



United Nations Association in Canada
Association canadienne pour les Nations Unies

(Mis)Informed Canadian Youth: Sexual Health Survey Report

A Report on a Survey of University Students

By:

Kathryn White, Katharine Kelly, Jason Oliver, Mara Brotman

March 2007

The United Nations Association in Canada (UNA-Canada) is a registered charity, founded in 1946, with a mandate to educate and engage Canadians in support for, and understanding of the United Nations and its issues which have a global impact. A Canadian NGO, UNA-Canada has a wide variety of programmes and activities through which to build Canadian capacity to identify and address emerging international issues on a national basis and to provide a foresight and policy research capacity underpinning this innovative programming. With a professional, national secretariat in Ottawa and a regional office in Vancouver, UNA-Canada derives much of its strength and community outreach from its network of seventeen volunteer-based branches and contact points. Working with the private and public sectors, academia, community leaders, like-minded NGOs as well as multilateral organizations, UNA-Canada provides a place for Canadians to offer their made-in-Canada solutions to challenges confronting the global commons and to develop skills in living together in peace and prosperity. Key programmes target Canadian youth, human rights, sustainable development, environment, peacebuilding and corporate social responsibility. For more information, and for a sense of the full scope of our work, we invite you to visit our website at www.unac.org.

Authors' Note: The authors and UNA-Canada would like to thank the Public Health Agency of Canada (PHAC) for support of the research and development of this paper. The opinions expressed herein are those of the authors and not of PHAC, nor of the United Nations Association in Canada.

(Mis) Informed Canadian Youth: Sexual Health Survey Report

A Report on a Survey of University Students

Acknowledgements

Survey research is always dependent on the good will and engagement of its participants. In our case, this was a fairly ‘invasive’ survey. We are deeply grateful for those participants at the Canadian International Model UN (CANIMUN) 2007 for talking part in increasing our understanding and knowledge in prevention HIV transmission.

This paper was undertaken by the United Nations Association in Canada as part of a partnership with the Public Health Agency of Canada (PHAC), and in conjunction with two important UNA-Canada projects - its HIV and AIDS project *Its Time to Act: Mobilizing Young Canadians around HIV and AIDS* and CANIMUN. We would like to thank Katharine Kelly, of Carleton University, for her skill in compiling and analysing the data that emerged from a survey of a special group of university students. Katharine has provided guidance on methods to the research teams at UNA-Canada over the past two years.

UNA-Canada would like to gratefully acknowledge the Public Health Agency of Canada for their support for our innovative work around HIV and AIDS and youth.

I would also like to commend both, Jason Oliver and Mara Brotman, key team members for *Its Time to Act: Mobilizing Young Canadians around HIV and AIDS* and developing this report. Special thanks to Joan Broughton, Public Information Officer at UNA-Canada for her editorial assistance. Thank you, finally, Jennifer Baldwin, who provided research support to the programme and to the authors.

Kathryn White
Executive Director
UNA-Canada

Executive Summary

The United Nations Association in Canada (UNA-Canada), through its HIV and AIDS project *Its Time to Act: Mobilizing Young Canadians around HIV/AIDS*, surveyed a select group of privileged Canadian youth who could be described as among the best and brightest. The purpose of the survey was to explore their knowledge and understanding of their own sexual health, general knowledge of HIV and AIDS prevention, and the importance of HIV and AIDS related issues in both domestic and international policy.

Each year UNA-Canada brings together university students from across Canada to the national capital for the Canadian International Model United Nations Conference (CANIMUN). The goal of the survey was to build on the opportunity of congregating approximately 500 Canadian university students from all regions of the country - to explore the knowledge and perceptions of those who might be considered among the best-informed.

Overall there was a 24.4% response rate reflecting the highly personal nature of the Survey. 68.5% of respondents were female, 31.5% were male.

The results of this survey are indicative only. The sample as described above is particular (high demographic scholars), however the findings are important within this context.

The Findings

Prevention and Protection

Survey data indicates serious knowledge gaps with respect to HIV transmission. Almost one-third (31%) of respondents identify the birth control pill as protecting against HIV exposure. Younger respondents are more likely to identify the pill as preventing HIV transmission (44%), compared to 21% of older students. This finding is significant in that it highlights a dangerous confusion among youth, conflating HIV prevention with contraception.

86.7% of youth understand that condoms are an effective means of HIV protection. 43.8% identify abstinence as an effective means of prevention. Newer safer sex innovations, like the female condom and the dental dam, rank lower as effective preventative measures with 13.3% and 12.4% respectively.

Older youth are more likely than younger youth to cite abstinence as a way of preventing HIV infection (63.8 % vs 25.0%).

Youth who report being sexually active are more likely to report condom use as an effective tool to prevent against HIV than youth who are not sexually active (93.1% versus 72.7%). At the same time, those that are not sexually active are twice as likely to rate abstinence as an effective prevention measure (60.6% to 36.1%).

Youth who self-identify as ‘high socio-economic status’ are more likely (35.3% compared to just 9% of general respondents) to report they would, or have used withdrawal before ejaculation to prevent HIV transmission.

Sources of Information

When asked to indicate all of the sources from which they receive information about their sexual health, the media is the most common source of information listed by 58.6% of respondents. Other high sources of information are family doctors (55.6%), the internet (54.5%) and friends (54.5%).

Importantly in terms of health knowledge, most respondents felt they are currently well informed about their sexual health, with 88.6% answering yes and 2.9% indicating no. This conflicts with their actual knowledge base, which is significantly lower in a number of areas.

A majority of youth found that their knowledge increased during their four years at university. Sixty-eight percent (68.6%) indicated they felt well informed about sexual health on entering university, in contrast to 88.6% feeling presently well informed.

Finally, this survey exposed a gaping need for broad HIV prevention and sexual health education and outreach – before young people are sexually active. Additionally, public health practitioners and policy makers and other stakeholders must address the risks of a generation who believe the internet provides credible information to them. (In this survey 73% of males cited the internet as their source for sexual health information.)

Introduction

Youth and HIV

Researching awareness and practices around HIV/AIDS is, generally, of critical importance. Researching youth is particularly important. In 2006, the Public Health Agency of Canada noted that:

“At a global level, youth have been greatly affected by the HIV/AIDS epidemic; in that an estimated 10 million people aged 15 to 24 years are now living with HIV. Half of all new infections worldwide are occurring among young people.” (2006, PHAC EPI Report).

While in June 1999, Health Canada noted:

Young people are key to the future course of the HIV/AIDS epidemic. The behaviours they adopt now and those they maintain throughout their lives will determine the course of the epidemic for decades to come. (http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/1999/1999_83bk2_e.html).

One key to adopting behaviours that will reduce the risk of contracting and spreading HIV/AIDS is to ensure that young people know what behaviour is high risk, know what methods to use to reduce their risk have access to information and are taking care of their sexual health. Thus, prevention efforts need to continue to assess awareness and to keep youth well informed about how HIV is transmitted. To this end, a range of resources have been developed to educate young people about HIV/AIDS. But

[w]hile this information is necessary, it is not sufficient to protect youth from infection. Young people also require comprehensive sexuality education that includes an exploration of values, the development of skills and the provision of a supportive environment. Parents, schools, public health and the professional community have an important role to play in relaying this information to young people(http://www.phac-aspc.gc.ca/aids-sida/publication/reports/report05/5_e.html).

Thus, access to knowledge needs to lead to the development of skills and requires a supportive environment to be effective.

In considering HIV/AIDS within a community context, it has been established that vulnerability to the virus, transmission, effective responses, prevention messages and needs vary among different populations. This has led to a shift to a population-specific approach. This approach is designed to provide

“evidence-based, culturally appropriate responses that are better able to address the realities that contribute to infection and poor health outcomes for the target groups. Population-specific approaches also allow people at risk of infection and those living with HIV/AIDS to directly shape policies and programmes that affect them (http://www.phac-aspc.gc.ca/aids-sida/publication/reports/report05/5_e.html)”

Youth are a population of particular interest. Though youth represent a small proportion of reported HIV and AIDS cases in Canada (http://www.phac-aspc.gc.ca/aids-sida/populations_e.html#youth; Public Health Agency of Canada 2006a) they are also a group that engages in risk behaviours. High rates of rates of chlamydia and gonorrhoea among those aged 15 to 24 years indicate that many youth are engaging in high risk sexual behaviour (Public Health Agency of Canada 2004, *ibid.*). Further, research indicates some worrisome misconceptions among young people, including beliefs that AIDS can be cured if treated early or prevented (Public Health Agency of Canada 2006b).

While youth are viewed as a single group, they cover a wide age-range and they are also diverse in a variety of other ways. There are cultural and residential variations (e.g., urban/rural; part of the country) among youth. In addition, there are differences in education and in their ability to be effective consumers of educational tools and information. This study considers the awareness of risk and preventative measures on HIV/AIDS for elite youth. Elite youth are defined as the top 25% of the youth population – these are youth who are enrolled in universities across the country. These young people are not typical Canadian youth – they represent a relatively privileged group of young people. Canadian research indicates that youth in Canadian Universities are more likely to be from urban areas, to come from wealthier families and to have parents with higher levels of education (Canadian Council on Learning). They are more likely to have positive records of school achievement, including not having ever failed a grade and not having learning disabilities (Canadian Council on Learning).

The data for this study is part of the *It's Time to ACT Project: Mobilizing Young Canadians around HIV and AIDS* an initiative of the United Nations Association in Canada (UNA-Canada) with support from the Public Health Agency of Canada (PHAC). The project's goal is to empower youth towards making informed decisions around HIV and AIDS. Participants for this survey were selected from the Canadian International Model United Nations Conference (CANIMUN). For the past five years, facilitated by the United Nations Association in Canada (UNA-Canada), CANIMUN has accepted delegations of University students from across Canada, as well as a few American and International academic institutions to participate in a four day Model United Nations session. Youth that attend CANIMUN are typically 2nd to 4th year University students from Model United Nations and/or International Affairs clubs across Canada. Selection is based on academic merit, analytical skills and commitment to international relations. Past research has shown that the majority of CANIMUN delegates and Model United Nations participants go on to Master's Degree programmes in International Relations and Law School. CANIMUN delegates are often establishing networks in these fields. Further, previous UNA-Canada research of participants indicates that the majority of CANIMUN delegates identify themselves as being of middle to high socio-economic status. Thus they are indeed elite Canadian youth.

Research Design and Sample

The research used a self-administered questionnaire distributed with an evaluation survey for the CANIMUN participants. The research was designed to explore four main areas related to HIV/AIDS awareness and personal practices:

- Concern about HIV/AIDS
- Knowledge about how the virus is transmitted through sexual activity
- How to protect yourself and sexual partners from virus transmission
- Seeking treatment for and Information about sexual health issues

Within each of these areas, the design allowed us to explore whether there were variations by gender, age, family income and sexual activity. While a number of other demographic variables were collected and are reported in the section on demographics, these were not used in the analysis due to there being too few cases. For the univariate analysis the original coding categories are presented. For the bivariate analysis some variables needed to be recoded in order to assess whether there were any statistically significant results.

Survey Design

The Canadian Public Health Agency campaign (<http://www.campaign.cpha.ca/hiv101.htm>) provides detailed information on how the virus can get into your bloodstream. The current survey included the sexual activities identified in this campaign in the survey to assess the knowledge levels of these young people. The activities include:

- Having vaginal sex without using a condom,
- Having anal sex without using a condom,
- Having oral sex without using a condom or a dental dam (giving and receiving),
and
- Sharing sex toys.

We also include a number of safe activities to further assess respondents' level of knowledge about safe practices. These included

- Kissing,
and
- Naked Body contact without penetration.

We further explored respondents' knowledge by asking them about the methods available to prevent AIDS. We explored both effective and ineffective methods of preventing HIV transmission. Safe sex practices included:

- Condoms,
- Dental Dams,
- Female Condoms,
and
- Abstinence.

Non-protective practices include:

- Withdrawal before ejaculation,
- Birth Control Pills,
- Diaphragms,
and
- Spermicides.

It is important for young people to seek treatment for their sexual health. We assessed a number of dimensions of this. We asked respondents if they ever, and how often they visited their health care professional for information or treatment related to sexual health. Further, we asked them what their source was of information on sexual health and to assess how informed they felt they were about sexual health. We also explored whether they had been tested for HIV and, if they had not been tested, why they had not been tested.

Another issue we sought to understand was how important an issue HIV/AIDS was for our respondents. We explored a number of dimensions including – whether it was a concern for them individually, how important a concern it was internationally and nationally, compared to other issues explored at the Model U.N. Finally we explored whether they felt that education resources for College/University youth would be useful.

Data Analysis

Data analysis used univariate frequency reports and bivariate cross tabulations. Cross tabulations provide information on the distribution of cases on the two variables in question. The method does not assume a normal distribution and it is therefore best used with a random population. It is, however, a relatively robust technique. In this study we relied on a comparison of the broader population characteristics to determine that our sample was indeed drawn from an elite population.

Three statistics were produced with the cross tabulations – chi square, the contingency coefficient (C) and eta. Chi square assesses whether the distribution of cases within the cells of a table is what would be expected or is significantly different from what would be expected, given the column and row totals. It measures only that there is a deviation from what would be expected. C and eta measure the strength of association. A simple reading of them is that they represent the proportion of the variance in the dependent variable and is explained by the independent variables. C is used for nominal by nominal variable comparisons and eta for nominal by interval area comparisons. Nominal variable are variables where the numbers are used to name the variable, and interval variables is where the differences between the variables are ranked and where the distances are measured.

Sample Overview

This year there were 462 attendees to CANIMUN. As in the past, attendees were asked to complete a Participant Survey and a smaller Sexual Health survey was attached to this larger questionnaire. At past sessions approximately 40% of attendees responded to the CANIMUN survey. This would yield an expected number of questionnaires of approximately 184. There were 112 Sexual Health questionnaires returned; of these there were 12 where the respondents chose to answer either none of the sexual health questions or not the questions on safe sex practices and risky sexual behaviour. In addition, 22 of the sexual health surveys have no demographic information attached. This is a relatively low response rate overall (24.4%) and a response rate compared to the usual response to the CANIMUN survey of 60.9%, which is low but more acceptable than a 24.4% response rate.

There are a number of reasons why the response rate was low. First, the topic of the questionnaire is extremely sensitive. Bradburn & Seymour (1980: 85 – Quoted in Newman 2003: 264) state that questions about sexual explicit subject are viewed as threatening by about 50% of potential respondents. The topic alone would have limited response rates. Further, there appear to be question order effects. The questionnaire begins with the most explicit questions, an approach that is not recommended as it tends to reduce response rates overall. While the survey was administered in conjunction with an evaluation of the Model UN experience, which should have helped to reduce question order effects, it is clear that some participants answered the more threatening Sexual History Survey first thereby eliminating any blunting of question effects. Further, within the survey the questions could have been reordered to put less threatening questions earlier in the survey.

Findings

(a) Demographics:

The demographic information on the respondents is presented in Tables 1 through 9. The demographic data confirm, in part, that the youth in the survey are at the upper end of the economic scale. Ninety percent of them identify themselves as being from middle or upper class families (see Table 8). In addition, as with the Canadian University population generally, there are few aboriginal youth and few new Canadians among the respondents (see Table 7 and Table 6, respectively). The majority of the respondents were women 68.5% (see Table 1). This is higher than the proportion of women in Canadian Universities but probably also reflects the topic of the conference and, potentially, women being more willing to complete the assessment questionnaires. Youth ranged in age from 17 to 28 (see Table 3). The majority of the respondents, almost 50%, are between the ages of 20 and 22 years. Students' year of study ranged from 14 respondents who were attending CEGEP to one who had graduated with an Honours Degree and one in an MA programme (see Table 9). The respondents do appear to be elite Canadian youth.

(b) Core Research Questions:

In the following sections we present the data on the core research questions outlined above. Discussion of the findings is included in the appropriate sections. These are further developed in the Discussion/Conclusions section. Each section begins with a univariate analysis and then presents findings from bivariate tables. For the tabular analysis the independent variables had to be recoded to deal with problems related to small cell size. The recoded variables can be found in Appendix C.

1. Is HIV/AIDS a Concern for Elite Youth?

Three questions asked about how concerned respondent were about HIV/AIDS – they asked about whether the respondents were personally concerned about HIV/AIDS when engaging in sexual activity, how important the issue of HIV/AIDS is nationally and how important it is internationally. Respondents were asked to rank on a scale of 1 to 6, with 1 being the most important and 6 being the least important, how important HIV/AIDS was as a national and an international issue. Responses ranged widely. Respondents were asked to do the ranking with respect to five other issues. For the question on how important HIV/AIDS was nationally the comparison topics were Aboriginal/Indigenous issues, Access to Healthcare, Climate Change, Poverty and Access to Education. For how important HIV/AIDS was internationally the comparison issues were: Disarmament/Child Soldiers, Eradication of Poverty, Access to Water as a Human Right, Global Terrorism/Security, and Climate Change. The topics in the question of international importance were issued raised during the course of the Model UN sessions.

Most respondents (59.8%) indicated that HIV/AIDS was a concern for them when they engaged in sexual activity (see Table 10). A further 7.5% (n=9) indicated that they were somewhat concerned about HIV/AIDS when engaging in sexual activity. One third of the respondents (32.7%) indicated they were not concerned about HIV/AIDS when engaging in sexual activity.

When asked to rank how important HIV/AIDS was as an issue nationally in comparison to five other issues, HIV/AIDS had a mean score of 4.00 on a six-point scale, with six being the least important (see Table 11). Access to health care, education, climate change and poverty were (based on the mean scores) viewed as more important issues. Only Aboriginal Issues were ranked lower.

Table 13 shows the mean rankings for HIV/AIDS as an international concern relative to other concerns that formed part of the CANIMUN event. HIV/AIDS has a mean ranking of 3.4 out of 6, indicating that respondents viewed it as slightly more important internationally than as a national issue.

The bivariate analysis examined what factors predicted concern about HIV/AIDS as a personal, national and international issue. The predictor variables were: whether or not the respondent was sexually active (Table 14), gender (table 1), age (Table 2), and family income (Table 8). In order to do the cross-tabulations the variables had to be recoded to deal with cell sizes that were too small. Sexually active was recoded so that the no and no, not yet were one category. Age had to be recoded into two categories, 19 and under and 20 and

over. Income was recoded but, even with the recode we were unable to resolve the cell size problem and so this variable was dropped out of the analysis. The ranking questions were recoded into three categories: 1 & 2, 3 & 4, and 5 & 6.

The results of the cross-tabulations indicated that personal concern about HIV/AIDS was unrelated to gender, age and sexual activity. Ratings of the importance of HIV/AIDS as a national and international issue did not vary by age or sexual activity. However, there was a positive relationship by gender with women (see Tables 15 and 16) rating HIV/AIDS as a significantly more important issue both nationally ($p < .05$) and internationally ($p < .10$). The relationships are weak, indicating that gender is a weak predictor of concern about HIV/AIDS.

2. Do they know how the virus can get into your blood stream?

Respondents were asked about how aware they were of safe sex practices with respect to HIV/AIDS. They were asked to indicate whether the practices had a high, low or no risk (see Table 17). There was some variation in how the responses were answered, with some respondents indicating how high the risk was and others simply indicating which practices they thought were risky. Respondents were asked about six high risk activities – Giving and Receiving Oral Sex, Anal Sex, Vaginal Sex, Sharing Sex Toys and Rimming. Almost ninety percent (88.9%) regarded vaginal sex as high risk, 79.6% indicated that oral sex was high risk. Sharing sex toys was viewed as high risk by 54.2% and 47.5% thought that Rimming was a high risk activity. There was considerable confusion around oral sex with 40.4% reporting that giving oral sex was high risk but only 26.3% believing that receiving oral sex was high risk. There are clearly serious gaps in the knowledge that respondents have with respect to high risk sexual activity.

Cross-tabulations sought to ascertain whether awareness of risk varied by age, gender, being sexually active, concern about HIV/AIDS, having been tested for HIV/AIDS and Family Income. Again, to address issues related to cell size, most variables were recoded. Age was recoded to 19 and under and 20 and older; being sexually active was recoded to yes and no, being tested was coded as yes or no. The Risk Assessments were also recoded to yes and no. The cross-tabulations provided little in the way of insights. There were not statistically significant relationships between and of the independent variables of giving and receiving oral sex, anal sex, and sharing sex toys. There was a correlation between gender and knowing the risk of vaginal sex but the cell counts are too small for the results to be reliable. The data indicate that knowledge of risk is not related to whether or not young people are sexually active and the knowledge, or a lack of it, is distributed across income categories and between the genders.

The survey also included two activities that were not risky – Kissing and Bodily contact while Naked. For these two activities there were two statistically significant relationships. Younger respondents were more likely to identify bodily contact while naked as dangerous (see Table 18). The relationship was statistically significant at the .025 level and the relationship was weak ($\eta = .265$). Women were also more likely to identify bodily contact while naked as a risky behaviour ($p < .05$) and again the relationship is weak ($\eta = .227$).

Understanding the meanings of these findings is difficult. Data on awareness and attitudes among various groups are critical for determining whether the awareness level of this group is higher or lower than that of the “average” Canadian. However, as the UN notes, “[d]ata on sexual behaviour and AIDS-related knowledge and attitudes are sparse and difficult to compare.

(http://www.un.org/esa/population/publications/AIDS_awareness/AIDS_es_English.pdf.) In general though, the levels of awareness of risk – especially around oral sex – are low and suggest that young people are either not having access to, or are not retaining information on the risks in these areas.

3. How can you protect yourself and your partner(s)?

In addition to knowing what behaviours put young people at risk for HIV infection or transmission, it is important for young people to know how to prevent exposure to HIV during sexual relations. Respondents were asked to identify practices they had used or would use to prevent exposure to HIV/AIDS during Sex. The available responses included both things that would and would not prevent HIV exposure. Results for this are presented in Table 20. Note that while condoms are well known as a means of protecting against HIV – identified by 86.7% of respondents – other methods are not well recognized. This includes the female condom which was identified by only 13.3% of participants, and dental dams that were identified by only 12.4% of participants. Almost half (43.8%) of the respondents identified abstinence as an available method. Given that the question asked what respondents would or had used, it is likely that they recognize abstinence as a method for prevention of HIV transmission, and it is likely that the low acknowledgement of this technique reflects more their unwillingness to use the technique than a lack of knowledge about its’ effectiveness. It is of concern that so many young people confused techniques used to prevent conception with techniques for preventing pregnancy. Note that almost one-third (31.4%) identified the pill as protecting against HIV exposure, 16.2% identified withdrawal, 9.5% thought spermicides or contraceptive jellies would protect against HIV and 6.7% thought a diaphragm would prevent HIV transmission.

These data indicate serious knowledge gaps with respect to HIV transmission. Of particular concern is the lack of knowledge about the risks posed by giving and receiving oral sex and the use of the pill. Not surprising was that respondents were less familiar with the dental dam and the female condom – more recently developed they are not as well known. Clearly, there needs to be more education on effective and ineffective methods for preventing HIV transmission.

Cross tabulations were run to assess what might be shaping respondents’ identification of specific methods as effective in preventing HIV transmission. The independent variables in the analyses were gender, income, age, concern about HIV/AIDS, Ever Tested for HIV, Sexually Active. There were nine potential protection methods asked about. The cell sizes were too small for the tables for use of diaphragms, spermicides, and other methods for the tables to yield usable results and these were dropped from the analysis. The remaining six methods, combined with the six independent variables, yielded 36 cross tabulations. Of these 36 cross tabulations, only eight were statistically significant.

The statistically significant results are quite diverse. Age was statistically significant related to use of the female condom, use of the pill, and use of abstinence. Beginning with use of female condoms (see Table 22), older respondents were more likely to indicate they would use female condoms (19.6%) as compared to younger respondents (6.7%). The relationship was significant at the .10 level and was weak ($\eta = .18$). With respect to the Birth Control Pill (Table 25), younger respondents were more likely to identify the pill as preventing HIV transmission (43.8% versus 21.3%). The relationship was significant at the .05 level and was weak with an η of .240. Finally, older youth were more likely than young respondents (see Table 27) to cite abstinence as a way for preventing infection. The relationship was significant at the .001 level with a moderately strong η of .332.

The relationships between age and knowledge about prevention methods are relatively weak – indicating that age is a factor but that the process, not surprisingly, is more complex. This requires further investigation. However, due to the small sample size further analysis is not possible. Overall, older youth were better informed and this suggests that as young people get older they are exposed to more information about HIV transmission.

Income was related to a belief in the use of withdrawal (see Table 24) and the use of the pill (see Table 26) to prevent HIV transmission. However, we note that the n 's are quite small in the High Income category and recommend viewing the results with caution. For withdrawal, respondents from wealthier families were more likely (35.3% to 9.0%) to report they would or had used withdrawal to prevent HIV transmission. The relationship was statistically significant at .01-level ($p < .01$) and the relationship was moderate with an η of .302. Higher income youth were also more likely (52.9% to 29.4%) to indicate using the pill to prevent HIV transmission. The relationship was significant at the .05-level ($p < .05$) and was weak with an η of .240. These findings are difficult to interpret. It is not clear why income would result in these types of attitudes. Further research is clearly needed.

Being Sexually Active was related to the use of a condom to prevent HIV transmission (see Table 21) and to Abstinence (see Table 267). For condom use, those who are sexually active are more likely to report that they do or would use a condom to prevent HIV transmission (93.1% versus 72.7%). The relationship is moderate with a Contingency Co-efficient of .267 ($p < .01$). Those who are not sexually active are almost twice as likely (60.6% to 36.1%) to report that abstinence was a method for avoiding HIV transmission. What these data seem to indicate is that those who are sexually active are using or would use condoms to prevent HIV transmission and those who are not sexually active are not active, at least in part, as a method of ensuring they are not at risk of HIV transmission.

Finally, use of withdrawal was statistically significantly related to having been tested for HIV (see Table 23). Interestingly, those who had been tested were more likely to believe that you could use withdrawal to prevent HIV transmission (25.8% versus 12.5%). The relationship was weak with a Contingency Co-efficient of .162 ($p < .01$). The pattern is quite puzzling, since one might expect that those who had been tested would also have had the benefit of counselling on the topic. However, one respondent noted that they were tested as a result of donating blood. Thus, future research should consider why people were tested.

Overall, the research indicates that the factors that contribute to knowledge about how to protect against HIV transmission are complex. A multivariate analysis is a better option – especially given that the vast majority of the variables explored had weak predictive value.

4. Youth Self-perception of Sexual Health Knowledge

In terms of health knowledge, most respondents felt they were currently well informed about their sexual health with 88.6% answering yes and 2.9% indicating no. Comparing their current knowledge against how well informed they thought they were when entering University, indicates that respondents felt better informed now than when they entered University. Sixty-eight (68.6%) indicated they felt well informed about sexual health¹ on entering university, in contrast to 88.6% feeling currently well informed.

This is suggestive that within Universities young people are receiving information related to their sexual health that they feel is informative for them. However, given the amount of incorrect information young people have this may reflect more open discussion of sexual issues within the University context, but it does not seem to indicate that all the information is of ‘good’ quality.

5. Seeking Treatment/Information for Sexual Health Issues

Another area of interest is young peoples’ sources of information on sexual health and their personal care processes. The survey asked about visiting a health care professional for information on or treatment for sexual health issues. It also asked about sources of information, assessment of how well-informed they feel they are, and whether including a resource manual on HIV and sexual health in a Frosh Kit would be useful.

Respondents were asked if they have ever visited their health care professional for information or treatment for their sexual health (see Table 29). Forty-six percent (46.7%), 46 of the respondents, indicated they had never seen a health care professional for treatment or information about sexual health. Of these four indicated that they planned to do so. One third of respondents (34.3%) indicated that go yearly and a further nine (8.6%) go more than once a year.

Respondents report that they get information on sexual health from a wide range of sources (see Table 30). This is important information as it suggests venues for awareness campaigns that are likely to reach young people. The most common source of information (reported by 58.6% of respondents) was the media; this was followed by family doctors (55.6%), the internet (54.5%) and friends (54.5%). Approximately one third of respondent (32.3%) reported getting information from parents and from teachers and about a quarter (26.2%) report using a drop in/sexual health clinic. Eleven percent (11.1%) reported using other

¹ Note that three of the students were not in University – if these are excluded then 75.6% of those in University felt well informed on entering University.

sources including a sister, a gynaecologist, HIVEdmonton, Training in the course of Social Service education, books and journals, school, the school nurse, and Planned Parenthood.

Cross-tabular analysis of what was related to where respondents get their sexual health information were conducted with gender, age, currently sexually active, concerned about HIV/AIDS, and ever been tested for HIV/AIDS. The results of the statistically significant cross tabulations are presented in Tables 31 through 39. Age and Gender were each related to three information sources.

With respect to age, younger participants were more likely than older participants to get their sexual health information from their parents (40.6% versus 18.2%, $p < .05$, $\eta^2 = .248$ – Table 31), from friends (71.9% versus 45.5%, $p < .05$, $\eta^2 = .263$ – Table 35) and from teachers (40.6% versus 18.2%, $p < .05$, $\eta^2 = .248$ – Table 37). This suggests that as young people age their sources of information change. Their reliance on more informal sources needs to be further scrutinized to assess whether these are reliable sources of information. When these findings are considered in the light of the questions on knowledge about safe sex practices, it suggests that sources that young people rely on early on are not providing good information.

It also seems that young people differ in their sources of information by gender. Males are more likely to get their sexual health information from the internet (73.1% versus 43.6%, $p < .05$, $C = .266$ – Table 32). Young women are more likely to get their sexual health information from friends (61.8% versus 38.5%, $p < .04$, $C = .214$ – Table 34) and from their family physicians (67.3% versus 26.9%, $p < .05$, $C = .354$ – Table 39). This has implications for targeting information in different media. Given that information levels are about the same for men and women, their reliance on different sources of data may not be impacting on where they get that data. There may, however, be some concern around women getting information from friends related to reliability.

Young people who were concerned about HIV/AIDS were more likely than those not concerned to get their information from the media (65.7% versus 43.8%, $p < .05$, $C = .204$ – Table 33) or from a teacher (38.8% versus 18.8%, $p < .05$, $C = .197$ – Table 38). This suggests that young people are being made aware of the issue of HIV/AIDS through the media and education and that this is generating concern about the issue. The final positive relationship is between whether a young person had ever been tested for HIV/AIDS and whether or not they got their sexual health information from friends (Table 34). Those who had been tested for HIV/AIDS were less likely to get their information from friends (71.9% versus 45.5%, $p < .05$, $c = .259$).

Discussion/Conclusion

While this survey must be read as indicative only -- limited by a small sample of a very focused demographic, it is clear that there is much work to do in risk reduction, awareness raising and education among young Canadians. The survey recorded significant numbers of young people receiving information about their sexual health from the media (58.6%), likewise significant numbers ranked their family doctor, the internet and friends as important sources (at 55.6% and 54.5% and 54.5% respectively).

Population health demands increasingly looking to diffuse and competing sources of information on vital health information. For this age cohort, who will be availing themselves of the health care system for many years, there is an important investment to make in exploring and assessing the dissemination of sexual health information through non-conventional channels.

Besides the obvious (and difficult to control) broad channel of the internet, including now-conventional web pages, new modalities emerge that become ‘trusted’ spaces for young people. You Tube (which was a key reason for the American Time magazine naming ‘You’ as the Person of the Year for 2006) has burgeoned – and perhaps is already losing some of its energy – as a prime shared source for exchange of popular culture. MySpace and FaceBook, the latter often supported by university administrations as a space for students to build “networks” of friends, are now a fact in the life of most of this cohort.

Also of significance was the fact that these privileged young people saw themselves as well-informed on issues of their own sexual health. (An overwhelming 88.6% answering yes and a tiny 2.9% indicating no, they didn’t feel well informed.) This, in spite of the broad misunderstanding they exhibit of the HIV virus and infection, and the wrong-headed conflating of contraception with HIV transmission prevention.

It is clear that this communication needs to be “peer to peer” to be most effective. The United Nations Association in Canada developed an initiative “*It’s Time to Act: Mobilizing Youth around HIV and AIDS*” to fill this niche and need. Its legacy document/resource is a *Peer to Peer (P2P)* manual (reviewed by senior national and international medical specialists – as well as other young people, including those living with HIV). This research indicates the value of this type of higher level evaluative review of the P2P – and other such “by youth, for youth” education or information resources.

The other key gap this research revealed is the linkage that university students in Canada (particularly those just entering university) make between pregnancy prevention and HIV transmission prevention. It seems that the campaigns urging condom use to prevent transmission of the HIV virus may be being understood as implying that other birth control methods also prevent the transmission of HIV. If these, the “best and brightest” of young Canadians are mixing these messages, there is some urgency in both surveying a broader, more generalized group of youth – and to develop a national strategy to address this alarming gap.

The Public Health Agency in Canada has undertaken important, statistically significant research on HIV and AIDS. It is clear this population knowledge is key to promotion and programming and should be continued. It is also clear that there would be a benefit in tailoring messaging to special at-risk or early-informant groups to prevent new infections and develop a humane and broad understanding of AIDS management. Audiences like this group of elite youth – but with a more robust numbers would be valuable.

This research seems to suggest that the general sexual health education Canadian youth receive may focus predominantly, or exclusively on ‘procreative intercourse’ and therefore does not address risks around behaviours such as oral sex.

Finally, the authors reiterate that the explicitness of many of the questions on the Sexual Health Survey quite likely reduced the percentage of returned and/or completed surveys. This challenge has been noted in the literature as cited above, and efforts to plumb the material for meaningful public health informing data must take this into account.

Bibliography

Neuman, Lawrence (2003). Social Research Methods: Qualitative and Quantitative Methods 5th edition. Boston, MA: Allyn and Bacon.

Public Health Agency of Canada (2006a). HIV/AIDS Attitudinal Tracking Survey 2006. EKOS Research Associations Inc. for Public Health Agency of Canada. <http://www.phac-aspc.gc.ca/aids>. Accessed 2007 April 10.

Public Health Agency of Canada (2006b). HIV and AIDS in Canada. Surveillance Report to December 31, 2005. Surveillance and Risk Assessment Division, Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada.

Public Health Agency of Canada (2006c). Youth at Risk Factsheet. http://www.phac-aspc.gc.ca/aids-sida/populations_e.html#youth Accessed March 28th 2007

Public Health Agency of Canada. (2004) Canadian Sexually Transmitted Infections Surveillance Report: Pre-Release. http://www.phac-aspc.gc.ca/std-mts/stddata_pre06_04/index.html . Accessed 2007 March 28.

United Nations, Department Of Economic And Social Affairs Population Division (200x). HIV/AIDS: Awareness and Behaviour (http://www.un.org/esa/population/publications/AIDS_awareness/AIDS_es_English.pdf). Accessed 2007 March 27

Sexual Health Survey

(administered in conjunction with CANIMUN 2007)

This survey is for UNA-Canada's HIV/AIDS project *It's Time to Act: Mobilizing Young Canadians around HIV/AIDS*. The survey's goal is to get a sense of CANIMUNers sexual health and need for further and accurate information on HIV/AIDS. This survey is completely anonymous and we appreciate your honesty in answering the following questions.

1) Is HIV/AIDS a concern for you when engaging in sexual activity? (please check one)

- ◇ Yes
- ◇ No
- ◇ Sometimes

2) Of the following sexual activities please identify and indicate whether you think they are high risk (H), low risk (L) or no risk (N) in contracting HIV?

- ◇ Oral sex (giving)
- ◇ Oral sex (receiving)
- ◇ Kissing
- ◇ Anal penetration
- ◇ Vaginal penetration
- ◇ Sharing sex toys
- ◇ Naked body contact w/out penetration
- ◇ Rimming/anal play

3) What would you or have you used to prevent you and your partners exposure to HIV during sex?

- ◇ Condoms
- ◇ Dental Dams
- ◇ Female Condom
- ◇ Withdrawal before ejaculation
- ◇ Birth control pill
- ◇ Not having sex
- ◇ Diaphragm
- ◇ Spermicide/contraceptive jellies
- ◇ other (please specify)_____

4) Are you sexually active? (please check)

- ◇ Yes
- ◇ No
- ◇ No, not yet

5) Have you ever visited your health care practitioner for information or treatment for your sexual health?

- ◇ Never
- ◇ Once
- ◇ Once a year
- ◇ Often/several times a year
- ◇ Never but plan on going soon

6) Where do you receive your information on sexual health?(check all those that apply)

- ◇ Parents
- ◇ Internet
- ◇ Media (print articles/TV programmes)
- ◇ Friends
- ◇ Teacher
- ◇ Family Doctor
- ◇ Drop-in/Sexual Health Clinic
- ◇ Other (please specify)_____

7) Do you feel you entered university well-informed about your sexual health? (please circle)

Yes No Unsure Somewhat

8) Do you feel you are currently well-informed about your sexual health?

Yes No Unsure More than my peers

9) Have you ever been tested for HIV?

Yes No No, but I mean to

10) If you haven't been tested for HIV what are the reasons why? (please check all that apply)

- ◇ No facilities in my area
- ◇ Don't know where to go
- ◇ Afraid of the result
- ◇ I don't think I'm at-risk
- ◇ I'm embarrassed to go
- ◇ I've been meaning to go but keep putting it off
- ◇ I'm not sexually active

11) Please rank from 1 to 6, 1 being most important and 6 being the least important international issue on your radar.

Disarmament/Child Soldiers _____ Eradication of global poverty _____
Access to water as a human right _____ HIV/AIDS _____
Global Terrorism/Security _____ Climate Change _____

12) Please rank from 1 to 6, 1 being the most important and 6 being the least important national/domestic issue on your radar.

Aboriginal/Indigenous issues _____ Access to healthcare _____
HIV/AIDS _____ Climate Change _____
Poverty _____ Access to education _____

13) Would a resource manual on HIV and sexual health put in frosh kits be useful?

- ◇ Yes
- ◇ No
- ◇ Somewhat

Appendix B**Tables**

Table 1: What is your gender?

Gender	Frequency	Percent
female	61	68.5
male	28	31.5
Total	89	100.0

* 23 missing cases

Table 2: Respondent's Age*

Age	Frequency	Percent
17	4	4.8
18	15	18.1
19	15	18.1
20	11	13.3
21	17	20.5
22	12	14.5
23	3	3.6
24	3	3.6
25	1	1.2
26	1	1.2
28	1	1.2
Total	83	100.0

* 29 missing cases

Table 3: What is your first language?*

First Language	Frequency	Percent
English	61	67.8
French	13	14.4
Other	16	17.8
Total	90	100.0

* 22 missing cases

Table 4: What is your home province?*

Province	Frequency	Percent
Nfld/Lab	4	4.6
Nova Scotia	3	3.4
PEI	1	1.1
New Brunswick	1	1.1
Quebec	16	18.4
Ontario	32	36.8
Manitoba	3	3.4
Saskatchewan	5	5.7
Alberta	12	13.8
British Columbia	3	3.4
Not a Canadian Resident	7	8.0
Total	87	100.0

* 25 Missing Cases

Table 5: What is your status in Canada?*

	Frequency	Percent
Canadian Citizen	79	89.8
Landed Immigrant	1	1.1
Other**	8	9.1
Total	88	100.0

* 24 Missing Cases

**Other includes International Students, Children of Diplomats

Table 6: Are you a New Canadian

	Frequency	Percent
Yes	28	33.7
No	52	62.7
don't know	3	3.6
Total	83	100.0

* 29 missing/not applicable (not Canadian citizens)

Table 7: Are you an Aboriginal/Metis/Inuit/First Nations?*

Aboriginal	Frequency	Valid Percent
Yes	2	2.3
No	85	97.7
Total	87	100.0

* 22 Missing Cases and 3 Not Applicable (not Canadian)

Table 8: What do you consider your Family Income to Be?*

	Frequency	Valid Percent
Low Income	8	9.1
Middle Income	63	71.6
High Income	17	19.3
Total	88	100.0

* 24 Missing Cases

Table 9: What year are you in?

	Frequency	Percent
Cégep	11	12.8
1st year	15	17.4
2nd year	19	22.1
3rd year	15	17.4
4th year	24	27.9
Graduated	1	1.2
MA	1	1.2
Total	86	100.0

Table 10: Is HIV/AIDS a concern for you

	Frequency	Valid Percent
Yes	64	59.8
Sometimes	8	7.5
No	35	32.7
Total	107	100.0

* 5 Missing Cases

Table 11: Rank how important the issue of HIV/AIDS is nationally

	Frequency	Percent
1 – Most Important	11	11.3
2	11	11.3
3	11	11.3
4	20	20.6
5	22	22.7
6 – Least Important	22	22.7
Total	97	100.0

* 9 Missing cases

Table 12: Mean Ranking of Issues of National Importance

		Rank how important the issue of health care access is nationally	Rank how important the issue of HIV/AIDS is nationally	Rank how important the issue of Climate Change is nationally	Rank how important the issue of Poverty is nationally	Rank how important the issue of Education is nationally
N	Valid	97	97	97	98	98
	Missing	15	15	15	14	13
Mean		4.76	2.79	4.00	3.07	3.24
Median		5.00	3.00	4.00	3.00	3.00
Mode		6	2	5(a)	1	3(a)

a Multiple modes exist. The smallest value is shown

Table 13: Mean Ranking of Issues of International Importance

	Rank how important the issue of Child Soldiers is internationally	Rank how important the Eradication of Poverty is internationally	Rank how important Access to Water is internationally	Rank how important HIV/AIDS is internationally	Rank how important Global Terrorism-Security is internationally	Rank how important Climate Change is internationally
Mean	4.13	2.67	3.24	3.40	4.02	3.44
Median	4.00	2.00	3.00	3.00	4.00	3.00
Mode	5	1	5	4	6	1
Total	97	97	98	96	97	97
Missing	15	15	14	16	15	15

Table 14 – Are you sexually Active?

	Frequency	Valid Percent
Yes	72	68.6
No	17	16.2
No, not yet	16	15.2
Total	105	100.0

* 7 Missing Cases

Table 15 – Crosstabulation of National Ranking of HIV/AIDS by Gender

NationalHIVAIDS2		What is your gender?		Total
		female	male	
Ranked HIVAIDS 1 or 2	Count	14	5	19
	% within What is your gender?	27.5%	18.5%	24.4%
Ranked HIVAIDS 3 or 4	Count	18	4	22
	% within What is your gender?	35.3%	14.8%	28.2%
Ranked HIVAIDS 5 or 6	Count	19	18	37
	% within What is your gender?	37.3%	66.7%	47.4%
Total	Count	51	27	78
	% within What is your gender?	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	6.423(a)	2	.040	

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.58.

Nominal by Interval	Eta	NationalHIVAIDS2 Dependent	.224
---------------------	-----	----------------------------	------

Table 16: Crosstabulation of International Ranking of HIV/AIDS by Gender

HIVAIDS2		What is your gender?		Total
		female	male	
Ranked HIVAIDS 1 or 2	Count	20	4	24
	% within What is your gender?	40.0%	14.8%	31.2%
Ranked HIVAIDS 3 or 4	Count	21	15	36
	% within What is your gender?	42.0%	55.6%	46.8%
Ranked HIVAIDS 5 or 6	Count	9	8	17
	% within What is your gender?	18.0%	29.6%	22.1%
Total	Count	50	27	77
	% within What is your gender?	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	5.331(b)	2	.070	

Square			
--------	--	--	--

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.96.

Nominal by Interval	Eta	HIVAIDS2 Dependent	.243
---------------------	-----	--------------------	------

Table 17: Perceived Risk of Various Sexual Activities

	None	Low	Yes	High	Total
Giving Oral Sex	7 7.1%	47 47.5%	5 5.1%	40 40.4%	99 100.0%
Receiving Oral Sex	15 15.2%	53 53.5%	5 5.1%	26 26.3%	99 100.0
Kissing	60 63.2%	32 33.7%	1 1.1%	2 2.1%	95 100.0%
Anal Sex	4 4.1%	12 12.2%	4 4.1%	78 79.6%	98 100.0%
Vaginal Sex	2 2.0%	4 4.0%	5 5.1%	88 88.9%	99 100.0%
Sharing Sex Toys	5 5.2%	36 37.5%	3 3.1%	52 54.2%	96 100.0%
Naked Body Contact	36 37.9%	52 54.7%	3 3.2%	4 4.2%	95 100.0%
Rimming	8 8.1%	37 37.4%	5 5.1%	47 47.5%	99 100.0%

Table 18: Crosstabulation of Riskiness of Bodily Contact While Naked by Age

Naked2		19 or younger	20 or higher	
No	Count	6	21	27
	% within Age Group	17.6%	42.9%	32.5%
Yes	Count	28	28	56
	% within Age Group	82.4%	57.1%	67.5%
Total	Count	34	49	83
	% within Age Group	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	5.812(b)	1	.016	

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.06.

		Value
--	--	-------

Nominal by Interval	Eta	Naked2 Dependent	.265
---------------------	-----	------------------	------

Table 19: Crosstabulation of Riskiness of Bodily Contact While Naked by Gender

		female	male	Total
No	Count	16	14	30
	% within Gender Category	26.2%	50.0%	33.7%
Yes	Count	45	14	59
	% within Gender Category	73.8%	50.0%	66.3%
Total	Count	61	28	89
	% within Gender Category	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		4.853(b)	1	.028

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.44.

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.227	.028

Table 20: Methods for preventing HIV exposure

Protect Against HIV exposures by using	Yes	No	Don' Know
Condom	86.7%	13.3%	0.0%
Dental Dam	12.4%	86.7%	1.0
Female Condom	13.3%	85.7%	1.0
Withdrawal	16.2%	83.8%	
Birth Control Pill	31.4%	68.6%	
Abstinence	43.8%	56.2%	
Diaphragm	6.7%	93.3%	
Spermicide	9.5%	90.5%	
Other	3.8%	96.2%	

Table 21: Crosstabulation of Using Condoms to prevent Virus Transmission by Sexually Active

Use condom to prevent HIV		Are you currently sexually active?		
		Yes	No or No, not yet	Total
Yes	Count	67	24	91

	% within currently sexually active?	93.1%	72.7%	86.7%
No	Count	5	9	14
	% within currently sexually active?	6.9%	27.3%	13.3%
Total	Count	72	33	105
	% within currently sexually active?	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		8.092(b)	1	.004

a Computed only for a 2x2 table

b 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.40.

Nominal by Nominal	Contingency Coefficient	.267	.004
N of Valid Cases		105	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 22: Crosstabulation of Use Female Condom to Prevent HIV by Age

Use female condom to prevent HIV		Age		
		19 or younger	20 or higher	Total
Yes	Count	2	9	11
	% within Age Group	6.3%	19.6%	14.1%
No	Count	30	37	67
	% within Age Grp	93.8%	80.4%	85.9%
Total	Count	32	46	78
	% within Age Grp	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		2.762(b)	1	.097

a Computed only for a 2x2 table

b 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.51.

		Value
Nominal by Interval	Eta	Use female condom to prevent HIV Dependent
		.188

Table 23: Crosstabulation of Use of Withdrawal to Prevent HIV Transmission by Ever Had an AIDS Test

Use withdrawal to prevent HIV		Ever Been Tested for HIV/AIDS?		
		Yes	No or No, but plan to be	Total
Yes	Count	8	9	17
	% within Ever Been Tested for HIV/AIDS?	25.8%	12.5%	16.5%
No	Count	23	63	86
	% within Ever Been Tested for HIV/AIDS?	74.2%	87.5%	83.5%
Total	Count	31	72	103
	% within Ever Been Tested for HIV/AIDS?	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		2.784(b)	1	.095

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.12.

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.162	.095
N of Valid Cases		103	

Table 24: Crosstabulation of Use of Withdrawal by Income

Use withdrawal to prevent HIV		Income		Total
		Low/Medium	High	1.00
Yes	Count	6	6	12
	% within Income	9.0%	35.3%	14.3%
No	Count	61	11	72
	% within Income	91.0%	64.7%	85.7%
Total	Count	67	17	84
	% within Income	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		7.682(b)	1	.006

a Computed only for a 2x2 table

b 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.43.

		Value
Nominal by Interval	Eta	Use withdrawal to prevent AIDS Dependent .302

Table 25 – Cross-tabulation of Use of the Pill to Prevent HIV by Age

Use Pill to prevent HIV Transmission		Age		
		19 or younger	20 or higher	Total
Yes	Count	14	10	24
	% within Age Group	43.8%	21.3%	30.4%
No	Count	18	37	55
	% within Age Group	56.3%	78.7%	69.6%
Total	Count	32	47	79
	% within Age Group	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		4.546(b)	1	.033

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.72.

		Value
Nominal by Interval	Eta	Use Pill to prevent HIV Dependent .240

Table 26 – Cross-tabulation of Use of the Pill to Prevent HIV by Income

Use Pill to prevent HIV Transmission		Age		
		Low/Medium	High	Total
Yes	Count	17	9	26
	% within Age Group	25.4%	52.9%	31.0%
No	Count	50	8	58
	% within Age Group	74.6%	47.1%	69.0%
Total	Count	67	17	84
	% within Age Group	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		4.822(b)	1	.028

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.26.

		Value
Nominal by Interval	Eta	Use Pill to prevent HIV Dependent .240

Table 27 – Crosstabulation Use of Abstinence to Prevent HIV by Sexually Active

Use abstinence to prevent HIV		Are you currently sexually active?		
		Yes	No or No, not yet	Total
Yes	Count	26	20	46
	% within Are you currently sexually active?	36.1%	60.6%	43.8%
No	Count	46	13	59
	% within Are you currently sexually active?	63.9%	39.4%	56.2%
Total	Count	72	33	105
	% within Are you currently sexually active?	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		5.515(b)	1	.019

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.46.

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.223	.019
N of Valid Cases		105	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 28: Crosstabulation of Use Abstinence to Prevent HIV by Age

Use abstinence to prevent HIV		Age		
		19 or Younger	20 or Older	Total
Yes	Count	8	30	38
	% within Age Group	25.0%	63.8%	48.1%
No	Count	24	17	41
	% within Group	75.0%	36.2%	51.9%
Total	Count	32	47	79
	% within Age Group	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		11.498(b)	1	.001
N of Valid Cases		79		

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.39.

			Value
Nominal by Interval	Eta	Use abstinence to prevent HIV Dependent	.382

Table 29: Visit Health Provider of Sexual Health

	Frequency	Percent
Never	45	42.9
Once	11	10.5
Once a Year	36	34.3
Often/several times a year	9	8.6
Never, but plan to soon	4	3.8
Total	105	100.0

Table 30: Where do you receive your information on sexual health?

Information Source	Yes	No
Parents	32.3% (32)	67.7% (67)
Internet	54.5% (54)	45.5% (45)
Media	58.6% (58)	41.4% (41)
Friends	54.5% (54)	45.5% (45)
Teacher	32.3% (32)	67.7% (67)
Family Doctor	55.6% (n=55)	44.4% (n=44)
DropIn/Sexual Health Clinic	26.3% (26)	73.7% (73)
Other	11.1% (11)	88.9% (n=88)

Table 31: Get Sexual Health Information from Parents by Age

Sexual Health Info from Parents		Age		
		19 or younger	20 or higher	Total
Yes	Count	13	8	21
	% within Age Group	40.6%	18.2%	27.6%
No	Count	19	36	55
	% within Age Group	59.4%	81.8%	72.4%
Total	Count	32	44	76

	% within Age Group	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	4.667(b)	1	.031	

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.84.

		Value
Nominal by Interval	Eta	Sexual Health Info from Parents Dependent
		.248

Table 32: Get Sexual Health Information from the Internet by Gender

Get Sexual Health Info from Internet		Gender		
		Female	Male	Total
Yes	Count	24	19	43
	% within Gender	43.6%	73.1%	53.1%
No	Count	31	7	38
	% within Gender	56.4%	26.9%	46.9%
Total	Count	55	26	81
	% within Gender	100.0%	100.0%	100.0%

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.144(b)	1	.013

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.20.

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.266	.013
N of Valid Cases		81	

Table 33: Get Sexual Health Information from the Media by Is HIV/AIDS a Concern.

Get Sexual Health Info from Media		Is AIDS/HIV a Concern?		
		yes or sometimes	no	Total
Yes	Count	44	14	58
	% within Is AIDS/HIV a Concern?	65.7%	43.8%	58.6%
No	Count	23	18	41
	% within Is AIDS/HIV a Concern?	34.3%	56.3%	41.4%

Total	Count	67	32	99
	% within Is AIDS/HIV a Concern?	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	4.289(b)	1	.038	

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.25.

	Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.204 .038

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 34: Get Sexual Health Information from Friends by Gender

Get Sexual Health Info from Friends		Gender		
		Female	Male	Total
Yes	Count	34	10	44
	% within Gender	61.8%	38.5%	54.3%
No	Count	21	16	37
	% within Gender	38.2%	61.5%	45.7%
Total	Count	55	26	81
	% within Gender	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	3.881(b)	1	.049	

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.88.

	Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.214 .049
N of Valid Cases		81

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 35: Get Sexual Health Information from Friends by Age

Get Sexual Health Info from Friends		Age		
		19 or Younger	20 or Older	Total
Yes	Count	23	20	43
	% within Age Group	71.9%	45.5%	56.6%
No	Count	9	24	33

	% within Age Group	28.1%	54.5%	43.4%
Total	Count	32	44	76
	% within Age Group	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	5.264(b)	1	.022	

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.89.

		Value
Nominal by Interval	Eta	Sexual Health Info from Friends Dependent
		.263

Table 36: Get Sexual Health Information from Friends by Ever Been Tested for HIV/AIDS?

Sexual Health Info from Friends		Ever Been Tested for HIV/AIDS?		
		Yes	No or no, but plan to be	Total
Yes	Count	11	43	54
	% within Ever Been Tested for HIV/AIDS?	35.5%	64.2%	55.1%
No	Count	20	24	44
	% within Ever Been Tested for HIV/AIDS?	64.5%	35.8%	44.9%
Total	Count	31	67	98
	% within Ever Been Tested for HIV/AIDS?	100.0%	100.0%	100.0%
	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	7.054(b)	1	.008	

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.92.

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.259	.008
N of Valid Cases		98	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 37: Get Sexual Health Information from Teacher by Age

Sexual Health Info from Teacher		Age		
		19 or Younger	20 or Older	Total
Yes	Count	13	8	21
	% within Age Group	40.6%	18.2%	27.6%
No	Count	19	36	55
	% within Age Group	59.4%	81.8%	72.4%
Total	Count	32	44	76
	% within Age Group	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		4.667(b)	1	.031

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.84.

		Value
Nominal by Interval	Eta	Sexual Health Info from Teacher Dependent .248

Table 38: Get Sexual Health Information from Teachers by HIV/AIDS a Concern?

		Is AIDS/HIV a Concern?		
		Yes or sometimes	no	Total
Yes	Count	26	6	32
	% within Is AIDS/HIV a Concern?	38.8%	18.8%	32.3%
No	Count	41	26	67
	% within Is AIDS/HIV a Concern?	61.2%	81.3%	67.7%
Total	Count	67	32	99
	% within Is AIDS/HIV a Concern?	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		3.982(b)	1	.046

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.34.

		Value	Approx. Sig.
Nominal by	Contingency	.197	.046

Nominal	Coefficient		
N of Valid Cases		99	

Table 39: Get Sexual Health Information from your Family Doctor by Gender

Get Sexual Health Info from Family Doctor		What is your gender?		
		Female	Male	Total
Yes	Count	37	7	44
	% within Gender	67.3%	26.9%	54.3%
No	Count	18	19	37
	% within Gender	32.7%	73.1%	45.7%
Total	Count	55	26	81
	% within Gender	100.0%	100.0%	100.0%
		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		11.584(b)	1	.001

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.88.

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.354	.001
N of Valid Cases		81	