (Figure 2B.1). As well, the health risk behaviour evidence is promising. That is, the students reported relatively rare use of more harmful, addictive drugs.

- In relation to family structure and relationships, it is encouraging that over 75% of the students indicated that they have a "happy home life," although there was a moderate decline from Grade 7 to 11 (Figure 2G.2). The relationship with one's parents is most strongly associated with sexual behaviour especially among younger students (Figures 3G.1 to 3G.3).

- Some of the findings related to health and education services are encouraging. That is, 31% of the Grade 11 boys in the study reported that they would first go to their family doctor if they thought that they had an STI. Also encouraging was that 51% of males and 41% of females in Grade 9 reported that the school was their main source of information about human sexuality/puberty/birth control (Figure 2I.4). Further, 67% of males and 58% of females in Grade 11 students reported that the school was their main source of information about HIV/AIDS (Figure 2I.5). These students are slightly more likely to have high knowledge scores, although Grade 7 girls and Grade 11 boys did not show this result (Figures 3B.18 to 3B.20). Among Grade 9 and 11 students, those who spent more time learning about HIV/AIDS are more likely to have obtained high knowledge scores (Figures 3B.27 to 3B.29).

The sexuality component was operationalized by asking students about their sexuality knowledge, attitudes about sexuality and sexually related illnesses, sexual experiences, dating relationships, and protective actions against sexually transmitted infections and unwanted pregnancy.

The students' level of knowledge was measured by their responses to a set of statements that included transmission and protection as well as diagnosis and treatment items. Grade 7 students were asked to respond to 8 statements, whereas Grade 9 and 11 students responded to 18 statements. Approximately 50% of the Grade 7 students responded to at least half of the statements correctly. More than 60% of the Grade 9 students responded correctly to at least 8 statements, whereas 87% of the Grade 11 students responded correctly (Figures 3B.19 and 3B.20).

- Students were requested to report on the type and frequency of their sexual behaviour or activity. The results are encouraging. Although students engaged in deep (open-mouth) kissing, touching above and below the waist, oral sex, and sexual intercourse, the proportions of students engaging in these activities has remained quite consistent since 1989 (Figures 3D.6 to 3D.8). However, slightly fewer students are having sexual intercourse, but those who are, tend to be sexually active more frequently (Figures 3D.10 to 3D.13). The three most common reasons cited for not having intercourse were "not ready", "have not had the opportunity", and "haven't met the right person" (Figures 3D.14 and 3D.15). The two most common reasons cited by those who are sexually active for having intercourse were "love of the person" and "curiosity/experimentation" (Figures 3D.16 and 3D.17), which is an encouraging finding.

- The data on HIV/AIDS and STIs protection yielded encouraging results. For example, very few students admitted that they did not use a condom because they did not know how (Figures 3E.3 and 3E.4). In addition, between 25% of Grade 9 students and 30% of Grade 11 students reported using both the birth control pill and a condom the last time they had sexual intercourse (Figures 3E.1 and 3E.2).

- Close to 90% of Grade 11 boys and girls in relationships reported usually being comfortable with the physical contact with their partners (Figure 3F.9). This implies that physical contact is with the consent of both partners, which is promising for the development of future relationships.

- The School Attachment Scale, based on three items as outlined on page 111, was used to score student responses and categorize students as having poor, average, or good attachment to school. Those students, both boys and girls, at all three grade levels who reported good school attachment reported having sexual intercourse fewer times than did those who had poor school attachment (Figures 3G.9 to 3G.12).

Worrisome Aspects

Although the overall results from this study are encouraging, there are some findings that are worrisome. These distressing examples are identified and then discussed.

- A majority of both Grade 7 girls and boys indicated that teachers are interested in them as persons, and although a majority of Grade 9 and 11 students responded similarly, the percentages were, nonetheless, lower in these higher grades.

- Another health determinant included coping skills and self-esteem, the findings of which seem to be discouraging because confidence levels appear to have dropped since 1989 (Figure 2D.5). In relation to risk behaviours, the amount of bullying behaviour is distressing. That is, between one fifth and one third

of all the students experienced being made fun of for the way that they look or talk, and/or they experienced sexual jokes, comments, or gestures at least once over a two-month period (Figures 2E.1 to 2E.4).

- Health risk behaviours are revealed through the prevalence of alcohol use and repeated drunkenness that was reported (Figure 2F.4), and these findings create concern. In addition, one-fifth of Grade 9 and one-third of Grade11 students reported that more than half of their close friends use drugs to get stoned (Figure 2H.5).

- The evidence about peers presented some worrisome information. That is, significant numbers of students identified partying and engaging in rebellious activities as ways that persons their age become popular at school (Figures 2H.1 and 2H.2).

- Some of the findings related to the services of health and education raise concern. That is, 32% of the Grade 11 girls in the study reported that they would first go to their friends if they thought that they had a sexually transmitted disease, and only 17% said that they would first go to their family doctor (Figure 2I.1). Fewer than 3% of girls and 1% of boys visited doctors for testing/treatment of sexually transmitted infections in the past 12 months. Furthermore, 12% of boys and 16% of girls in Grade 11 did not know where young people would most likely go to get condoms (Figure 2I.3). In relation to education, it is very alarming that 27% of Grade 7 and 14% of Grade 9 and 11 students had not received any instruction about HIV/AIDS over the last two years (Figure 2I.8). Equally disturbing is that 17% of Grade 7 students, 8% of Grade 9 students, and 11% of Grade 11 students reported that they had not received any instruction about human sexuality/puberty/birth control over the past two years (Figure 2I.6). Some sexuality-related issues are cause for concern.

- In relation to specific knowledge items, less than half, or 40%, of the Grade 9 students and slightly more than half, or 53%, of the Grade 11 students knew that Vaseline is not a good lubricant to use with condoms. As well, similar proportions knew that men who have unprotected sex with men increase the risk of getting HIV/AIDS. Furthermore, a quarter of the Grade 9 and a third of the Grade 11 students knew that the risk of HIV infection is not higher with vaginal sex than with anal sex. Equally worrisome is that some students had the misconception that there is a vaccine available to prevent HIV/AIDS (Figures 3B.1 and 3B.2), and approximately 66% of Grade 7 students (Figure 3B.7) and 50% of Grade 9 students did not know that there is no cure for HIV/AIDS (Figure 3B.3). It is distressing that students who participated in this study have generally lower levels of knowledge than do those who took part in the 1989 study. Similarly, those students who cite television/movies or the Internet as their main source of HIV/AIDS information are likely to have low knowledge scores (Figures 3B.23 and 3B.25). Among Grade 7 students, a greater number of hours of instruction do not appear to influence knowledge scores (Figure 3B.27).

- As noted previously, students' attitudes were measured by their responses to a set of statements. Between 45% and 50% of students in all three grades reported that they worried about contracting an STI or HIV/AIDS (Table 3C.1), which is a decrease in the feelings of susceptibility since 1989 (Figure 3C.1).

- Few students who are not yet sexually active choose "fear of pregnancy" or "fear of HIV/AIDS and other STIs" as reasons for their choices. This is worrisome in that deleterious outcomes have a minimal impact on decisions to become sexually active.

- Having more partners increases the likelihood of pregnancy among girls who are sexually active, and 46% of girls, excluding Grade 7 girls, who have been pregnant, reported having four or more sexual partners (Figure 3E.7). Similarly, amongst both girls and boys, those who had multiple partners reported having an STI (Figure 3E.9). Twenty-two per cent (22%) of girls and 24% of boys in Grade 9 and 16% of males and females in Grade 11 reported that they would be too embarrassed to see a doctor or nurse if they had an STI (Figure 3E.11). However, a large majority, from 77% to 88%, of both girls and boys in both Grades 9 and 11 would tell their partners (Figure 3E.12).

- It is distressing that in all three grades, students who report a learning disability are more likely to be sexually active or engage in preliminary sexual activity. Overall, disability and chronic illness may predispose students to greater sexual health risks (Figures 3G.6 to 3G.8).

C. Implications

Introduction

Adolescents require a strong foundation of information, education, and supports to develop and continue to develop into healthy sexual people as they journey into adulthood. Sexuality and sexual health are complex concepts to define and equally complicated to operationalize.

However, this study reports important conclusions including both the encouraging and distressing aspects gleaned from the data, that is; what is working and what is not working. This information formed the implications or most promising practices for policy makers and implementers, educators and educational programs or interventions, medical professionals and related personnel, and future research.

Policy Makers and Implementers

This study strongly suggests that adolescent sexual health is an indispensable component of health development and thus an important investment for Canada. Consequently, policy makers and implementers across Canada within local, regional, provincial, territorial and national governments need to take the lead in ensuring that Canadian adolescents have access to education, information, services, and communities that will enable them to develop into sexually healthy adults. For example, the federal ministry of health and the Council of Ministers of Education (CMEC) could provide an outline of knowledge, skills, and attributes that are the standard criteria for each grade level from kindergarten to Grade 12. This is similar to what CMEC has done in science and would guide curriculum and instruction as well as teacher preservice education, inservice or professional development, and parent education.

Educators and Educational Programs or Interventions

This study has implications for educators and educational programming, whether it is delivered in schools or agencies within the community, or in both sites. Educators and educational initiatives need to address and/or continue to address the following concerns:

- the comprehensive framework of sexual health, including the health determinants, knowledge, attitudes, and behaviours; as well as a focus on the quality of life provided by healthy sexuality;

- content that extends beyond the basics into issues; for example, the reasons for using a condom are important, but a discussion about why some adolescents will not wear a condom is equally relevant;

- an awareness and understanding of personal sexual attitudes because beliefs sometimes influence behaviour more than does knowledge;
- a respect for and consideration of parents' knowledge, attitudes, and beliefs; and
- a respect for and consideration of those infected with or living with HIV/AIDS.

Medical Professionals and Related Personnel

The findings in this study affect the medical profession, as it is vital to health services, which are resources that adolescents need to access. Doctors, nurses and clinic personnel need to address and/or continue to address the following concerns:

- the information that adolescents are being given on HIV/AIDS, STIs and human sexuality requires an examination to determine if it age appropriate, comprehensive, and non-judgmental;
- the approachability of the health care professionals who are offering services to adolescents;
- the accessibility of the health care site including its location, parking facilities, hours of operation and the cost for services; and
- the level of confidentiality.

Future Research

Finally, there is a need for research to be conducted with the following adolescent populations to provide detailed information regarding the most appropriate content for, and delivery of, sexuality education programs for the groups:

- homosexual and bisexual youth
- youth who are unsure of their sexual orientation
- youth with learning disabilities and mobility impairments
- youth with chronic illnesses
- youth who are abstainers from sexual activity, and
- youth who are sexually active.