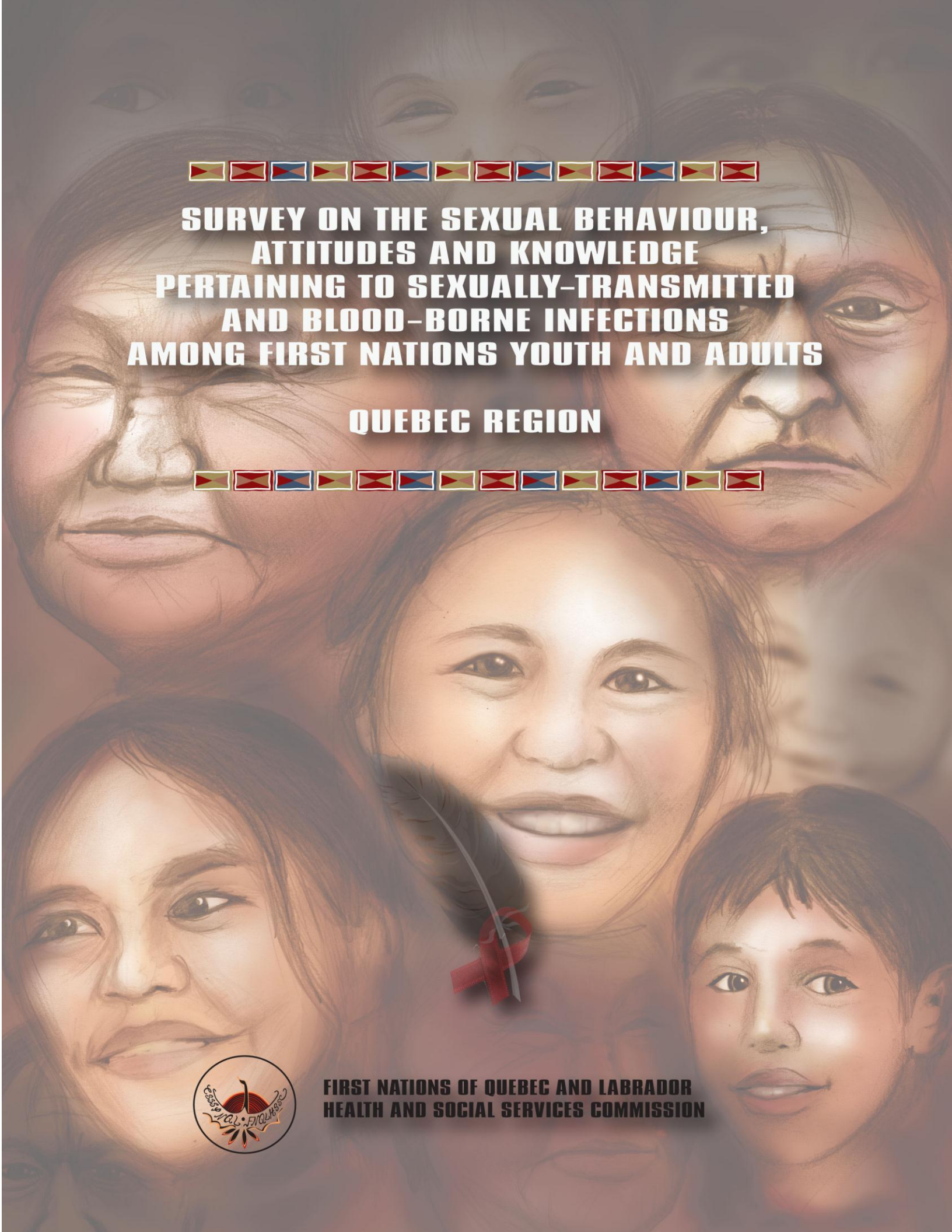

SURVEY ON THE SEXUAL BEHAVIOUR, ATTITUDES AND KNOWLEDGE PERTAINING TO SEXUALLY-TRANSMITTED AND BLOOD-BORNE INFECTIONS AMONG FIRST NATIONS YOUTH AND ADULTS

QUEBEC REGION

FIRST NATIONS OF QUEBEC AND LABRADOR
HEALTH AND SOCIAL SERVICES COMMISSION

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. INTRODUCTION AND STATE OF KNOWLEDGE

1. Introduction

A sexually-transmitted and blood-borne infection (STBBI) is an infectious disease that, as its name says it, may be transmitted during non protected sex or when exposed to contaminated blood or body fluids. STBBIs are known to be a major public health issue. According to the *Ministère de la Santé et des Services sociaux du Québec* (1), the current data on STBBIs in Quebec show either a potential explosive situation (syphilis, lymphogranulum venereum), or the beginning of a new rising cycle (gonococcal infection), or a stabilization at a high level (chlamydiosis, HIV infection) or even a downward trend (1) in the case of Hepatitis C. Only one STBBI, acute Hepatitis B, shows a constant decrease. Among Aboriginals, HIV/AIDS cases still represent a disproportionate number of the cases in Canada (1). In 2005, Aboriginals represented approximately 9% of new HIV infections in Canada, an alarming statistic given the fact that Aboriginals represent only 3.3% of the Canadian population (2). As to the reporting rate of genital chlamydiosis cases among First Nations of Canada, it was nearly seven times higher than that of the whole country (3).

It is of paramount importance to know the factors that expose First Nations members of the Quebec region to the risk of contracting STBBIs and blood-borne pathogens in order to identify useful types of interventions and establish harm reduction measures that will benefit communities and help reduce their risk of contracting STBBIs.

2. Research Background

At adolescence and early adulthood, decisions regarding sexual and reproductive activities become of decisive importance. These decisions usually impact on subsequent sexual behaviours, which in turn influence the risk of contracting STBBIs and blood-borne pathogens. Moreover, this risk increases during adolescence and early adulthood because of the onset of sexual activity and the use of drugs (4). Indeed, other studies have revealed that an early onset of sexual activity is linked to an increased risk of STBBI, and would be associated to higher STBBI rates (4).

Individuals make more informed choices when they can rely on a solid basis of personal resources developed at a young age and if there are sexual health information, education, prevention and support means. All these data highlight the importance of ensuring prevention programs that are culturally adapted and meet the needs.

Against this background, in order to try to improve the performance of prevention initiatives in First Nations communities of Quebec region, this survey's overall objective is to deepen our understanding of the factors that contribute to the sexual health of youth and adults. This will be done by surveying the socio-cultural, socio-environmental and inter-personal determinants involved in sexual activities as well as people's perceptions and knowledge related to STBBIs. This survey also addresses the context of the risks taken by these youth and adults with regards to sexuality, especially concerning STBBI prevention. The conclusions will help decision-makers, stakeholders, health professionals and community members identify the best approaches to help reduce STBBI transmission.

Furthermore, to our knowledge, no survey has ever been conducted on sexual behaviours and the knowledge pertaining to STBBIs in First Nations communities of Quebec region. In this context, our survey will fill a major void by allowing the production of an overall portrait of the targeted population's situation in terms of STBBIs. In other words, the lack of data on this issue represents a limitation in the development of prevention and intervention tools adapted to the needs. Therefore, the survey will not only allow for a better understanding of the issue's scope but also for an identification of the STBBIs' main dynamic elements in order to better target our interventions and try to adapt them adequately to the needs.

3. State of Knowledge

3.1 Most frequent bacterial STBBIs

Chlamydiosis*:* is a STBBI caused by the *Chlamydia trachomatis* bacteria. It can be transmitted during a vaginal, oral or anal sexual contact with an infected partner. This infection can result in severe problems such as infertility; it can also foster the onset of pneumonia, as well as other diseases in newborns of infected mothers (5). Genital chlamydiosis is the most frequently reported in Quebec. In 2005, it accounted for 49.4% of the 25,611 cases of reportable diseases (*Maladie à déclaration obligatoire*, MADO). In 2010, approximately 15,000 new cases will be reported (1). In Quebec, the most affected age group is between 15 and 24 years old, even though the sharpest increases between 2001 and 2005 were observed among those aged 30-34 (1,6).

Among the First Nations of Canada, the rate of genital chlamydiosis reported cases in 2000 was very high: 1,071.5 cases per 100,000 habitants. This rate is nearly six times higher than that of all of Canada in 2001 (178.9 cases per 100,000 habitants). It can also be noted that this rate remains higher among women than among men, particularly among those aged 15-24, which is 53.5% (7).

Gonococcal infection: is a STBBI caused by the *Neisseria gonorrhoeae* bacteria. It is transmitted mainly through sexual contact. However, pregnant women who are infected

can also transmit it to their newborn at birth. The bacteria often remains silent and is therefore treated only later on since people may show no symptom. Consequently, severe health problems, such as a pelvic inflammatory disease (PID), may arise later on in life (5).

In 2006, in Quebec, this infection's incidence rate increased by 37% compared to the year 2005. Furthermore, this rate is significantly higher among men (23.3 per 100,000) than among women (9.3 per 100,000), unlike what can be observed in other Canadian provinces (1.6). The majority of people affected were men who have sex with men (MSM), although the infection also affected a significant proportion of heterosexual men and women (6).

Infectious syphilis: is caused by the *Treponema pallidum* bacteria. The infection is almost always transmitted through sexual contact (including oral sex) with an infected person, except in the case of congenital syphilis, usually transmitted from the mother to the foetus. When not treated, syphilis evolves in four stages: primary, secondary, latent and tertiary, and each one of them has its own signs and symptoms (8).

In 2008, in Quebec, there was a total of 369 (1) reported cases. A majority of them are men who have sex with men who are affected. In 2005, for the first time since the outset, the group aged 15-19 has also been affected by the infection (1). In 2005, Montreal is the region where most of the cases are reported. Indeed, the incidence rate is 9.3 per 100,000, while it is 2.7 per 100,000 in the Quebec region (6).

3.2 Most frequent viral STBBIs

Human Papillomavirus (HPV): According to Health Canada, HPV is one of the most common STBBIs in Canada. It is transmitted during sexual relations, but also through skin contact. It infects the surface of the skin, the mucous membrane of the mouth, the tongue, throat, tonsils, vagina, penis, cervix of the uterus and anus. HPV is associated to cancers in the anogenital area (cervix of uterus, vulva, vagina, penis, anus) and to the occurrence of condylomas (1). Safe sexual practices with a condom and the reduction of the number of partners can contribute to reducing the risks of contracting an HPV infection or another STBBI (9).

Two Quebec studies provide an estimate of the HPV infection prevalence in the province. The first one was carried out between 1992 and 1993 among 375 university students from Montreal. In this group of young women, the total HPV infection prevalence was 22.7% (10). The second study was carried out among 621 university students, also in Montreal, and revealed a 29% HPV infection prevalence in a population in 1996 (11).

Herpes simplex virus (HSV): Genital herpes is a common viral infection and affects one Canadian out of five (12). Genital herpes is caused by the herpes simplex virus (HSV),

which originates from the same strain as the virus that causes cold sores. These sores are usually caused by a type of herpes simplex virus called HSV-1 and genital herpes is usually caused by the HSV-2 type. However, both types can infect the genital area and cause painful blisters (5). Genital herpes can spread through skin contact with and infected area, mostly during oral, anal or vaginal sexual contact. In rare cases, herpes can spread from mother to newborn at birth. HSV-1 active infections can also be transmitted through kissing. During oral sexual contact, herpes can be transmitted from the mouth to the genital area and vice-versa.

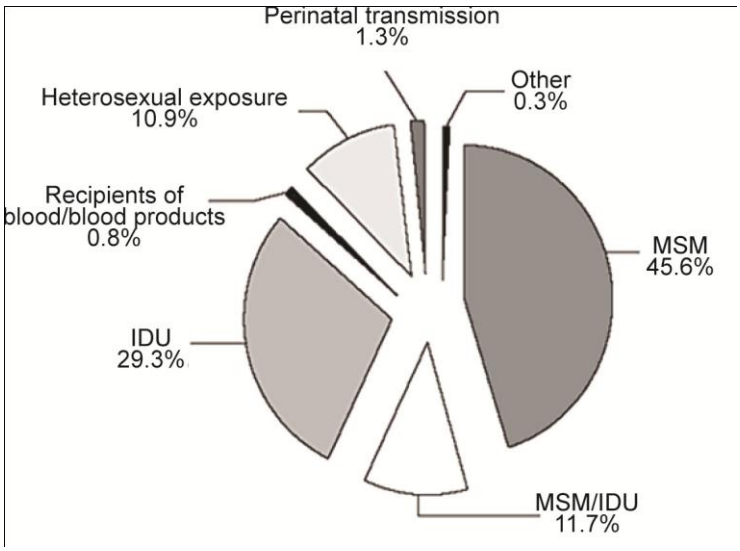
Hepatitis C virus (HCV)*:* It is mainly transmitted through contact with infected blood. It can also be transmitted from an infected mother to her baby. In the Quebec population, the proportion of infected individuals is approximately 0.5% (13). However, according to the Institut National de la Santé Publique du Québec (INSPQ), it remains difficult to measure how widespread the epidemic is given the fact that several people still don't know their serologic status (14). Since 1992, those are mainly injection drug users (IDU) who get infected through sharing non-sterilized injection material (14). Indeed, based on the 2010 National Report on the Health Status of the Population of Québec (1), nearly two thirds of the individuals using injection drugs are infected with the Hepatitis C virus. High infection rates have also been observed among homeless people (15.16). These sub-populations show significantly higher prevalence rates than in the general population.

Acute Hepatitis B virus (HBV)*:* It is a virus transmitted through blood during sexual contact with an infected person, when using injection drugs or when exposed to infected body fluids. The virus can be transmitted from a mother to her newborn. HBV can cause a permanent infection, liver cirrhosis (necrosis), liver cancer, liver failure and death.

HIV/AIDS virus: The proportion of AIDS cases among Aboriginals has increased, going from representing 1.7% of all cases in Canada in 1992 to 7.2% in 2001. It should be noted that ethnicity is not indicated on all HIV/AIDS reporting forms, which may have an incidence on reported results (7).

Based on the 2001 census, the Aboriginal population of Canada is divided as follows: 62% are First Nations members, 30% are Métis, 5% are Inuit and 3% are of mixed ascent (17). With the 509 reported AIDS cases among Aboriginals in Canada as of June 30, 2003, 72.3% (368) were First Nations members, 8.3% (42) were Métis, 4.1% (21) Inuits and 15.3% (78) were categorized as "Aboriginal of unspecified ascent". Among these 509 cases, there are 383 men, 125 women and 1 transgender (18). Figures 1 and 2 show the distribution of cases per exposure category. Because of his minimal influence, the transgender individual was not taken into consideration (18).

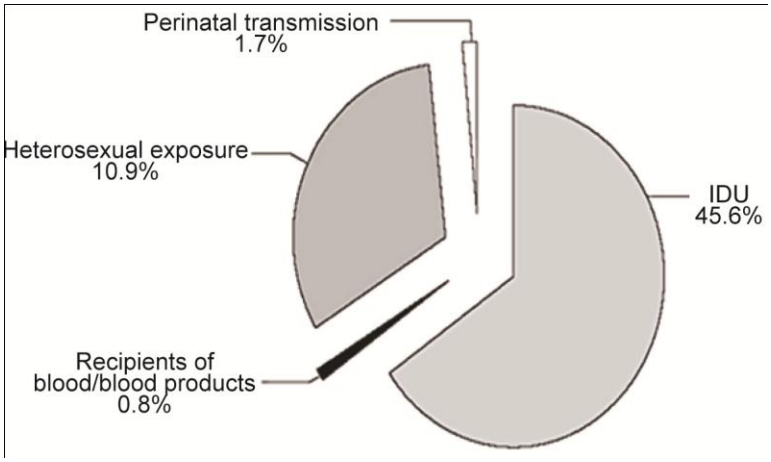
Figure 1 **Distribution of exposure categories among AIDS reported cases in Aboriginal men of Canada, between November 1979 and June 30, 2003**



IDU: Injection drug users

MSM: Men who have sex with men

Figure 2 **Distribution of exposure categories among AIDS reported cases in Aboriginal women of Canada, between November 1979 and June 30, 2003**

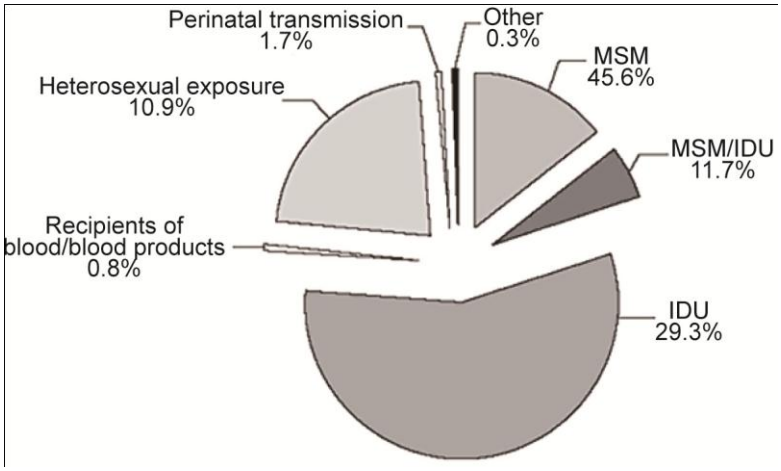


IDU: Injection drug users

When referring to figures 1 and 2, one can note that injection drug users (IDU) are a significant group at risk for AIDS among Aboriginals of Canada, for women as well as for men.

Recent data confirm these trends observed in monitoring data which reveal that drug injection represents a particularly important risk factor for the transmission of HIV among Aboriginals. Indeed, the monitoring of HIV positive tests between 1998 and 2003 also shows that drug injection represents the main transmission means among Aboriginals (see figure 3). Among Aboriginal cases whose exposure category was known, 61.1% were linked to drug injection (18).

Figure 3 **Distribution of exposure categories among Aboriginal men of Canada who have received positive results to HIV tests between January 1978 and June 30, 2003**



IDU: Injection drug users

MSM: Men who have sex with men

In a study published in 2001 on antiretroviral treatment among a group of pregnant seropositive women recruited in seven health centres in Ontario, Manitoba and Saskatchewan, researchers have found that 20% of women were Aboriginal (19).

3.3 Objectives of the research

This survey's main objective is to propose recommendations to decision makers, interveners and health professionals of the Quebec region First Nations communities in order to identify approaches that will most likely contribute to a reduction of the STBBI's risks transmission. This objective will be achieved through two specific objectives:

1) Develop the overall portrait, in a holistic approach, of the sexual behaviour of youth and adults in First Nations communities of the Quebec region;
2) Develop the overall portrait of the perceptions and knowledge pertaining to HIV and STBBIs among youth and adults in First Nations communities of Quebec region.

II. POPULATION AND METHODOLOGY

1. Research protocol

In order to develop its position on research carried out among First Nations, the Assembly of First Nations of Quebec and Labrador (AFNQL) undertook the development of a research protocol in order to provide communities with a reference guide that would allow for a better monitoring of the various activities and requests in terms of research on their territories. This document is first and foremost a reflection tool that gathers all the components or criteria essential to the development of a research policy.

The principles stated in this protocol aim to foster the implementation of a collaborative and mutual respect spirit between researchers and First Nations, as well as to ensure the appropriate conduct of research in Aboriginal settings and to contribute to the promotion of all aspects of Aboriginal science.

2. Population and type of survey

2.1 First Nations in Quebec

"Before 1500, Aboriginal societies in the Americas and non-Aboriginal societies in Europe developed along separate paths, in ignorance of one another. The variety in their languages, cultures and social traditions was enormous. Yet on both sides of the Atlantic, independent peoples with evolving systems of government - though smaller and simpler than the nations and governments we know today - flourished and grew."

"The Americas were not, as the Europeans told themselves when they arrived, terra nullius - empty land."
- Derived from the *Report of the Royal Commission on Aboriginal Peoples*, 1996 (20).

In Canada, as stipulated in the Canadian constitution, the Aboriginal population is divided into three groups that differ from each other on cultural, linguistic and geographical levels which are the Inuit, Métis and First Nations (erstwhile referred to as Indians). Nearly 4% of the Canadian population identifies as belonging to one of these three groups (21).

The Inuit are defined as being Aboriginal people who live beyond the forest boundaries in the Northwest Territories, Nunavut, Nunavik (northern Quebec) and Labrador. The Inuit are recognized as having originated from a population wave that arrived later than the Indians (22). Historically-speaking, the term Métis refers to children born from an Aboriginal woman and a French, English or Scottish fur trader. From a legal perspective, the Powley Act defined three criteria for the identification of the Métis: self-identifying as

a member of the Métis community, the existence of ancestral bonds with a Métis community and the current acceptance of the individual by the Métis community (23). In Quebec, no data allows for confirming the presence of a Métis community. As for the term First Nations, it became more commonly used over the course of the 1970s to eventually replace the term Indian. There is no consensus in terms of an official legal definition (22).

In Quebec, the First Nations and Inuit represent a little over 1% of the population (24). In 2007, with respect to First Nations only, approximately 77 000 people were registered as such out of a total population of more than 7 600 000 residents (25).

Composed of 41 communities that are present on the territory of Quebec, the First Nations are divided among ten Nations: Abenaki, Algonquin, Attikamekw, Cree, Innu, Malecite, Mi'gmaq, Mohawk, Naskapi and Wendat. These Nations essentially fall under two linguistic families. The Mohawk and Wendat Nations both stem from the Iroquoian linguistic family while the other Nations stem from the Algonquian linguistic family. Following the arrival of the Europeans during the XVI and XVII centuries and the implementation of an assimilation process by the federal government, the English and French languages became second languages that are used in the communities.

Each of these ten Nations has their own unique history, beliefs, way of life and life skills. Furthermore, among the communities of a same Nation, notable differences can be perceived, particularly on a historical and cultural level. However, the First Nations maintain a similar spiritual relationship with the environment they live in; this translates into a holistic view of nature and a search for balance and harmony.

From a demographic perspective, nearly half of the population of the First Nations communities is less than 30 years of age (24). The birth rate is increasing and in 2000, this rate was established at around 23.4 births per 1000 citizens, which nearly doubles the Canadian rates (26). Moreover, for many years now, a rapid demographic growth has been observed among the First Nations of Quebec population. Furthermore, even though the number of First Nations members who live in urban settings is increasing, more than 70% of the individuals still reside within one of the 41 communities (25).

The northern part of the Quebec territory is inhabited by the Inuit – a distinct Aboriginal people. The approximately 10 000 Inuit residing in Quebec are divided among 14 villages that are located along the coastline of the Hudson Bay, the Hudson Strait and Ungava Bay (24). They, as well as the Cree and Naskapi Nations, are different from the other Nations because of their status as Agreement communities. These Nations have in fact reached agreements with the Quebec government which provide them with a political and administrative autonomy in addition to access to provincial public services (The James Bay and Northern Quebec Agreement from 1975 and the North-eastern Quebec Agreement from 1978). As for the Inuit, they opted to be essentially connected

with the institutions of Quebec rather than being subject to a federal law, contrarily to the Naskapi and the Cree who receive federal services as well.

The members of the non-Agreement First Nations of Quebec, as for the First Nations across the country, are subject to the Indian Act. This Act, dating from 1876 and amended many times since, defines certain obligations of the federal government and governs the management of the Indian human and material resources. Although modifications have been made to it, particularly in 1951 and 1985, the act has essentially remained unchanged. In order to be recognized by this Act, the individuals must fulfil certain criteria and be registered in the registry held by Indian and Northern Affairs Canada. As for the Agreement communities, in 1984, the Parliament of Canada adopted the Cree-Naskapi (of Quebec) Act, which legally governs these two Nations (24).

The organizational modes among the First Nations in the Quebec region are similar from one community to another. The band council, composed of a Chief and councillors elected in accordance with the local customs or the regulations established by the Indian Act, represents the political and administrative organization of the community. Each band council governs the services that are provided locally, such as health services, social services, education, fire protection and public security. Among the Inuit, the organizational mode is different. In fact, each of the 14 villages, which are considered to be municipalities, is directed by a mayor and councillors that are elected in accordance with an elections process that is similar to that of other municipalities of Quebec. Each village therefore has the same competencies and powers as other municipalities in areas such as public security, leisure and town planning (27).

At the regional level, the First Nations members are represented by various organizations that ensure the defence of their interests while representing them among the governments. In this regard, the Assembly of First Nations of Quebec and Labrador (AFNQL) regroups all of the communities and constitutes a political authority through which the Chiefs of Quebec and Labrador deliberate on all issues that concern the First Nations. Its Regional Chief is the official spokesperson of the First Nations with respect to the different levels of government and the non-Aboriginal population. In fact, various regional organizations come under the AFNQL such as the First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC) (28).


Les
The Nations
Ivujivik
Salluit
Kangiqsujuaq
Akulivik
Quaqtaq
Puvirnituq
Kangirsuk
Killiniq
Aupaluk
Inukjuak
Tasiujaq
Kangiqsualujjuaq
Kuujjuaq
Umiujaq
Kuujjuarapik
Whapmagoostui
Kawawachikamach
Lac-John
Schefferville
Matimekosh
Chisasibi
TERRE-NEUVE ET LABRADOR
NEWFOUNDLAND AND LABRADOR
Wemindji
Eastmain
Waskaganish
Nemiscau
Pakuashipi
Mingan
Natashquan
La Romaine
Maliotenam
Havre-Saint-Pierre
Mistissini
Uashat
Oujé-Bougoumou
Waswanipi
Chibougamau
Sept-Îles
Pikogan
Baie-Comeau
Betsiamites
Amos
Val-d'Or
Obedjiwan
Gaspé
Essipit
Timiskaming
Lac-Simon
Saguenay
Gesgapegiag
Wemotaci
Listuguj
Winneway
Mashteuiatsh
Cacouna
Kitcisakik
Whitworth
Ville-Marie
Coucoucache
Rivière-du-Loup
Hunter's Point
La Tuque
Wendake
Manawan
Rapid Lake
Eagle Village
Kipawa
Mont-Laurier
Québec
Trois-Rivières
Kitigan Zibi
Doncaster
Wôlinak
Odanak
Gatineau
Kanesatake
Montréal
Kahnawake
Akwesasne
Abénakis / Abenakis
Algonquins
Atikamekw
Cris / Crees
Hurons-Wendat
Innus
Inuit
Malécites / Maliseet
Micmacs
Mohawks
Naskapis
Affaires indiennes et du Nord Canada
Indian and Northern Affairs Canada
Canada

2.2 Type of survey

This survey is a descriptive cross-sectional study. It consists in interviewing a representative sample of the population with a structured interview questionnaire. In the context of this survey, the target population includes all First Nations youth attending high school in the community and adults aged 18 to 60 living in communities of Quebec region.

3. Sampling plan

The procedure to select participants is based on a two-level sampling method: the selection of the communities and that of respondents. This ensures that each individual of the population has the same chances of being selected to take part in the survey.

3.1 Selection of the communities

Given the time and costs associated to the conduct of such a survey in all the First Nations communities of Quebec region, it seemed wise to focus the survey on a sample of communities. However, bearing in mind the question of representativeness, we planned a process that took into account the greatest possible diversity of communities. In order to do so, we proceeded with a community selection based on four inclusion criteria: Nation, language, size of population and geographical zone. We also established a second list of communities that could replace those that could eventually decline the invitation to take part in the survey.

Table 1 Characteristics of the communities selected to take part in the survey

Community	Nation	Language	Size	Zone
Natashquan	Innus	French	478	3
Matimekush		French	301	4
Pakua Shipi		French	120	4
Kitigan Zibi	Algonquins	English	872	1
Eagle village		English	120	2
Kawawachikamach	Naskapis	English	231	4
Opiticiwan	Atikamekw	French	1301	3
Manawan		French	930	2
Wendake	Hurons/Wendat	French	657	1
Listuguj	Mi'kmaqs	English	860	1

The community's authorization to take part in the survey was obtained by sending an information letter and a consent form to all the community Chiefs and Health Directors. These forms were signed by them and returned to the FNQLHSSC.

3.2 Target population

The survey focused on youth attending high school in the communities and adults aged 18 to 60 living in the communities.

3.2.1 Adults

The first task was to identify all the community members who were eligible to take part in the survey. In other words, identify the men and women aged 18 to 60 and living in the communities.

In order to ensure that each person had the opportunity to participate, potential participants were selected based on a list. In Canada, First Nations communities have band lists managed by the communities themselves. The band list is a list of the community members, legally held by the registry administrator, that includes the list of all Indians registered in the Department of Indian and Northern Affairs Canada (INAC) Registry as well as the other members eligible under the law. This list includes all the community children, adolescents and adults. Moreover, it provides important data such as the name, determination of current residence (in community or outside community), age and gender of each community member. For each selected community, we then used the band list as a survey basis after having kept only the adults aged 18 to 60 living in the community. For each community, we then randomly selected potential participants (a sample); this aimed to ensure each person an equal selection probability.

Table 2 The size of the sample in each selected community

Community	Size of the sample
Natashquan	82
Matimekush	52
Pakua Shipi	20
Kitigan Zibi	149
Eagle Village	20
Kawawachikamach	40
Opitciwan	222
Manawan	158
Wendake	112
Listuguj	146

Let it be noted that in exchange for their participation, the FNQLHSSC offered the possibility of entering a draw to win a 42-inch television and a gift certificate.

3.2.2 Youth

Regarding youth, the survey focused on communities that have high schools, such as Natashquan, Matimekush, Kitigan Zibi, Kawawachikamach, Opitciwan and Manawan. All these community youth enrolled in a high school were selected to participate in the survey.

4. Data collection

4.1 Recruiting of interviewers

The emphasis was put on the recruiting of local interviewers who have a good knowledge of the community, the residents, the local culture and those who could communicate in the local language and in French or English.

Key players of the health centre, social services and Band Council staff of the selected communities took part in recruiting interviewers by referring names of people who were available and qualified to carry out this work.

The names of the people referred were submitted to the research agent responsible for the project. The agent contacted each candidate, describing the nature of the survey in detail as well as the role and responsibilities of the interviewers. The agent then determined if the candidate met the employment requirements and was interested in collaborating in the survey. The persons who met the requirements were then asked to take part in a training session.

4.2 Training of interviewers

The selected interviewers had to take part in a one-day training session. The training sessions were facilitated by the research agent responsible for the project either in the community or through videoconferencing. A training manual was developed to support interviewers in their work. The training sessions included discussions on the following issues:

- The goal of the survey;
- The way to identify and register the selected community members to take part in the survey and ensure their cooperation;
- The way to administer the questionnaires;
- The way to act when some people confide in them about their personal experiences (ex.: sexual abuse, violence, etc.);

- Some suggestions to deal with difficult situations;
- Ethical considerations;
- Respondents' privacy, anonymity and confidentiality;
- File management.

4.3 Support to interviewers

The research agent maintained regular communication with the interviewers in order to ensure the work progressed and potential problems were identified and dealt with as they arose. Indeed, the interviewers phoned the research agent on a weekly basis to report on the administration of questionnaires and the overall description of the community's receptivity towards the survey. Each week, the interviewer also sent the signed consent forms and the filled out questionnaires separately (sealed envelopes). Pre-addressed and pre-paid envelopes were provided to the interviewers to send the consent forms and questionnaires directly to the FNQLHSSC research agent.

The interviewers were paid per questionnaire and consent form duly filled out and sent to the FNQLHSSC.

5. Data source

This was a voluntary survey. The data was obtained directly from the respondents through a self-administered questionnaire on the following themes:

- Socio-demographic data;
- Socio-environmental and interpersonal data on their sexual activity;
- Sexual behaviours;
- Perceptions and knowledge pertaining to STBBIs;
- Knowledge concerning risk factors or behaviours;
- STBBI history;
- Knowledge of protection means;
- Screening.

5.1 Adult questionnaire

The adult questionnaire is anonymous and self-administered. Whenever the respondents had difficulties understanding or answering the questions, the interviewer could explain the questions or suggested answers. Once the questionnaire was completed, the respondents were to insert it in a sealed envelope in order to prevent the interviewer from reading the answers.

5.2 Youth questionnaire

The questionnaire intended for youth attending high school is anonymous and self-administered. However, it was administered by a research agent in the classroom, after having obtained the consent from students aged 18 and over and parental consent for student aged 12 to 17. Once the questionnaire was completed, it was inserted in a sealed envelope in order to prevent anyone from reading the answers. The questionnaire is entirely anonymous: the students did not write their name on it. The research agent collected the sealed envelopes classroom per classroom.

6. Data analysis

Once the data collection was completed, all the information gathered was put together and structured in a database in order to carry out descriptive analyses. First, an univariate analysis allowed for a description of the participants' main characteristics and the frequency distribution of the various variables. Afterwards, a bivariate analysis allowed the review of the relations between the various variables and their trends. Using the chi-square, a comparison was then done between the distributions based on the various demographic factors. An alpha threshold of 5% was used to determine whether the values were statistically significant for a one-variable analysis. The analyses were conducted using the SAS statistics software, version 9.2.

7. Ethical aspect

This survey was conducted in compliance with ethical rules, according to which free and informed consent must be given voluntarily by each prospective individual. Accordingly, a consent form was developed for the adults (adults and students aged 18 and over) and another one for adolescents. Indeed, consent was asked of parents for the participation in the survey of minor students attending high school.

These forms inform on the goal of the survey, expectations towards participants (to fill out the questionnaire), period and length of time for which participants commit themselves, voluntary participation declaration, freedom to withdraw without prejudice, confidentiality, availability to answer questions, information on risks and benefits, as well as their level of responsibility.

Let it also be noted that the communities' authorization to take part in the survey was obtained by sending an information letter as well as a consent form to all Chiefs and community Health Directors. These forms were returned signed by the Chiefs and Health Directors.

The obligation to ensure privacy, anonymity and confidentiality of information applied to all the people associated with this survey, including interviewers. This is why they signed an “Oath of secrecy”. This oath establishes the interviewers’ responsibility to preserve, at all times, the confidential nature of the information collected, the participants’ anonymity as well as the consequences of disclosing confidential information.

To protect the participants’ anonymity and the confidentiality of the data and their use, a number of measures have been put in place:

- Once completed the questionnaire is inserted in a sealed envelope by the respondent.
- All the people working on this survey must take an oath of secrecy.
- Information on hard copies is stored in locked rooms or locked cabinets.
- Electronic data is protected by a password.
- Security copies are made of electronic data and kept in a safe place.
- Personal information are not stored with the answers to the survey questionnaire.
- If a respondent withdraws his/her consent, the data collected from this person are destroyed.
- Each questionnaire is identified with a unique code.

It should also be noted that the adults and youth had:

- The right to refuse to answer any question.
- A presentation on the purpose of the survey by the interviewer, which allowed them (youth and adults) to freely express their agreement or refusal.
- The right not to be judged or noted on their answers, the latter being entirely confidential and not disclosed to their family or teachers (for students), as well as the right to stop at any time or refuse to answer any question.

III. YOUTH FROM FIRST NATIONS HIGHSCHOOLS

1. Characteristics of the population

The analyses included a total of 179 respondents, among which were 75 boys and 104 girls (Table 3). The girls' participation rate is higher than the boys'. The average age of the participants in the survey was 15.5 years with a 1.9 year standard deviation. The average age of girls (15.4 years) and boys (15.5 years) was fairly similar; no significant difference was noted between both genders. Among these young respondents, 33.9% were aged 12 to 14, 49% 15 to 17, and 16.7% 18 to 20 (Table 3).

The majority of students were single (91%); only 16 adolescents (9%) lived with a partner (married or common law). Approximately 77% of students indicated they had carried out their studies in a First Nations community and 21% indicated they had carried out one part of their studies in a community and another part outside the community. Approximately seventy-eight percent (78%) of youth mentioned that spirituality is a very important (40.5%) or important (38%) part of their life.

Table 3 Socio-demographic characteristics of the 179 students

Socio-demographic variables	N (*)	%
Gender		
Female	103	58.2
Male	74	41.8
Age		
12 -14 years old	59	33.9
15 -17 years old	86	49.4
18-20 years old	29	16.7
Language(s) spoken on a daily basis		
French	18	10.1
English	18	10.1
First Nations Language (FNL)	48	26.8
French-English	2	1.0
French - FNL	72	40.2
English - FNL	15	8.4
French - English - FNL	6	3.4
Place of schooling		
In a First Nations community	139	77.2
Part in a community and part outside the community	38	21.1
Outside the community for the whole duration of the studies	1	0.6
Residential school	2	1.1
Marital status		
Single	163	91.0
Common law union	15	8.40
Married	1	0.60
Place of spirituality in life		
Very important	47	40.5
Important	44	37.9
Not very much important	24	20.7
Not important at all	1	0.9

*The rates may vary because of missing values

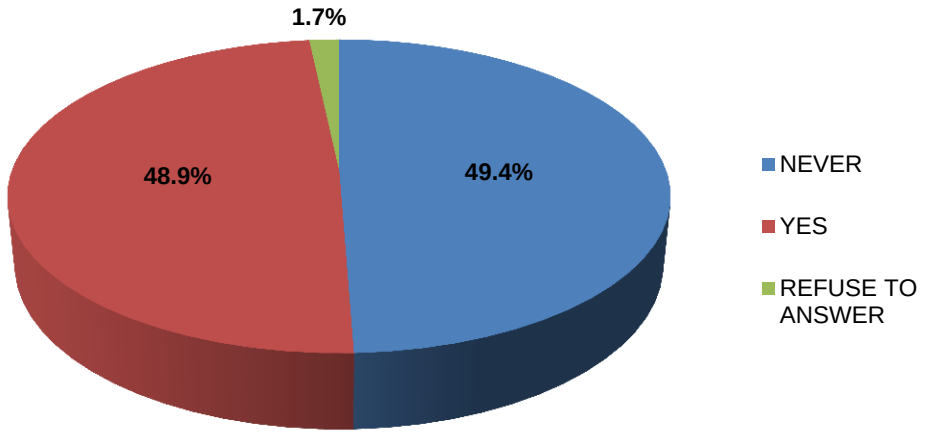
2. Sexual Behaviours

2.1 Sexual activity

Through the review of the data it is possible to describe the characteristics of the sexually-active youth, including risk behaviours.

The data shows that the boys' average age at their first sexual intercourse was slightly lower than the girls': 13.4 years old (±3.78) versus 13.6 years old (±2.60). The difference was significant ($p<0.001$).

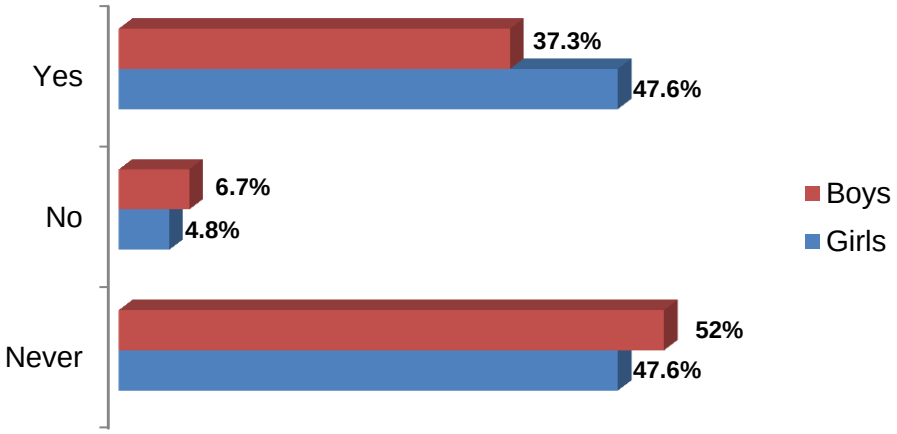
Figure 4 Distribution of respondents for the question: "Have you had sex during the past 12 months?"



*People who refused to answer whether they had sex during the 12 months preceding the survey

Out of 179 respondents, 49% of them declared they had sex, the same proportion indicated they never had sex, and 1.7% refused to answer. Among the 49% of students who indicated they had been sexually active, 80% had sex during the 12 months preceding the survey.

Figure 5 **Distribution of respondents based on gender for the question: "Have you had sex during the past 12 months?"**



Among the 103 girls, 47.6% indicated they had been sexually active in the 12 previous months, whereas 37.3% of boys indicated they had been sexually active. It can be noted that 6.7% of boys compared to 4.8% of girls indicated they didn't have sex in the 12 previous months. Regarding the youth who indicated they never had sex, girls represent 47.6% of that proportion whereas boys represent 52%. Among the total number of respondents, girls were slightly more susceptible than boys of declaring their sexual activity in the 12 months preceding the survey.

Table 4 **Distribution of respondents based on age categories for the question "Have you had sex during the past 12 months?"**

Sexual activity	Age (years)					
	12-14		15-17		18-20	
	N(*)	%	N(*)	%	N(*)	%
Yes	6	11.3	46	51.7	25	75.7
No[1]	2	3.8	6	6.7	2	6.1
Never[2]	45	84.9	37	41.6	6	18.2

[*] The rates may vary because of missing values

[1] The youth who have not had sex in the 12 months preceding the survey

[2] The youth who have never had sex

Based on the results in the previous table, one can see that sexual activity increases with age. Approximately 11% of youth aged 12-14 and half of the youth aged 15-17 indicated they have had sex, as opposed to approximately three quarters of the youth aged 18-20.

Table 5 Distribution of sexually-active youth per gender based on the number of sexual partners in the 12 months preceding the survey

	Number of partners									
	1		2		3		4		refusal	
Gender	**N(*)**	**%**	**N(*)**	**%**	**N(*)**	**%**	**N(*)**	**%**	**N(*)**	**%**
Girls (N=49)	27	55.1	15	3.6	5	10.2	0	0.0	2	4.1
Boys (N=28)	15	53.6	3	10.7	6	21.4	3	10.7	1	3.6
Total	42		18		11		3		3	

*The rates may vary because of missing values

The number of partners is an important indicator of at risk sexual behaviour, especially in the case of STBBIs. Adolescents who indicated they were sexually active were asked to specify the number of partners as well as their sexual orientation and preferences by answering the same question.

The average number of sexual partners for girls is 1.5 compared to 1.9 for boys. Slightly more than half (54.5%) the youth who declared they were sexually active also indicated they had only had one partner: 55.1% of girls compared to 53.6% of boys. Approximately 33.6% of girls indicated they had two sexual partners compared to 10.7% of boys (Table 5). However, only boys indicated they had four or more partners. Generally speaking, boys reported a greater number of partners than girls.

2.2 Sexual practices

Youth who indicated they were sexually active were asked to specify whether they had practised oral or anal sex.

Among the sexually-active youth, 25% indicated they had practiced anal penetration. Among these respondents, 41% were girls and 59% were boys (Figure 6). Furthermore, 63% indicated they had not tried this practice and 12% answered “Don’t know”.

Figure 6 Distribution of sexually-active youth based on anal penetration practice

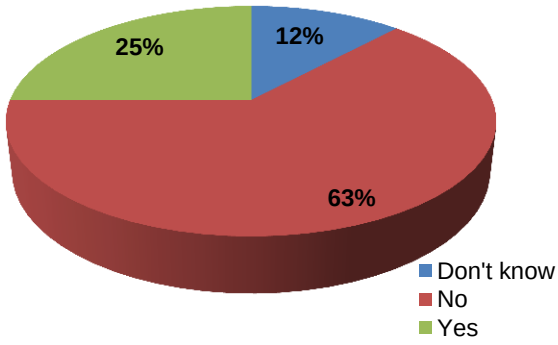
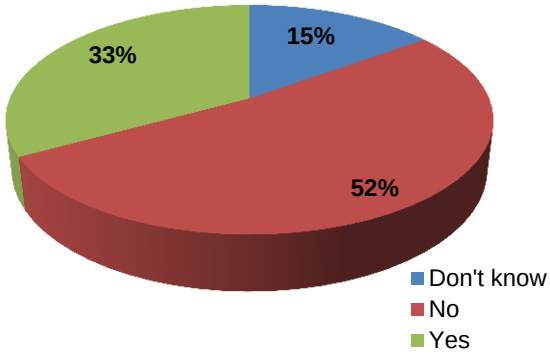


Figure 7 Distribution of sexually-active youth based on oral sex practice



From the sexual health point of view, practising oral sex does not represent a risk for an unwanted pregnancy and the risks of contracting a sexually-transmitted infection are low compared to vaginal or anal penetration. However, oral sex is not without risks and its practice by youth does preoccupy health professionals. Approximately 33% of youth who declare themselves sexually active indicated they have tried oral sex (Figure 7), 52% have never tried it and 15% answered “Don’t know”.

Table 6 Results from the crossing of the oral sex variable with the anal sex variable

Anal sex	Oral sex			
	Yes	**No**	**Don’t know**	**Total**
Yes	17	5	5	27
No	15	46	6	67
Don’t know	3	4	5	12
Total	35	55	16	106

*The rates may vary because of missing values

Furthermore, among the 27 youth who have tried anal penetration, 63% indicated they also practised oral sex, whereas nearly half of the 35 youth who indicated they had practised oral sex also had anal sex (Table 6).

2.3 Other high-risk behaviours

Table 7 Distribution of youth who stated having high-risk behaviours for STBBIs transmission

	Yes	No	Don't know
Accept money or drugs in exchange for sex	2	104	2
Have sex with a person who has HIV/AIDS	0	90	19
Have sex with a person who has a STBBI	6	86	17

*The rates may vary because of missing values

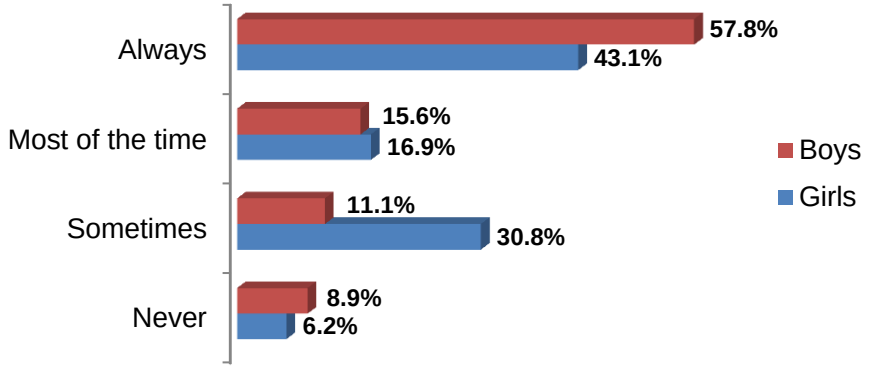
Based on the results in the previous table (Table 7), a majority of youth (95.5%) indicated they have never accepted money or drugs in exchange for sex. However, two persons (a girl and a boy) admitted they had accepted this type of exchange. It can also be noted that 82.6% of respondents confirmed they had never had sex with a person with HIV/AIDS, whereas over 17% of respondents did not know if they had ever had sex with an infected person. As well, 79% indicated they had never had sex with a person with a STI and 15.6% did not know if they had ever had, and 6 youth (5.5%), among which five girls and one boy, confirmed they had sex with a person with a STBBI.

3. Protection against HIV/AIDS and other STBBIs

Adolescence's physical, psychological and social attributes make youth particularly vulnerable to HIV and other sexually-transmitted infections (STBBIs). Youth are often not able to entirely grasp the scope of the risks they expose themselves to. Because of this, it is important to understand the patterns and attitudes of youth towards protection and contraception in order to evaluate their risk of contracting a STI, HIV/AIDS as well as the risk of an unwanted pregnancy among adolescents.

3.1 Frequency of condom use

Figure 8 **Distribution of condom use frequency based on gender among sexually-active youth**



The proportion of respondents who have indicated they always use a condom during sex is slightly higher among boys than among girls: approximately 58% versus 43%. However, it should be noted that approximately 54% of girls compared to 36% of boys did not always use it.

Table 8 **Distribution of condom use frequency based on age categories among sexually-active youth**

Frequency of condom use	12-14 years old		15-17 years old		18-20 years old	
	N(*)	%	N(*)	%	N(*)	%
Always	8	44.4	28	45.9	18	69.2
Most of the time	2	11.1	11	18.0	5	19.3
Sometimes	5	27.8	17	27.0	3	11.5
Never	3	16.7	5	8.2	0	-
Total	18	100	61	100	26	100

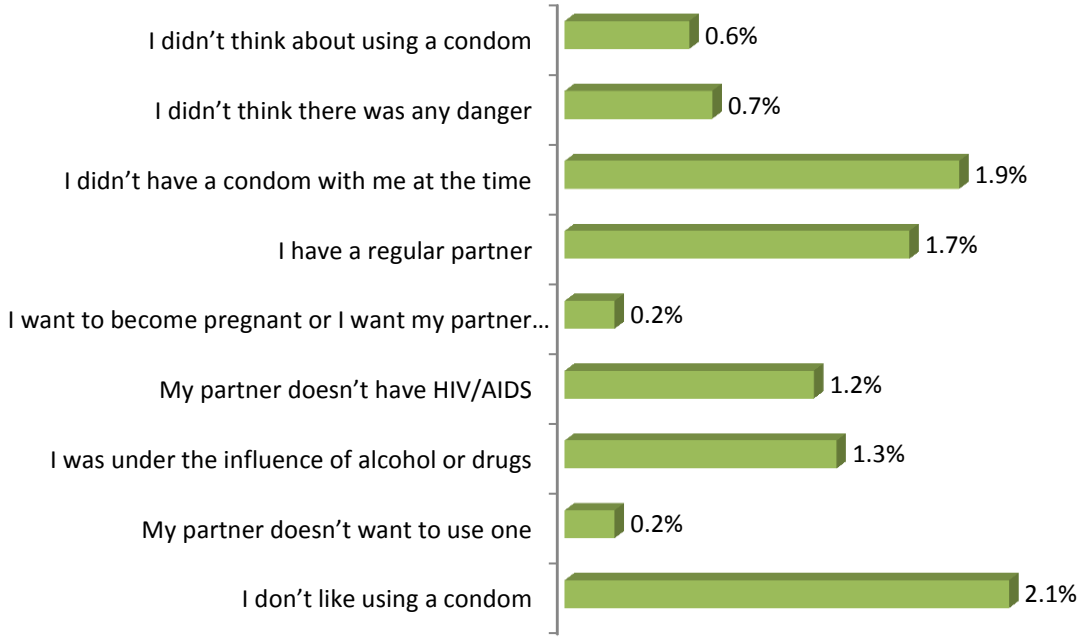
*The rates may vary because of missing values

The data in the previous table (Table 8) clearly shows that the use of condoms increases with age among youth. Indeed, over 88% of youth aged 18-20 indicated they “always” or “most of the time” use condoms, compared to 64% of the 15-17 and 55.5% of the 12-14.

3.2 Reasons for not using condoms

It is of paramount importance to determine why youth do not use condoms; it will allow us to guide prevention programs in order to better meet the needs.

Figure 9 Distribution of frequencies on reasons why youth do not use condoms



When asked "What is the main reason that you do not use a condom?", youth gave three main reasons (Figure 9):

- Because they don't like using a condom (21.4%);
- Because they didn't have a condom with them at the time of the sexual relation (19.1%);
- Because they have a regular partner (16.7%).

Then two other reasons (Figure 9):

- Because they were under the influence of alcohol or drugs (13.1%);
- Because their partner doesn't have HIV/AIDS (12%).

However, only 2% of respondents mention the risk of an unwanted pregnancy.

3.3 Use of condoms and type of partner

Figure 10 Attitudes towards the regular partner's refusal to use a condom based on gender

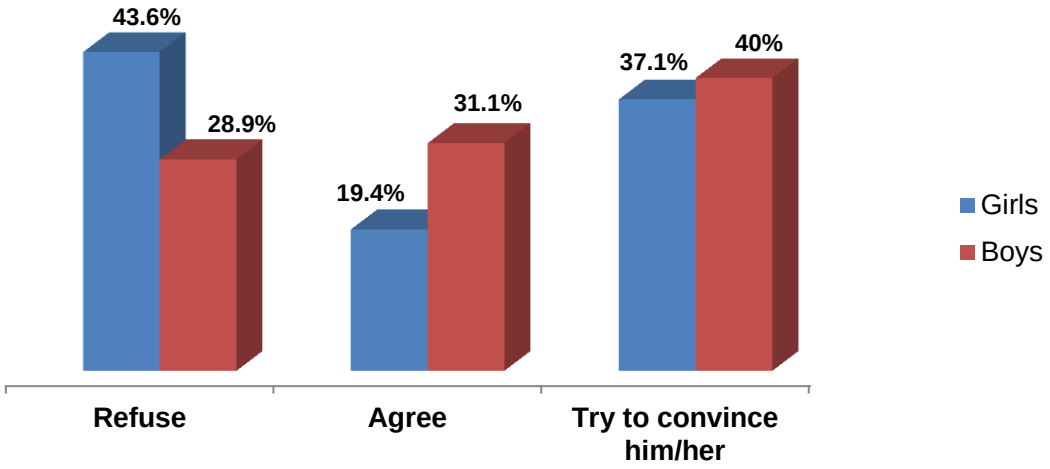
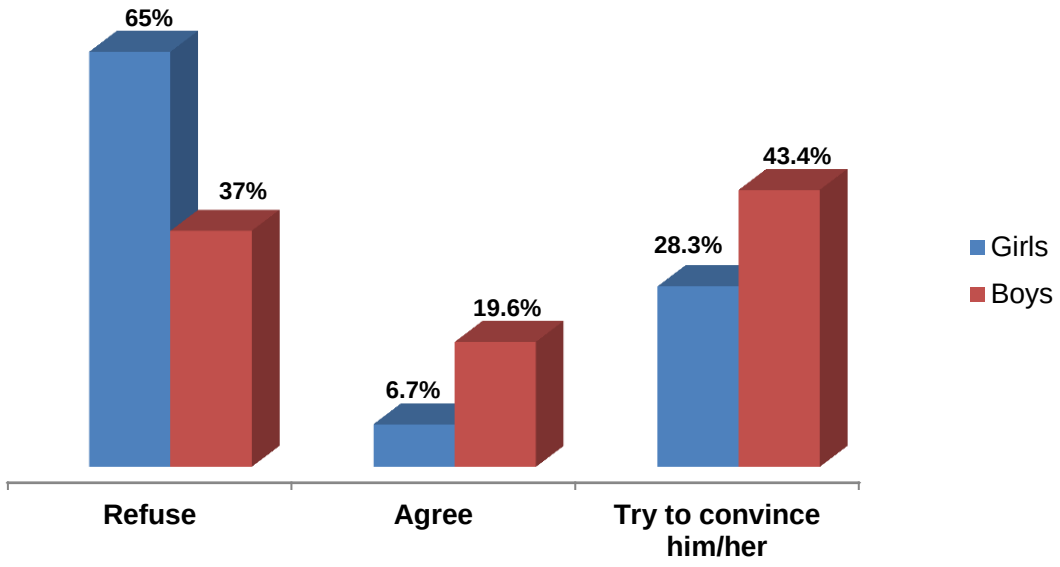


Figure 11 Attitudes towards the occasional partner's refusal to use a condom based on gender



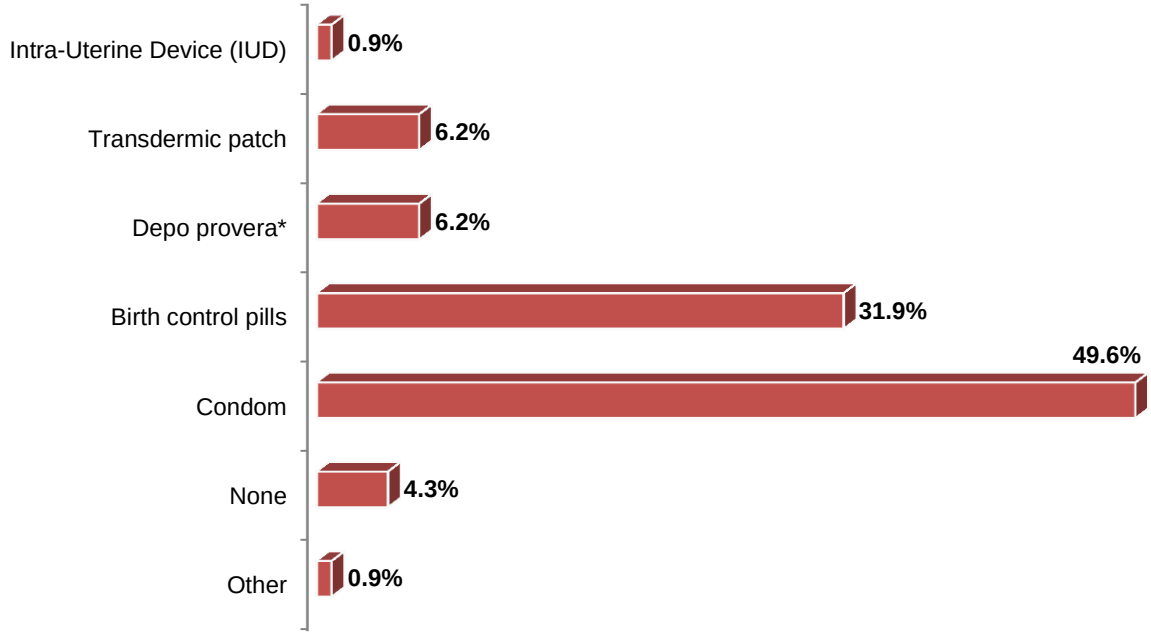
Based on the data presented in both figures 10 and 11, it appears that more boys than girls indicate that they would accept having sex with a regular partner (31.1% versus 19.4%) or occasional partner (19.6% versus 6.7%) who would refuse to use a condom.

As well, more boys than girls indicate that they would try to convince their partner to use a condom.

3.4 Contraception methods

Adolescents' capacity to communicate with their partner on the use and type of contraception and prevention methods influences the adoption of safer habits in terms of sexuality.

Figure 12 Contraceptive methods used by sexually-active youth



*Also called injectable contraceptive

Based on figure 12, it can be noted that condoms, birth control pills, Depo-Provera (an injection given every three months) and transdermic patches are used more frequently by sexually-active youth.

4. Knowledge and information means pertaining to HIV/AIDS and other STBBIs, transmission mechanisms and prevention means

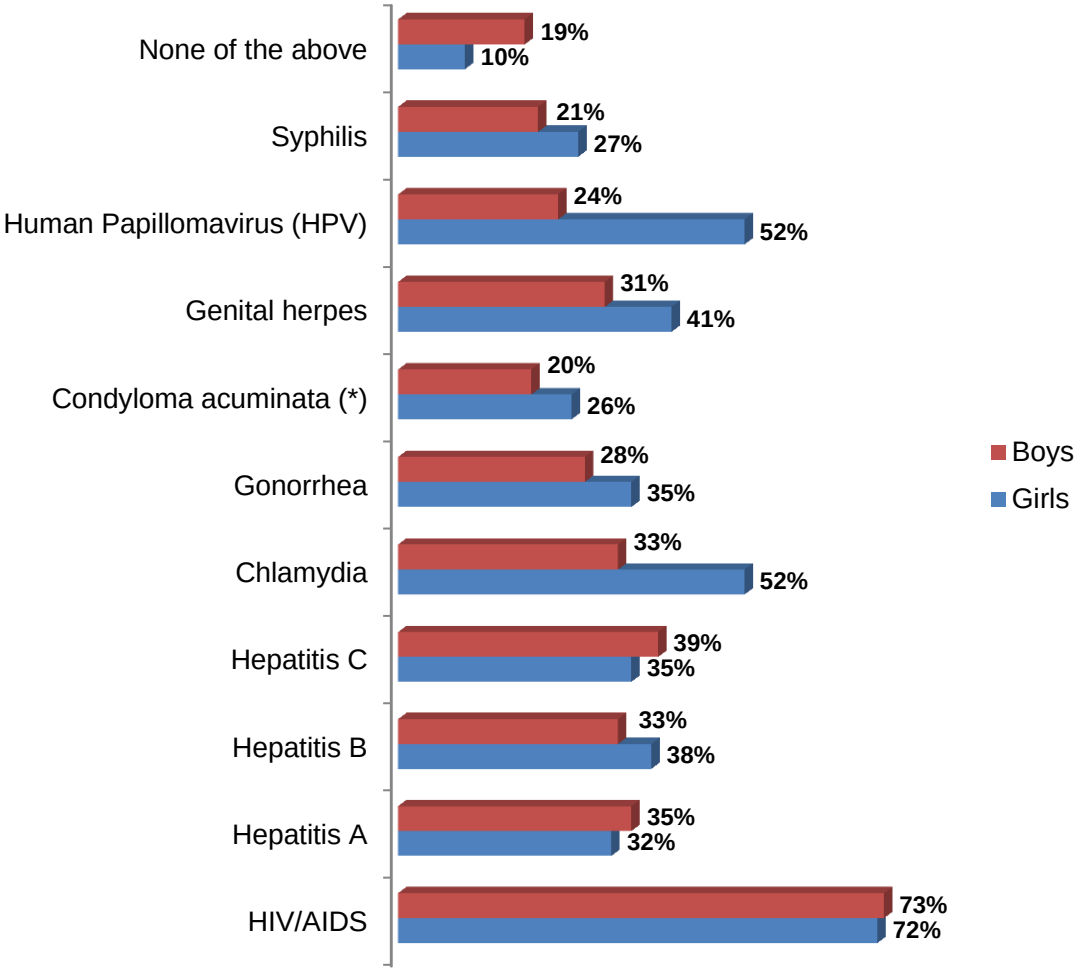
The promotion of sexual health among youth must be done through information on the risks, such as HIV and AIDS and other sexually-transmitted infections, and on the way to avoid their negative effects on sexual health. Indeed, knowledge revealed to be determining in the sexual behaviours of youth since a good protection from HIV, AIDS

and other STBBIs involves a good understanding of the transmission mechanisms and prevention means.

In order to do so, this section focuses on evaluating the knowledge pertaining to sexual health and STBBIs among youth. It also examines the sources of information and the gaps in the knowledge pertaining to sexual health among youth.

4.1 Knowledge of the various STBBIs

Figure 13 Proportion of respondents who have heard about the various STBBIs based on gender



* Or genital warts

When reviewing the previous figure, one can only but notice that while approximately 73% of girls or boys indicated they know about HIV/AIDS, approximately 27% confirmed they knew nothing about it. Furthermore, less youth attending high school know about the other infections. However, when it comes to HPV and chlamydia, more than half of

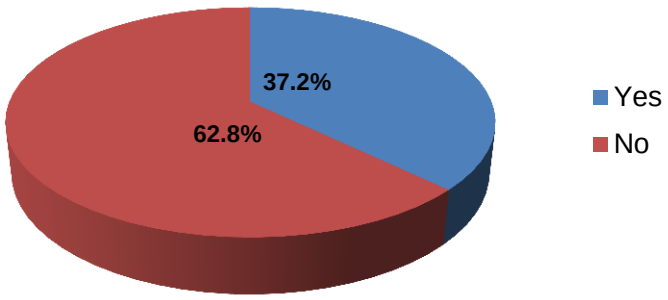
the girls (52%) knew about these infections compared to only 24% and 33% respectively among boys. As well, syphilis (27% versus 21%), genital herpes (41% versus 31%), condylomas acuminate (26% versus 20%), gonorrhea (33.5% versus 28%) and Hepatitis B (38% versus 33%) are also more well known among girls than among boys. Regarding Hepatitis A and C, a slight difference can be noted in favour of the boys: 35% versus 32% and 39% versus 35% respectively.

In other words, girls seem to know about more STBBIs than boys, particularly human papillomavirus, genital herpes and chlamydia.

4.2 Estimation of the level of knowledge

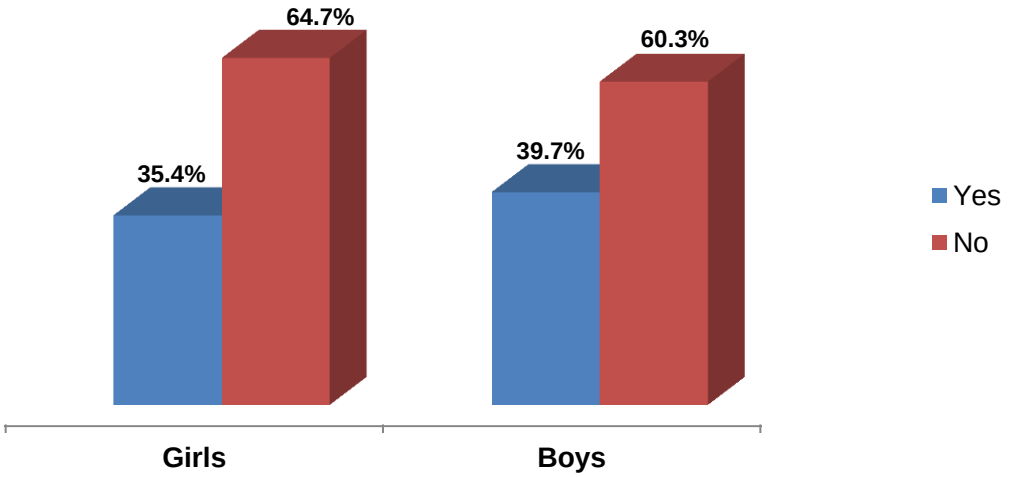
In this section, adolescents also provided an estimation of their level of knowledge concerning HIV/AIDS and other STBBIs.

Figure 14 Distribution of respondents for the question "Do you think you are adequately informed about STBBI, HIV and hepatitis? "



One can note that only 37% of adolescents consider themselves to be adequately informed about HIV/AIDS and the other STBBIs. However, nearly 63% deemed they were not adequately informed.

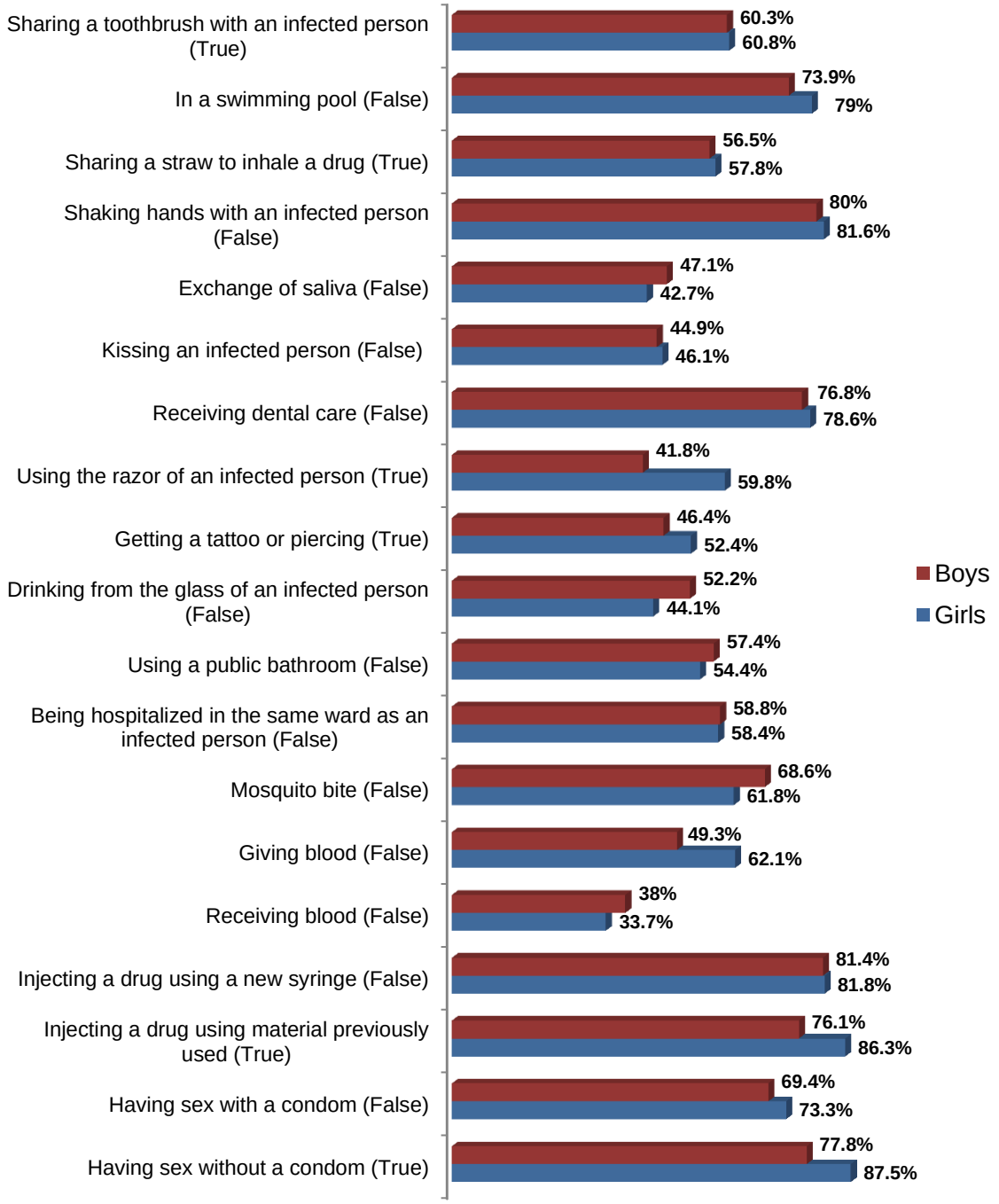
Figure 15 **Distribution of respondents based on gender for the question "Do you think you are adequately informed about STBBI, HIV and hepatitis?"**



The previous figure indicates the youth's estimation of their own level of knowledge regarding HIV/AIDS and the other STBBIs, based on their gender. When comparing girls and boys, one can note that 35.4% versus 39.7% consider themselves adequately informed whereas 64.7% versus 60.3% did not consider themselves adequately informed. One can note there is a very slight difference based on gender.

4.3 Knowledge of the transmission mechanisms and prevention means

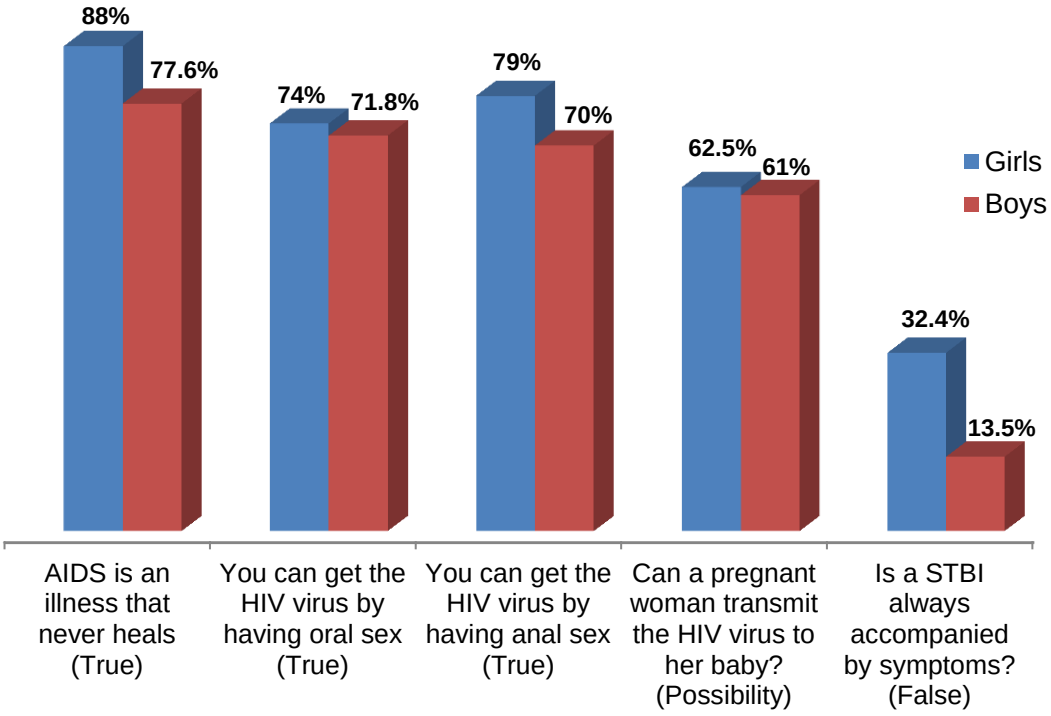
Figure 16 Knowledge of HIV/AIDS transmission mechanisms among adolescents based on gender (% of correct answers)



Most youth identified some HIV transmission mechanisms such as non-protected sex and sharing used drug injection material (Figure 16). However, less of them identified the use of an infected person's razor, tattooing or piercing, and sharing a straw to inhale drug. Girls obtained slightly higher rates of good answers than boys.

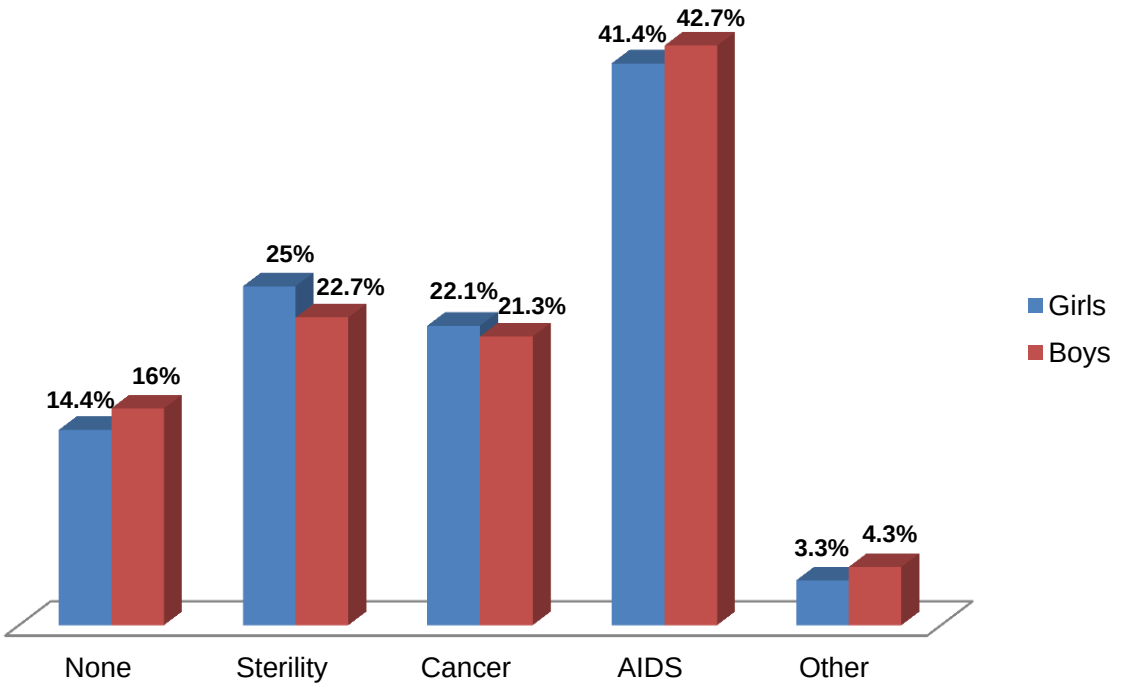
4.4 Knowledge related to HIV/AIDS and other STBBIs

Figure 17 Knowledge related to HIV/AIDS among youth based on gender (% of correct answers)



The majority of youth know that AIDS is a disease that cannot be cured, that it is possible to contract HIV through oral or anal sex, that the transmission of HIV from a mother to her foetus is possible. However, not many people know that a STBBI does not always produce symptoms (Figure 17).

Figure 18 **Distribution of respondents based on gender for the question "What are the consequences that an STBBI can have on a person's health in the long term?"**



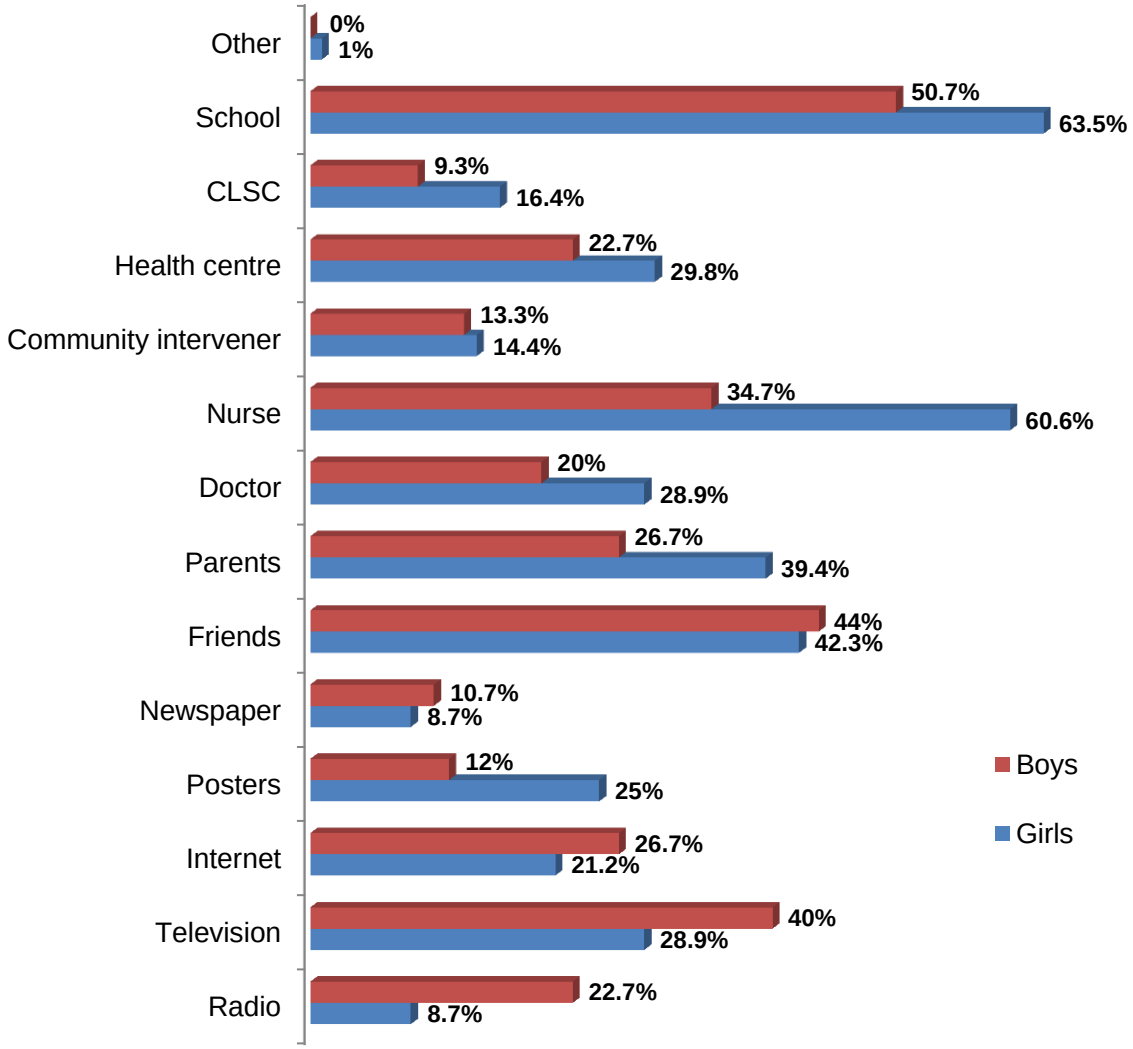
Regarding the knowledge of the potential consequences of a STBBI on a person's health in the long term, male and female respondents seem to have about the same level of knowledge. Approximately only 42% of adolescents identified AIDS as a consequence and 21% identified cancer. Concerning sterility, 25% of girls and 22.7% of boys identified it as a long-term consequence. However, 16% of boys and 14.4% of girls think that STBBIs cannot have any consequences on a person's health in the long term.

5. Sources of information

5.1 Sources of information used by youth

The following figure lists the main sources of information used by youth on HIV/AIDS and the other STBBIs.

Figure 19 **Distribution of the various sources of information used by youth based on gender**



For most respondents, school is the main source of information for girls as well as for boys (60.5% versus 50.7% respectively). Regarding the other sources of information most frequently stated by girls, they are: the nurse (60.6%), friends (42.3%), parents (39.4%) and the health centre (29.8%). Less than three girls out of ten mentioned news on television or the physician. One girl out of four mentioned posters and approximately one girl out of five mentioned internet. Boys indicated they obtained information on HIV/AIDS and the other STBBIs from their friends (44%), while four boys out of ten mentioned television (40%), a nurse (34.7%), internet or their parents (26.7%), 22.7% mentioned the health centre or the radio and two boys out of ten mentioned the physician (20%). However, it should be noted that the media (television and radio) are more often mentioned as information sources by boys than by girls.

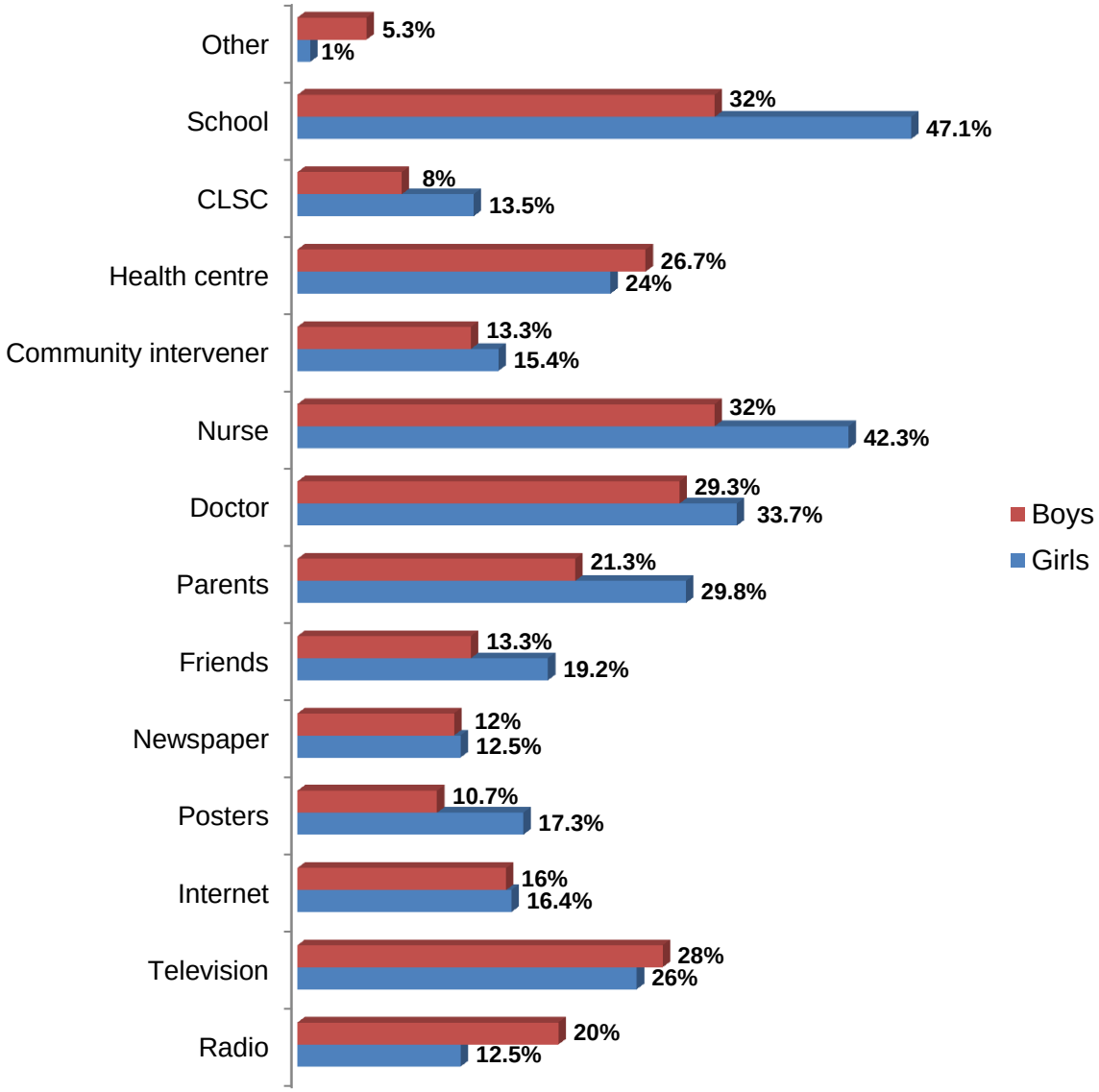
Furthermore, the least frequent sources of information for girls as well as for boys are the newspaper, the community worker and the CLSC.

5.2 Youth's favourite sources of information

In this section, we also asked youth the sources of information they preferred using to obtain information on HIV/AIDS and the other sexually-transmitted and blood-borne infections (STBBIs).

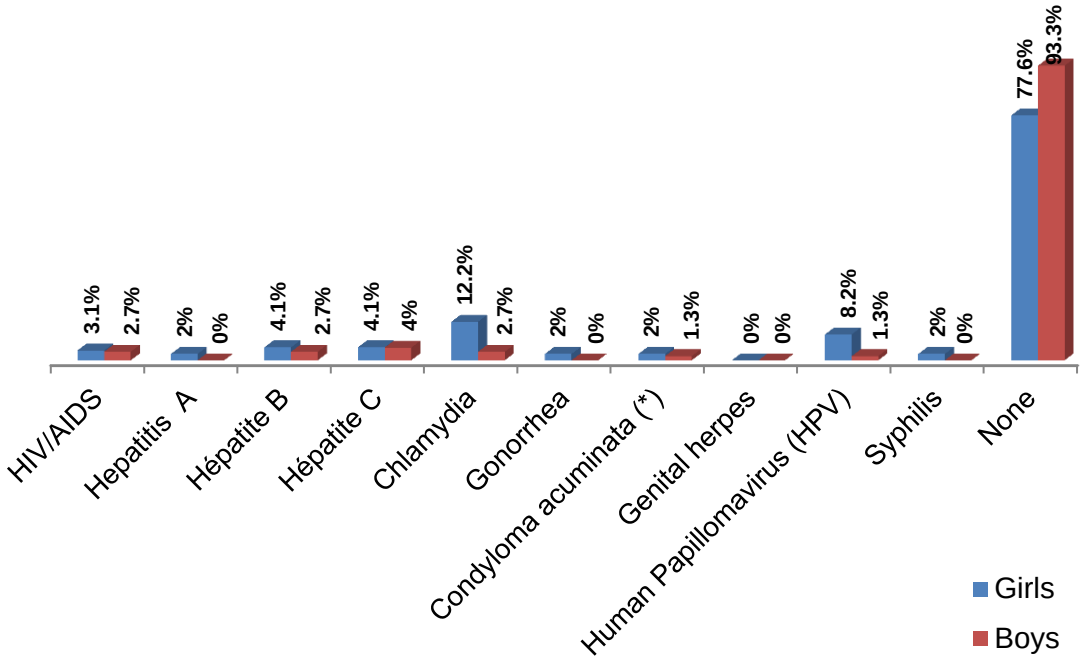
The results analysis (Figure 20) shows that school is often mentioned by girls (47%) and by boys (32%) as a source of information. As to the other sources of information most often mentioned by girls as well as by boys, they are: the nurse, the physician, parents, television and the health centre.

Figure 20 **Distribution of the various sources of information preferred by youth based on gender**



6. Screening test

Figure 21 Rates of STBBIs diagnosed in youth, based on gender

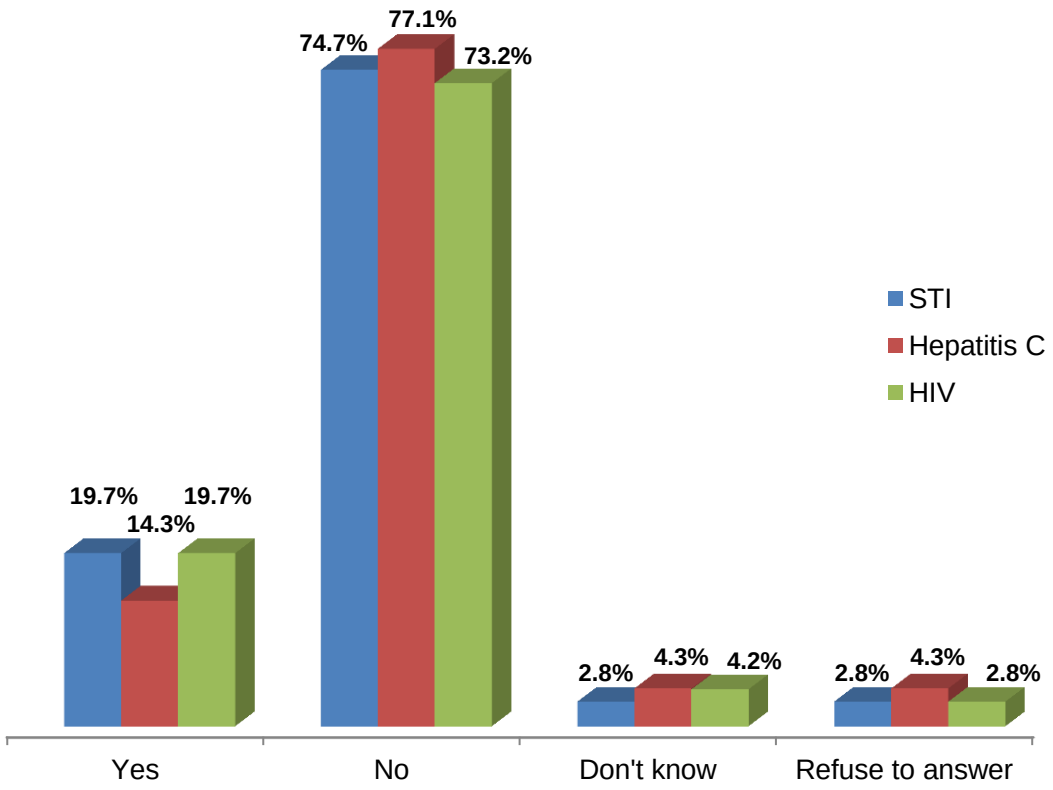


*Genital Warts

The proportions are based on the youth' self-declaration

Most youth, particularly boys, indicated they were never diagnosed with one of the sexually-transmitted and blood-borne infections (STBBIs). However, 12.2% of girls indicated they had been diagnosed with chlamydia compared to only 2.7% of boys and with human papillomavirus in a proportion of 8.2% versus 1.3% respectively. The proportion of diagnosed Hepatitis B, HIV/AIDS cases and condylomas acuminate is nearly two times higher among girls than boys. For Hepatitis C, the proportion is similar among girls and boys (4%). Regarding Hepatitis A, gonorrhea and syphilis, only girls indicated they had been diagnosed with one of these infections (2%). In other terms, girls are more susceptible of declaring a STBBI diagnosis than boys.

Figure 22 **Distribution of sexually-active youth who have been screened for a STI, Hepatitis C or HIV**



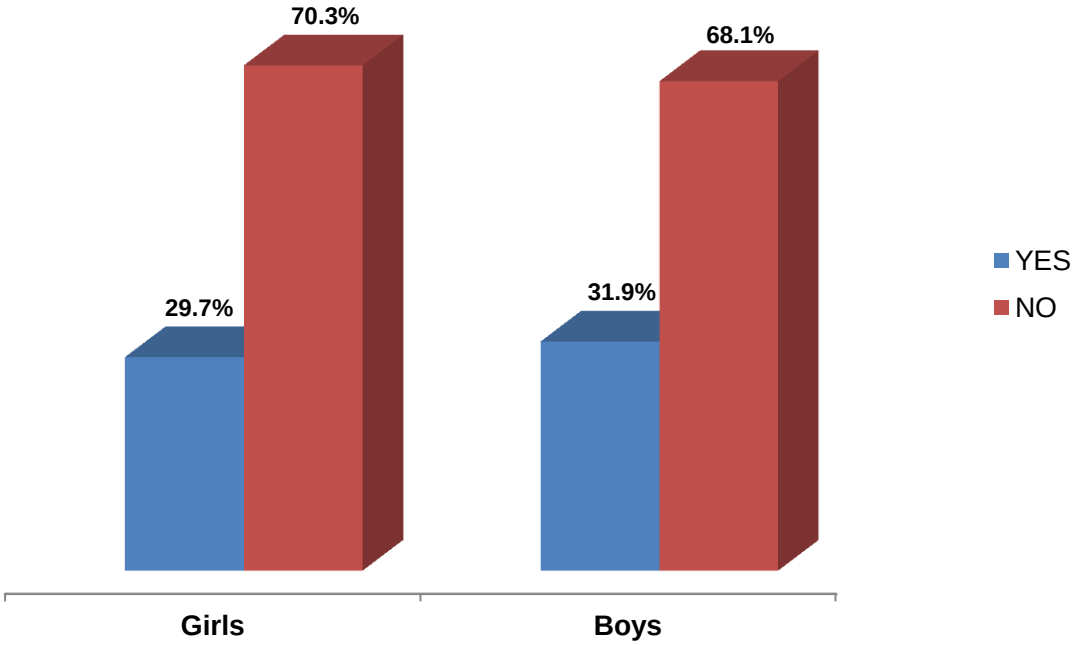
It is remarkable to note that the majority of sexually-active youth reported never having been screened for a STI, Hepatitis C or HIV (Figure 22). However, approximately 20% reported having been screened for a STI or HIV, and 18% reported having received the result for a STI and 17% for HIV; as to Hepatitis C, 14% were screened and 11% indicated they had received the result. It is important to note, however, that most of the youth screened are girls. Furthermore, a number of youth indicated they had not received a result after having been screened: approximately 3% for HIV or Hepatitis C and 1.4% for a STI.

7. Attitudes and perceptions

The information received by youth on HIV and AIDS as well as their experiences will no doubt have an impact on their fear of the disease, their feelings towards people affected and their perceptions regarding certain aspects of sexuality.

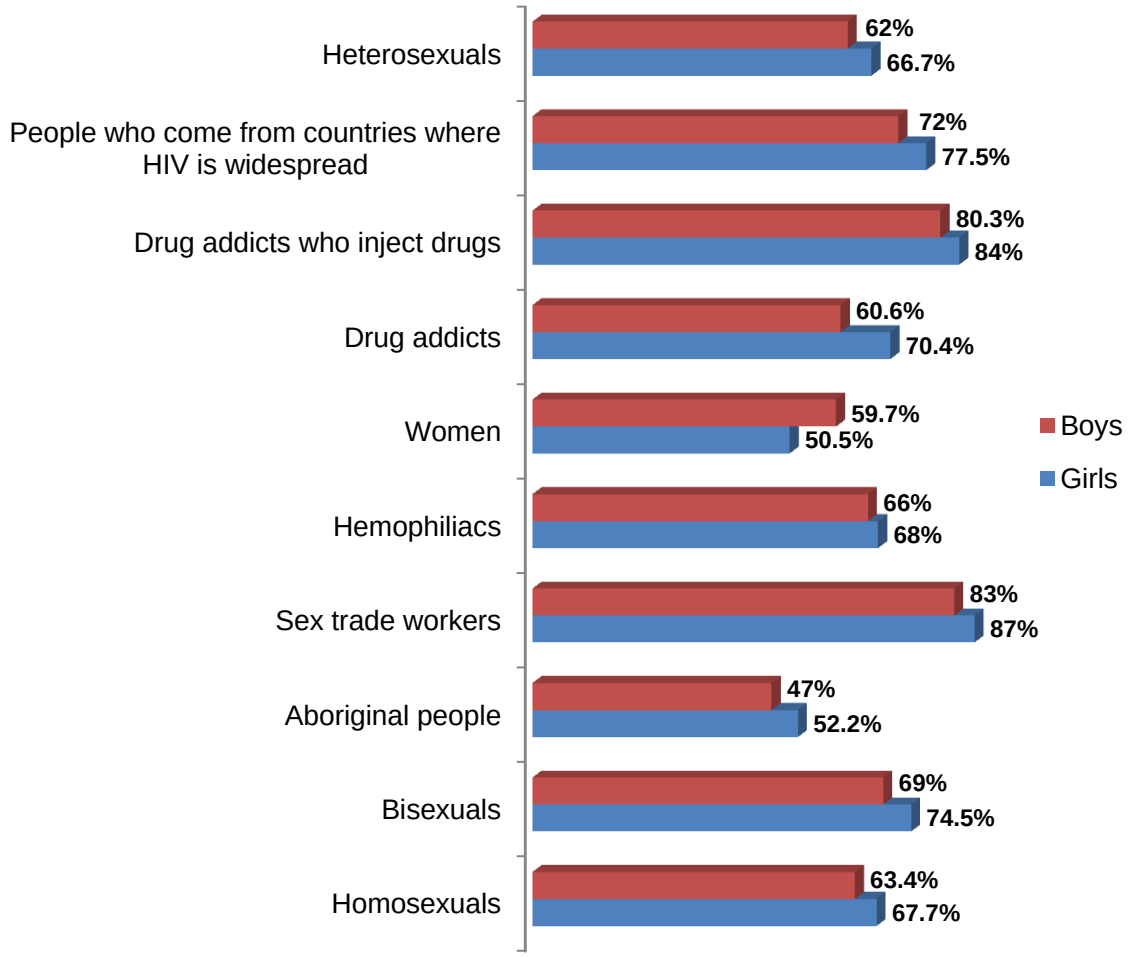
7.1 Attitudes of youth towards HIV/AIDS

Figure 23 Distribution of respondents based on gender for the question "Do you know at least one person with HIV/AIDS?"



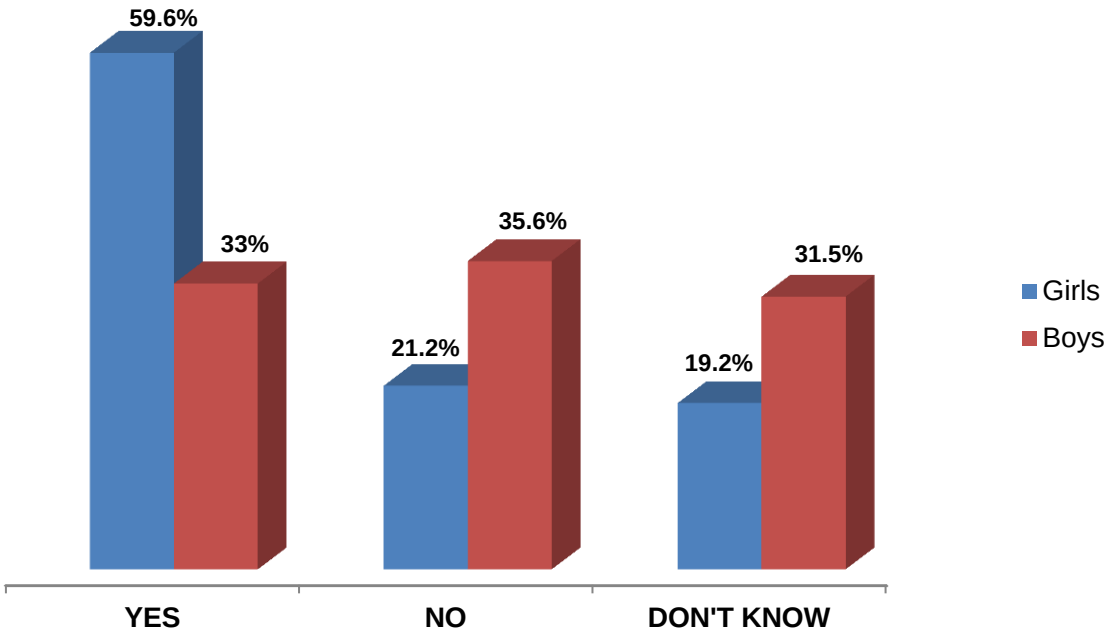
Based on the graph (Figure 23), one can notice that from the gender point of view, the proportion of individuals who know at least one person with HIV/AIDS is more or less the same.

Figure 24 **Distribution of youth answer to identify groups at risk for HIV based on gender**



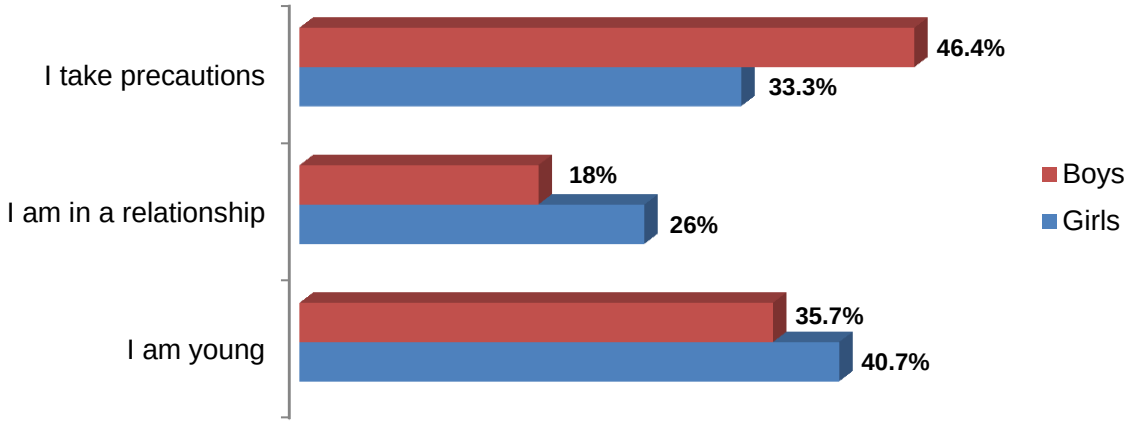
In the same section, attitudes and perceptions, youth were asked to identify groups at risk (Figure 24). A majority of respondents identified sex trade workers, drug addicts who inject drugs and people who come from countries where HIV is widespread as groups at risk. One can but notice that 52.2% of girls and 47% of boys have identified Aboriginal people as a group at risk. Also, 50.5% of girls and 59.7% of boys consider women to be a group at risk.

Figure 25 Concerns of youth's towards HIV/AIDS, based on gender



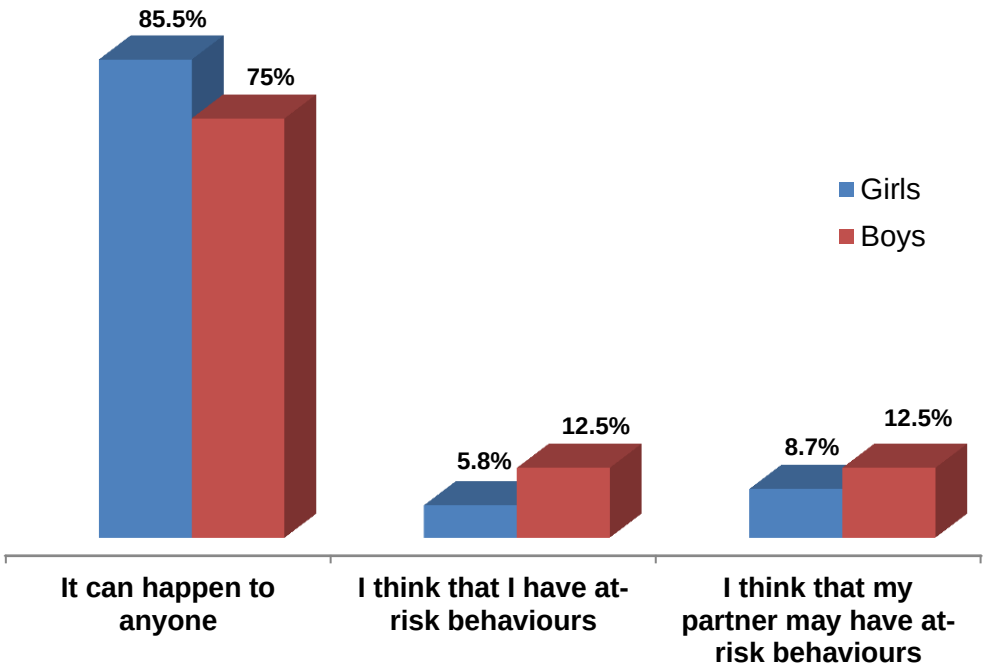
Youth were also evaluated regarding their own vulnerability to HIV and AIDS. Based on the graph (Figure 25), one can see that twice as many girls expressed their concerns regarding HIV/AIDS, compared to boys: approximately 60% versus 33%. However, one can note that 31.5% of boys and 19.2% of girls answered "Don't know".

Figure 26 Distribution of youth based on gender and the reasons why HIV does not worry them



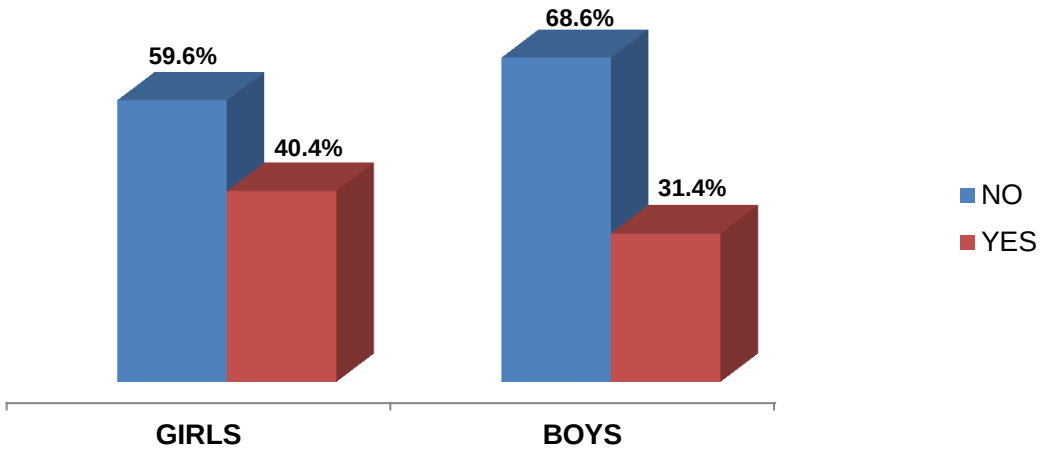
Among the youth who expressed no worry towards HIV, 38% explained this attitude by the fact they are young and 22% by the fact they are in a relationship. Based on gender, girls seem slightly more likely to put forth such arguments than boys. The latter explain their attitude by the fact they take precautions: 46.4% compared to 33.3% respectively.

Figure 27 Distribution of youth based on gender and the reasons why HIV worries them



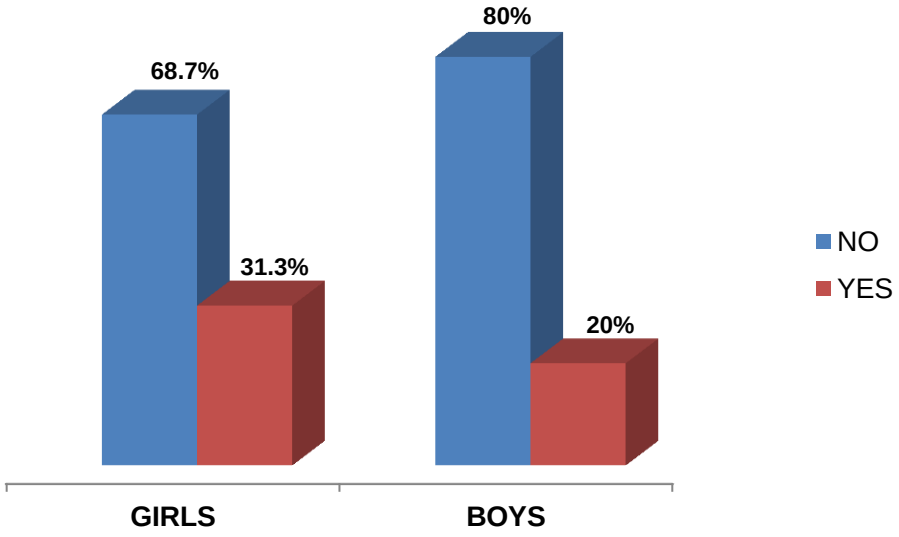
The majority of youth who expressed concerns regarding HIV/AIDS associated this attitude to the fact that it could happen to anyone. Regarding the others, they either thought they had at-risk behaviours (6.5%) or thought their partner might have at-risk behaviours (6.5%). Based on the graph (Figure 27), one can see that, based on gender, the proportion of individuals in the various categories is more or less the same.

Figure 28 **Distribution of respondents based on gender for the question "Have you ever wondered about the sexual practises of one of your partners?"**



Among the sexually-active youth, approximately 40% of girls compared to 31% of boys have wondered about the sexual practises of one of their partners. However, approximately 60% of girls compared to 69% of boys answered negatively. A slight difference can be noted between both genders.

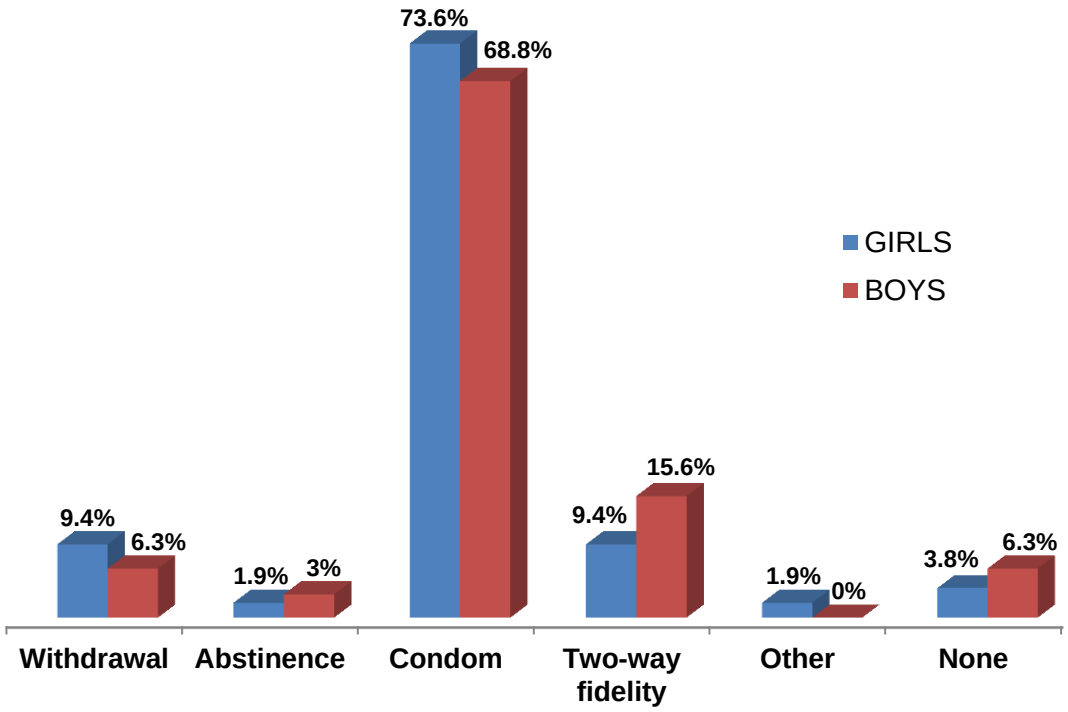
Figure 29 **Distribution of respondents based on gender for the question "Have you ever wondered about the possibility that one of your partners had been using drugs?"**



Concerning whether or not respondents had ever wondered about their partner's drug use, a majority of sexually-active adolescents answered negatively. However, 31% of girls compared to 20% of boys answered the question positively. There is also a very slight difference based on gender.

7.2 Methods of protection

Figure 30 Methods of protection from STBBIs and HIV based on gender



Regarding the methods of protection used against STBBIs and HIV, the majority of youth have chosen condoms, among girls as well as among boys: approximately 74% versus 69% respectively. However, 15.6% of girls compared to 9.4% of boys have chosen two-way faithfulness as method of protection, and 9.4% versus 6.3% respectively have chosen withdrawal. As to protection through abstinence, it was chosen by 3% of boys compared to 2% of girls.

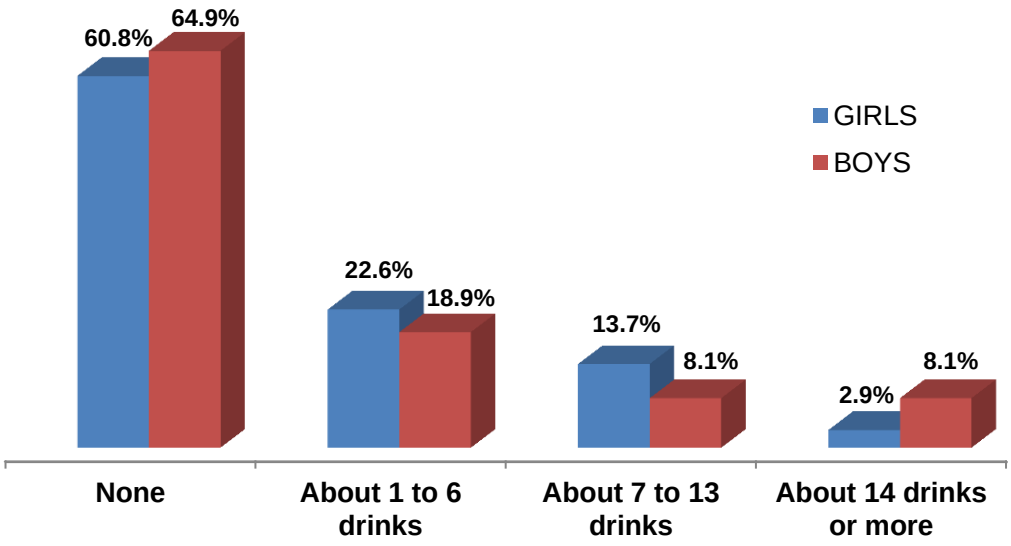
8. Substance use and sexual relations

The use of alcohol and/or drugs is known to impair judgement; furthermore, it is considered as a dangerous behaviour for sexual health. For these reasons, and to evaluate their sexual behaviours as well as their use of substances, youth were asked to answer questions on their lifestyle habits in relation with the use of alcohol and/or drugs.

8.1 Alcoholic beverages

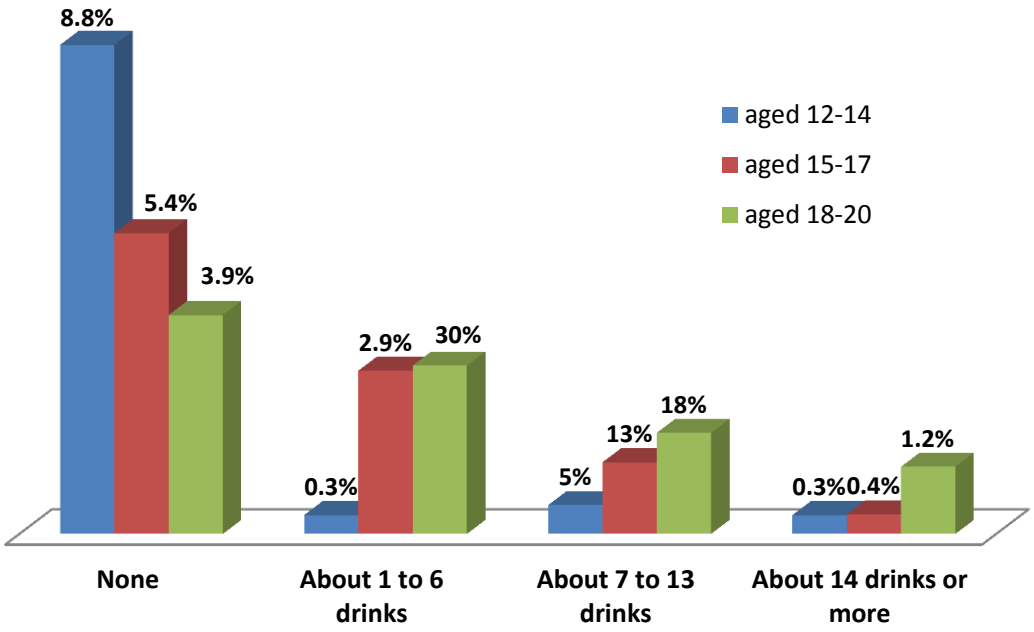
8.1.1 Drinking frequency

Figure 31 Distribution of drinking frequency over a seven-day period reported by youth based on gender



Based on the previous graph (Figure 31), a majority of youth reported they had not taken any alcohol during a seven-day period. As to the youth who reported having had 1 to 6 drinks or 7 to 13 drinks, the majority are girls, with 36.3% of girls compared to 27% of boys. However, regular alcohol intake (14 drinks or more) is more frequent among boys than girls.

Figure 32 Distribution of alcohol intake over a seven-day period reported, based on age category



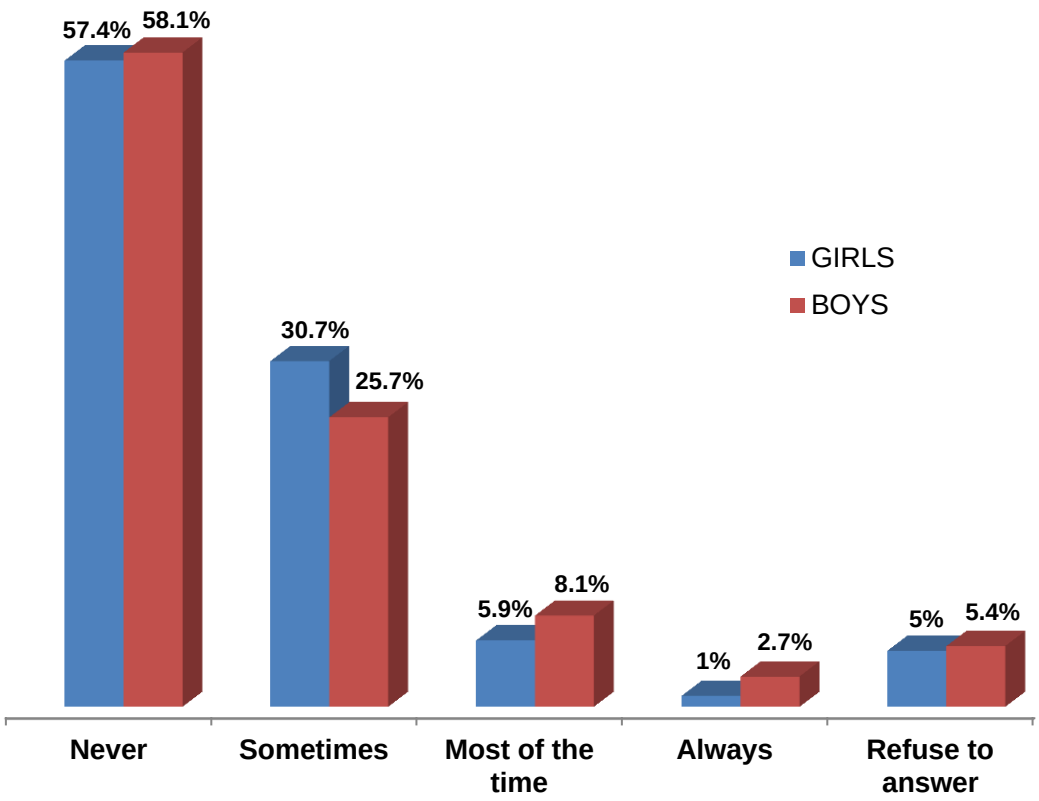
The results shown in this graph, based on different age categories (Figure 32), seem to indicate that alcohol consumption during this seven-day period, regardless of the frequency, is very widespread among 18 to 20 year olds (60.6%) compared to the 15-17 year old group (45.8%) and the 12 to14 year old group (12%). There are clearly more members from this group (12%) than the 12-17 year olds (6,9%) who reported 14 drinks or more during this period. It should however be pointed out that 8.6% of the 12-14 year old groupe reported having more than 7 drinks over the course of this period.

8.1.2 Alcohol intake and sexual relations

During the twelve months preceding the survey, 37.6% of girls compared to 36.5% of boys reported having taken alcohol before having sex (Figure 33). More or less the same proportion based on gender.

However, it can be noted that more boys than girls reported they had taken alcohol before sex “every time” or “most of the time” during the twelve months preceding the survey (Figure 33).

Figure 33 Alcohol drinking before sex frequency based on gender during the 12 months preceding the survey

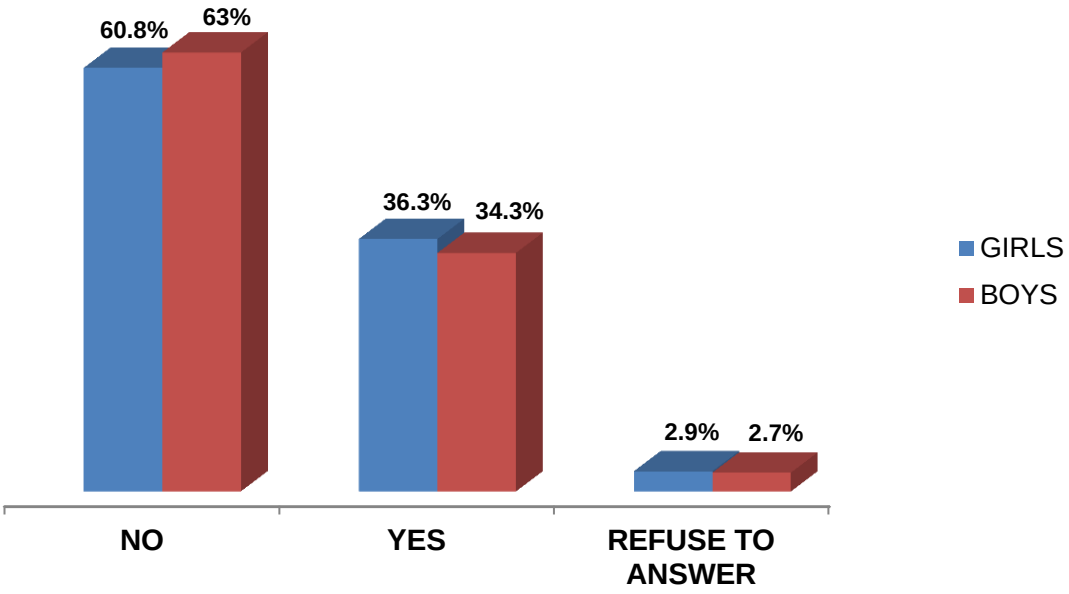


9. Use of drugs

Maximum vigilance is indicated even with a moderate use of drugs. There are several risks associated with using drugs and the impacts on the overall health and sexual health more specifically.

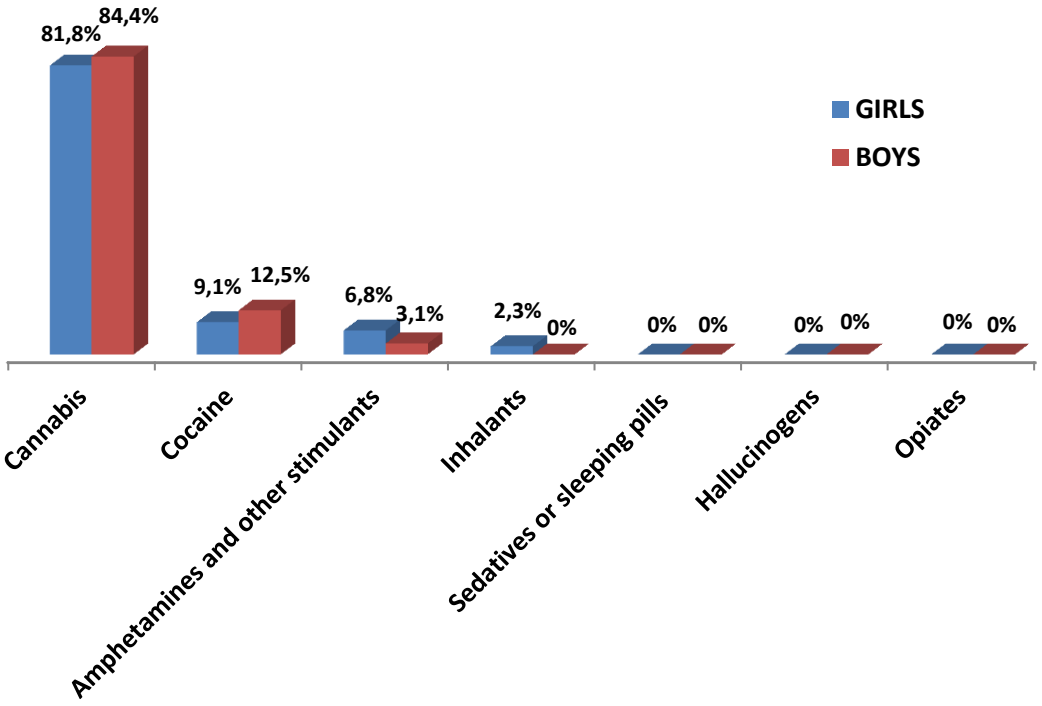
During the twelve months preceding the survey, approximately 36% of girls compared to 34% of boys reported having used drugs at least once (Figure 34). However, nearly 58% of youth reported never having used drugs during the same period. Furthermore, it can be noted that the use or injection of drugs increases with age.

Figure 34 **Use or injection of drugs based on gender during the 12 months preceding the survey**



9.1 Drugs used by youth

Figure 35 Types of drugs used by youth during the past 12 months among drug users, based on gender



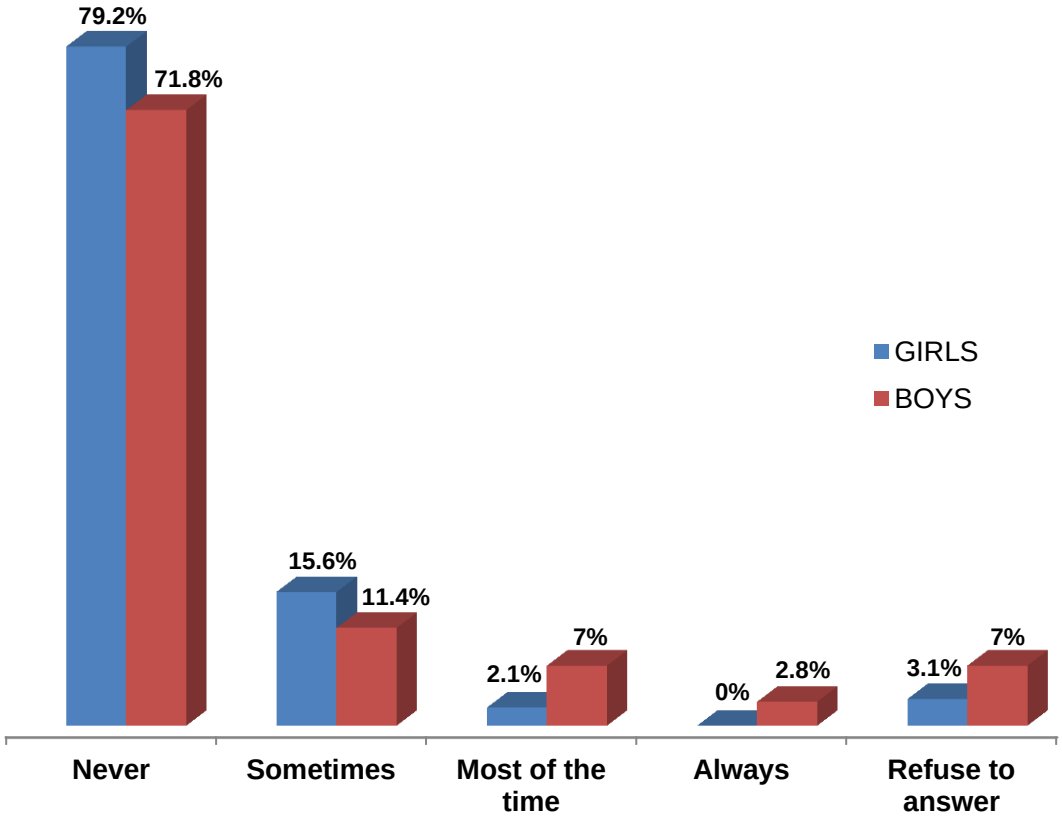
Based on the previous graph (Figure 35), cannabis is the most often used drug: 84.4% of boys compared to approximately 82% of girls have used cannabis at least once during the twelve months preceding the survey. After cannabis, the drugs most often used are cocaine and amphetamines.

9.2 Drugs injected used by youth

Regarding injection drugs, only 8 persons (5 boys and 3 girls) reported having injected drugs during the twelve months preceding the survey. This means that injection drugs are less wide spread among youth living in communities.

9.3 Drug use and sexual relations

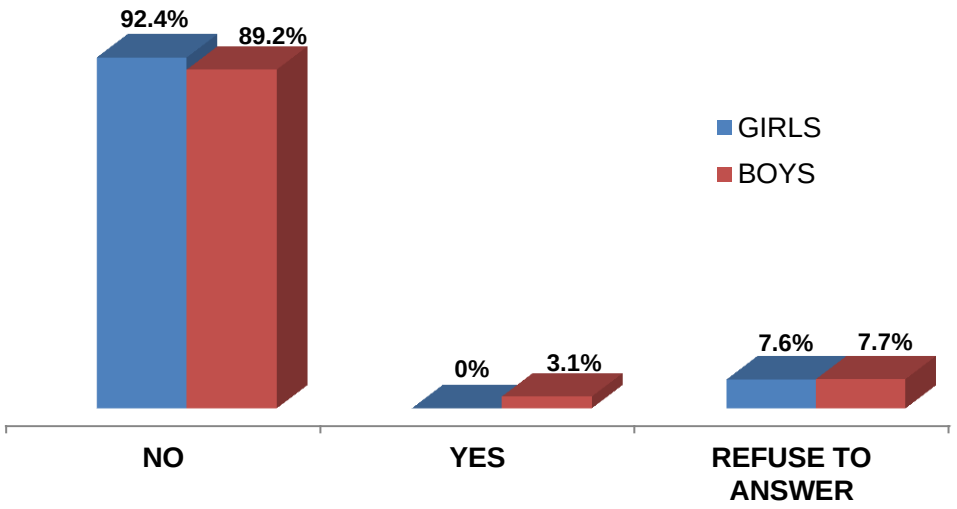
Figure 36 Frequency of drug use before sex based on gender during the 12 months preceding the survey



The majority of youth have never used drugs before sex during the twelve months preceding the survey. However, 21.2% of boys compared to 17.7% of girls reported having used drugs before sex during this period (Figure 36).

9.4 Material used to inject drugs

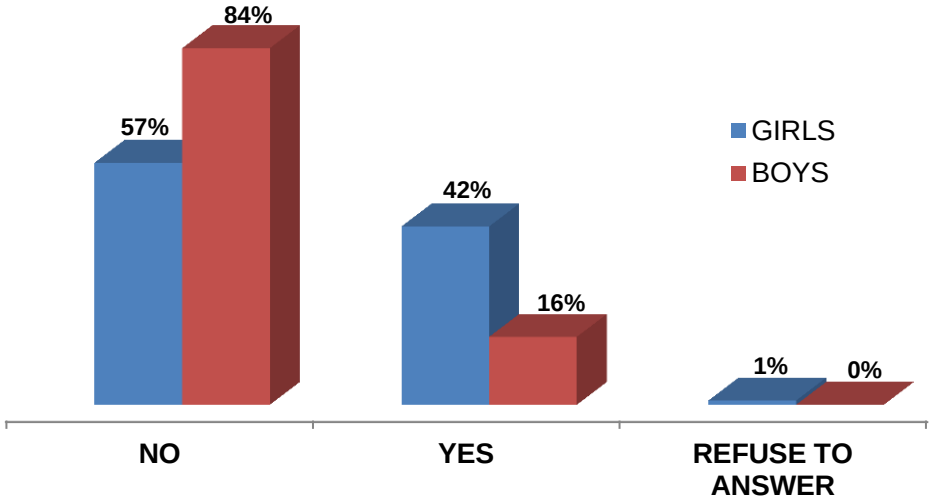
Figure 37 **Sharing of injection drug material based on gender during the 12 months preceding the survey**



The majority answered negatively when asked about sharing injection drug material during the 12 months preceding the survey (Figure 37). However, 3.1% of boys reported having used injection material that had been used at least once by other people (including their sexual partner) during this period.

10. Piercing or tattooing

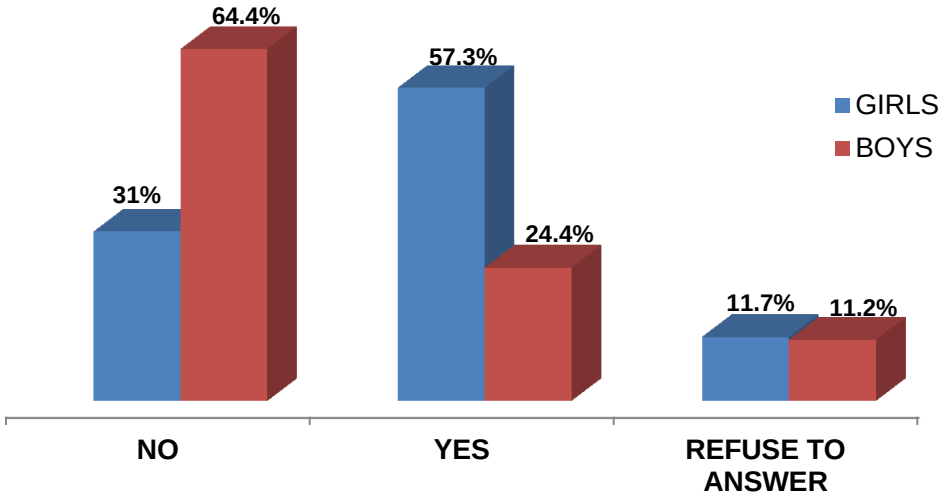
Figure 38 **Distribution of youth that stated having a tattoo or a piercing during the 12 months preceding the survey, based on gender**



Body piercing and tattooing are considered as dangerous behaviours since they may result in infection or facilitate the transmission of blood-borne diseases. Forty-two percent of girls compared to 16% of boys reported having had a part of their body tattooed or pierced during the 12 months preceding the survey. Indeed, piercing is more common among girls than among boys.

Based on the following graph (Figure 39), 64.4% of boys compared to 31% of girls reported not having verified whether the needles used were new or adequately disinfected.

Figure 39 **Distribution of respondents based on gender for the question "Did you make sure that the needles were new or adequately disinfected before using them?"**



DISCUSSION

This survey has revealed the early sexuality of First Nations youth compared to young Canadians. Indeed, the data shows that the average age of boys was 13.4 and 13.6 for girls; whereas the data from the 2003 Canadian Community Health Survey (CCHS) (29) show that the average age of young Canadians at the time of their first sexual intercourse was 16.5 both for boys and girls. This early sexuality could expose youth to a greater risk of contracting STBBIs. Indeed, a number of surveys have revealed that an early onset of sexual activity is associated with an increased risk of STI, and would be associated with higher STI rates (4).

Regarding sexual activity, we simply asked youth whether they had sexual intercourse. Those responding affirmatively were immediately classified as "sexually active" regardless of their behaviour's frequency. Approximately half of respondents identified themselves as sexually active. Results have shown that sexual activity increases with age. Only boys answered they had four or more partners during the twelve months preceding the survey. This disparity could be explained by what is referred to as the *sexual double standard*, according to which a given sexual behaviour is evaluated differently if it is adopted by a man or woman (30). Thus, while a large number of sexual partners could be a source of pride and respect for boys, among girls, this behaviour could lead to a bad reputation. This double standard with respect to sexual behaviour could cause boys to declare a falsely high number of sexual partners. These same reasons could have an effect to the contrary among girls, causing them to lower the number of sexual partners disclosed.

The results of the analysis show youth interest towards oral sex compared to anal sex. Indeed, among the sexually-active youth, 33% reported having had oral sex, 25% reported having tried anal sex and 16% reported having tried both. Although from the sexual health perspective, the risk of contracting a sexually-transmitted or blood-borne infection through oral sex is low compared to anal or vaginal penetration, oral sex is not without risk (31). Indeed, a number of STBBIs are present in sperm, vaginal secretions, saliva, and other body fluids and can therefore be transmitted through cuts and lesions in the genital area. As such, practising or receiving oral sex increases the risk of being exposed to a number of STBBIs. Furthermore, 82.6% of respondents confirmed they had never had sex with a person infected with HIV/AIDS and 79% reported they never had sex with a person with a STI. This might be due to the fact that youth do not know about the lack of symptoms of most STBBIs.

Approximately 54% of girls compared to 36% of boys did not always use a condom. When reviewing the reasons why girls did not always use a condom, one reason stood out: 71% of them indicated because they had a regular partner. This trust in the partner may be an obstacle to prevention. The result from this survey also indicates that the use of a condom among youth increases with age. In other words, youth under the age of 18

are less inclined to use a condom compared to the youth aged 18-20. This finding implies that adolescents could be at higher risks of contracting sexually-transmitted and blood-borne infections. As to the youth's attitude towards their partner's refusal to use a condom, more boys than girls indicate they would accept having sex with a regular (31.1% versus 19.4%) or occasional partner (19.6% versus 6.7%) without a condom. These results highlight youth's poor understanding of both the degree of risks they expose themselves to by having unprotected sex and of the utility of condoms with regards to the various STBBIs.

Knowledge revealed itself as a determining factor in youth's sexual behaviours since to protect oneself adequately from STBBIs, one must know and understand the transmission mechanisms and prevention means. As such, we evaluated youth's knowledge. When reviewing the results, one can notice that few of them know about STBBIs, are able to identify some HIV transmission mechanisms, and know the impacts of STBBIs on a person's health in the long term. Also, several of them think that withdrawal before ejaculation is a protection method against HIV and the other STBBIs. These results support our findings on youth's poor knowledge of STBBIs and their dangers.

For the majority, school is the main source of information for girls as well as for boys (60.5% versus 50.7% respectively). As to the other sources of information, those most frequently cited for boys are their friends (44%). The dangers of such a learning context are obvious. One can also note the lack of sex education within the family cell; another factor that fosters youth's vulnerability. Among the least frequently cited sources of information among girls as well as among boys is the community health worker. Although present in several communities, this resource does not seem to be an option for youth who want information. One could therefore think that this resource does not have a daily contact with youth, as friends, teachers or parents do.

Regarding the question on screening, about 75% of the young people have never had a screening test. However, there are two main findings: approximately 3% of youth indicated they had been diagnosed with HIV/AIDS and girls are more likely than boys to report having been diagnosed with other STBBIs. The latter finding could be due to the fact it is easier to reach girls in a confidential manner during an annual check-up (pap test) or consultation for birth control. These consultations may be an opportunity to suggest a screening. Medical follow-up of boys for their sexual health being less regular, it is more difficult to reach them and unusual to see them consult in the absence of symptoms.

Furthermore, the information received by youth on HIV and AIDS as well as their experiences with no doubt influence their fears and perceptions with regards to the disease and certain aspects of sexuality. Concerning the question on groups at risk for HIV/AIDS, over half of them identified Aboriginal people and women as groups at risk. As well, twice as many girls expressed their worries concerning HIV/AIDS compared to

boys who think they were not at risk since they take precautions. Since the questionnaire did not include information on the precautions taken by boys, it is difficult to know whether they are good precautions or based on lack of knowledge.

Analysis results show that the intake of alcoholic beverages and use of drugs, regardless of the frequency, is very widespread among youth, even young adolescents. Indeed, results show that cannabis is a drug widely used among youth. It also appears that the use of drugs and the volume of alcohol intake increase with age. As well, as many girls than boys have indicated they had taken alcohol or used drugs before sex during the twelve months preceding the survey. Based on a study, the use of alcohol and drugs can significantly impair preventive behaviours (30). In other words, these substances impair judgment, increase desire, reduce sexual inhibition and therefore divert from prevention.

IV. FIRST NATIONS ADULTS

1. Characteristics of the population

The analysis included a total of 935 respondents, among which were 493 women and 440 men (gender was not specified for 2 participants). The average age of the participants in the survey was 38.2 years with a standard deviation of 11.2 years. The average age of women (38.1 years) and of men (38.3 years) was similar. No significant difference was noted between both genders. Among these respondents, 24% were aged 18 to 28, 31.4% 29 to 39, and 18.4% 50 and over (Table 10). Approximately 27% of participants indicated they had carried out their studies in a First Nations community, 37.5% indicated they had carried out their studies in a First Nations community and outside the community, 30% outside the community, and 9.4% in a residential school. Only 54% indicated they had an income-earning activity. As to the annual personal income for the year ending December 31, 2007, approximately 5% indicated they had no income, 41% had an income between $1 and $19,999, 38% between $20,000 and $39,999 and approximately 15% over $40,000. Regarding the level of schooling, approximately half of the participants have studied a few years in high school (33%) or graduated from high school (16.1%). Vocational training (14.5%) and trade school (9.5%) were identified by one quarter of the respondents. However, approximately 14% of participants studied at university and 6.6% have a university degree. Over 60% have a partner, 31.6% are single and 8% are divorced or widows/widowers. Seventy-two percent of participants indicated that spirituality is a very important (31%) or important (41%) part of their life.

Table 9 **Socio-demographic characteristics of the 935 participants in the survey**

Socio-demographic variables	N(*)	%
Gender		
Female	493	52.8
Male	440	47.2
Age (years)		
18-28 years old	225	24.1
29-39 years old	294	31.4
40-49 years old	244	26.1
50 years old and over	172	18.4
Language(s) spoken on a daily basis		
French	126	13.6
English	170	18.3
First Nations Language (FNL)	303	32.6
French - English	58	6.2
French - FNL	156	16.8
English - FNL	77	8.3
French - English - FNL	39	4.2
Place of schooling		
In a First Nations community	250	26.7
Part in a community and part outside the community	349	37.3
Outside the community for the whole duration of the studies	280	30.0
Residential school	88	9.4

Socio-demographic variables	N(*)	%
Level of schooling		
Never	3	0.3
A few years of primary school	16	1.7
Primary school completed	31	3.4
A few years of high school	305	33.0
High school completed	149	16.1
A few years of college or trade school	76	8.2
College or trade school completed	88	9.5
A few years of university	65	7.0
University degree completed	61	6.6
Vocational training	133	14.4
Income-earning activity		
Yes	495	54
No	423	46
Annual income (dollars)		
None	41	5.4
1-19,999	314	41.3
20,000-39,999	289	38.0
40,000-59,999	81	10.7
60,000 and over	35	4.6
Marital status		
Single	292	31.6
Common law	257	27.8
Married	301	32.6
Divorced	65	7.0
Widow/widower	9	1.0
Place held by spirituality in life		
Very important	249	30.9
Important	331	41.1
Not very much important	191	23.7
Not important at all	34	4.3

*The rates may vary because of missing values

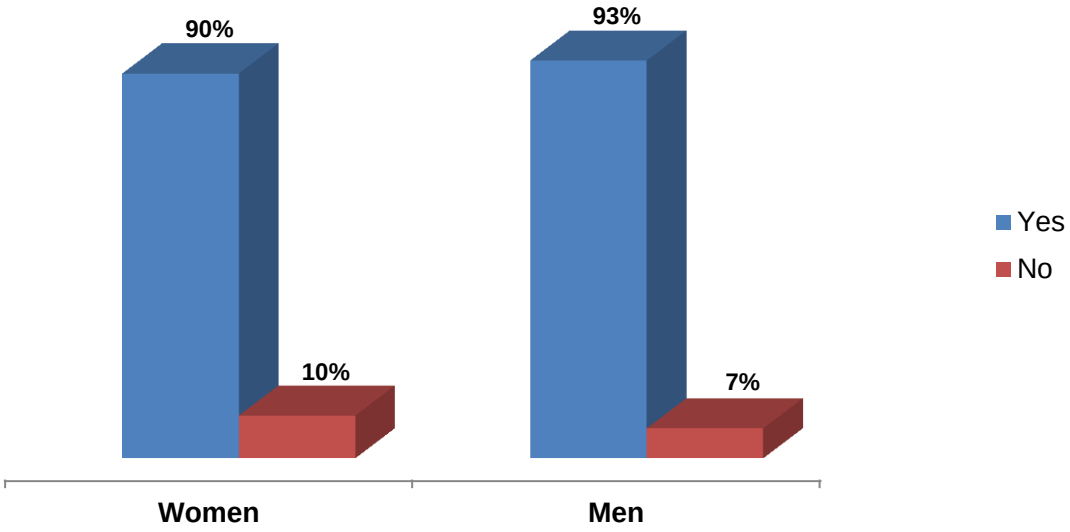
2. Sexual behaviours

A specific analysis was conducted with respondents who indicated they had been sexually active in the 12 months preceding the survey.

2.1 Sexual activity

Overall, 90% of female participants and 93% of male participants were sexually active in the 12 months preceding the survey (Figure 40). The average age of men at their first sexual intercourse is slightly lower than that of women: 15.3 years old (±0.27) versus 15.7 years old (±0.22). This difference was statistically significant (p=0.009).

Figure 40 Distribution of respondents based on gender for the question "Have you had sex during the past 12 months?"



However, if the gap between the average age of men and women at their first sexual intercourse is not really significant, it becomes more important when one compares the various age categories. While the average age at the first sexual intercourse of men aged between 50 and 60 is 16, it goes down to 14.5 among young men aged 18 to 28. The same trend can be noted among women with an average age of 17.2 at the first sexual intercourse for women aged between 50 and 60, and 14.3 for those aged 18 to 29. The gap noted between generations is 1.5 year for men and 3 years for women.

Table 10 Distribution of respondents based on age for the question "Have you had sex during the past 12 months?"

Sexual activity	Age (years)							
	18-28		29-39		40-49		50 and over	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
Yes	191	93.6	267	95.7	214	93.5	126	77.8
No	13	6.4	12	4.3	15	6.6	36	22.2

*The rates may vary because of missing values

Based on the results of the analysis (Table 10), one can see that, overall, the proportion of respondents who indicate they are sexually active tends to diminish among adults age 50 or more as age increases. Furthermore, nearly 95% of respondents aged 18 to 49 are sexually active.

The number of partners is an indicator of sexual behaviour that may increase exposure to the risk of STBBI transmission. According to the Canadian guidelines on sexually transmissible infection, having more than two sexual partners during a 12-month period is a risk factor for increased STI incidence. (33)

The average number of sexual partners for women and men during the 12 months preceding the survey is respectively 1.2 and 1.5.

The data in table 11 clearly indicates that the proportion of men who indicated they had at least two sexual partners in the 12 months preceding the survey was significantly higher than women (30.3% versus 16%). Moreover, men report more sexual partners than women do: answers vary between 2 and 8 among men versus between 2 and 6 among women. Generally, men report a higher number of partners than women. It should also be noted that there was a greater proportion of single-partner women than men: 77.2% compared to 58.8%.

Table 11 **Number of sexual partners in the 12 months preceding the survey among sexually-active participants, based on gender**

Number of partners	Gender			
	Women		Men	
	N(*)	%	N(*)	%
0	29	6.9	41	10.8
1	322	77.2	223	58.8
2	32	7.7	69	18.2
3 or more	34	8.2	46	12.1

*The rates may vary because of missing values

Based on the data in table 12, the proportion of sexually-active respondents who have had multiple sexual partners gradually decreases with age in a significant manner (<0.0001); 20.6% among 18-28 year old respondents compared to 10.6% among those aged 29-39, 4.2% among those aged 40-49 and 4% among those aged 50-60.

Table 12 **Number of sexual partners in the 12 months preceding the survey among sexually-active participants, based on age**

Numbers of partners	AGE							
	18-28		29-39		40-49		50-60	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
0	8	4.23	25	9.43	20	9.22	17	13.39
1	117	61.90	182	68.68	159	73.27	88	69.29
2	25	13.23	30	11.32	29	13.36	17	13.39
3 or more	39	20.63	28	10.57	9	4.15	5	3.94

*The rates may vary because of missing values

Fewer women than men have reported at least 3 partners in the 12 months preceding the survey: 8.2% of women versus 12.1% of men. The proportion of participants who reported at least 3 partners is highest at age 19, among women (40%) as well as among men (60%).

Furthermore, among the sexually-active participants, 65 indicated they had same sex partners in the 12 months preceding the survey (14 women and 51 men). During this period, approximately 27.5% of these men indicated they had more than one sexual partner compared to 14.3% these women.

2.2 Sexual practices

Among the respondents, 28% reported they had practised anal penetration (Figure 41). This proportion is higher among men (39%) than women (21%) (Table 13). This gap is statistically significant (<0.0001). Furthermore, approximately 66% indicated they had not tried this practice and 6% answered “Don’t know”.

Figure 41 Distribution of respondents based on anal penetration practice

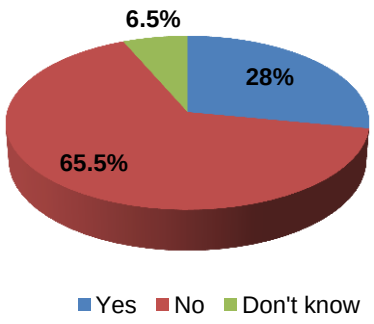
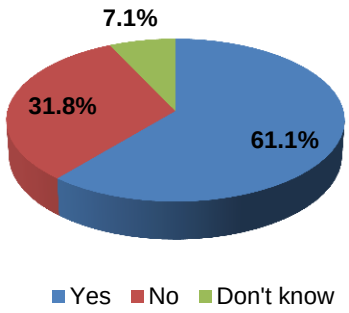


Figure 42 Distribution of respondents based on oral sex practice



In terms of risk levels, unprotected oral sex is a less at-risk practice because the mucous membrane of the mouth is thicker and more resistant than that of the vagina or the anus. Oral sex is less likely to cause oral lesions, which facilitate blood infiltration by HIV. However, although there is a low risk of transmitting HIV during oral sex with a HIV seropositive person or a person whose serostatus is unknown, several other sexually-transmitted infections (STBBIs) such as gonorrhea, chlamydia and herpes can be transmitted during unprotected oral sex. In other words, oral sex is not without risks and its practice, especially by young adult, is a source of concern among health professionals. Approximately 61% of respondents indicated they had tried oral sex (61% of women and 71% of men), approximately 32% never tried it and 7% indicated “Don’t know” (Table 13 and Figure 42). This gap between both genders is statistically significant (p=0.0031).

Table 13 **Proportion of women and men who have indicated they had practised anal or oral sex**

	Anal Sex				Oral Sex			
	Yes		No		Yes		No	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
Women	90	21.13	336	78.87	253	60.96	162	39.04
Men	155	39.44	238	60.56	273	70.91	112	29.09

*The rates may vary because of missing values

Furthermore, based on the data in table 14, practicing anal sex is significantly (p=0.0001) more frequent among participants aged 29 to 39 compared to the other age groups.

Table 14 **Proportion of respondents based on age who indicated they had anal sex in the 12 months preceding the survey**

	Age (years)							
	18-28		29-39		40-49		50-60	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
YES	48	25.9	103	40.7	55	25.5	40	23.9
NO	137	74.1	150	59.3	161	74.5	127	76.1

*The rates may vary because of missing values

Regarding the practice of oral sex, the proportion of young adults aged 18 to 28 is slightly lower, non significantly (p=0,72), compared to other age groups (63% versus 67.5%, 67.3% and 65.2%).

Moreover, among the 240 young adults aged 18 to 28 who have tried anal penetration, 43.5% indicated they also practised oral sex, whereas more than half of the 517 respondents who indicated they had practised oral sex also practised anal penetration.

2.3 Other high-risk behaviours

High-risk behaviour concerns all behaviours and practices related to sexual activity. High-risk behaviours refer to all sexual activities that put the individual at risk of contracting an STBBI.

Table 15 Proportion of women and men who have had high-risk behaviours with regards to STBBI transmission

	Women			Men		
	Yes (%)	No (%)	Don't know (%)	Yes (%)	No (%)	Don't know (%)
Accept money or drugs in exchange for sex	2.5	97	0.5	4.1	94.7	1.2
Having had sex with a person with HIV/AIDS	0.2	96.3	3.5	0.5	92.6	6.9
Having had sex with a person with a STBBI	20.3	73.5	6.2	12.2	73.2	14.6

Based on the analysis results (Table 15), a majority of participants (97% of women versus 95% of men) indicated they had never accepted money or drugs in exchange for sex. However, 12 women (2.5%) and 17 men (4.1%) reported they had accepted that type of exchange. These proportions are highest among women aged 18 to 39 and among men aged 50 to 60. It can also be noted that 96.3% of women versus 92.6% of men confirmed they had never had sex with a person with HIV/AIDS, whereas 46 participants (3.5% of women versus 6.9% of men) did not know whether they had sex with an infected person, particularly women aged 18 to 28 and men aged 29 to 39. However, three respondents (one woman and two men) reported having had sex with a person with HIV/AIDS. Also, approximately 73% reported never having had sex with a person with a STBBI and 10% did not know whether they did. However, 146 participants confirmed having had sex with a person with a STBBI. More women (20%) than men (14.6%) report having had sex with a person infected with a STBBI (significant gap $p<.0001$). These proportions are highest at 19 among women (25%) as well as among men (17%).

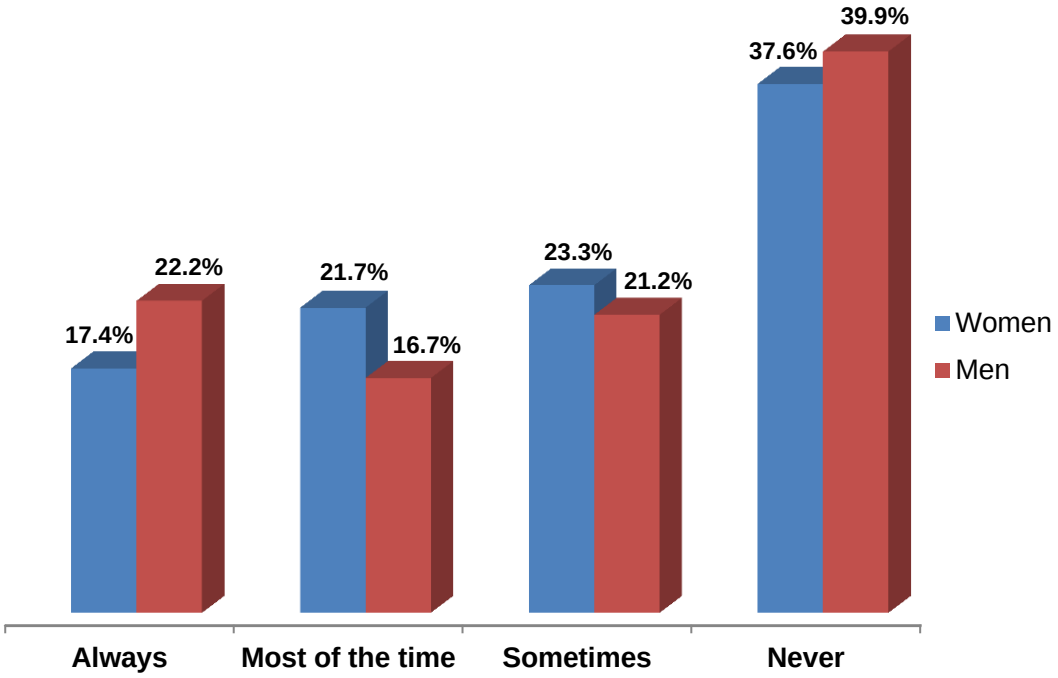
3. Protection against HIV/AIDS and other STBBIs

Because the systematic and adequate use of condoms is an efficient birth control method and it reduces the risks of sexually-transmitted infections, such as HIV, chlamydiosis, HPV, herpes, Hepatitis B, and gonorrhea (32), the levels and systematic use of condoms by sexually-active people are important indicators of sexual health.

3.1 Frequency of condom use

It should be noted that single-partner married or common law participants who had a sexual partner in the 12 months preceding the survey were excluded from the analysis (Figures 43,44,45), since they are not directly exposed to the risk of contracting a STBBI. People can expose themselves through unsafe behaviours.

Figure 43 Frequency of condom use among respondents, based on gender



The results of the graph (Figure 43) show that approximately 2 out of 5 respondents reported that they have never used condoms during sexual relations. The proportion of respondents who reported having always used a condom during sex is slightly higher among men than women (non significant gap p=0.44): approximately 22.2% versus 17.4%. However, it should be noted that approximately 82.6% of women compared to 77.8% of men did not always use it (Figure 43).

Table 16 Frequency of condom use among respondents, based on age

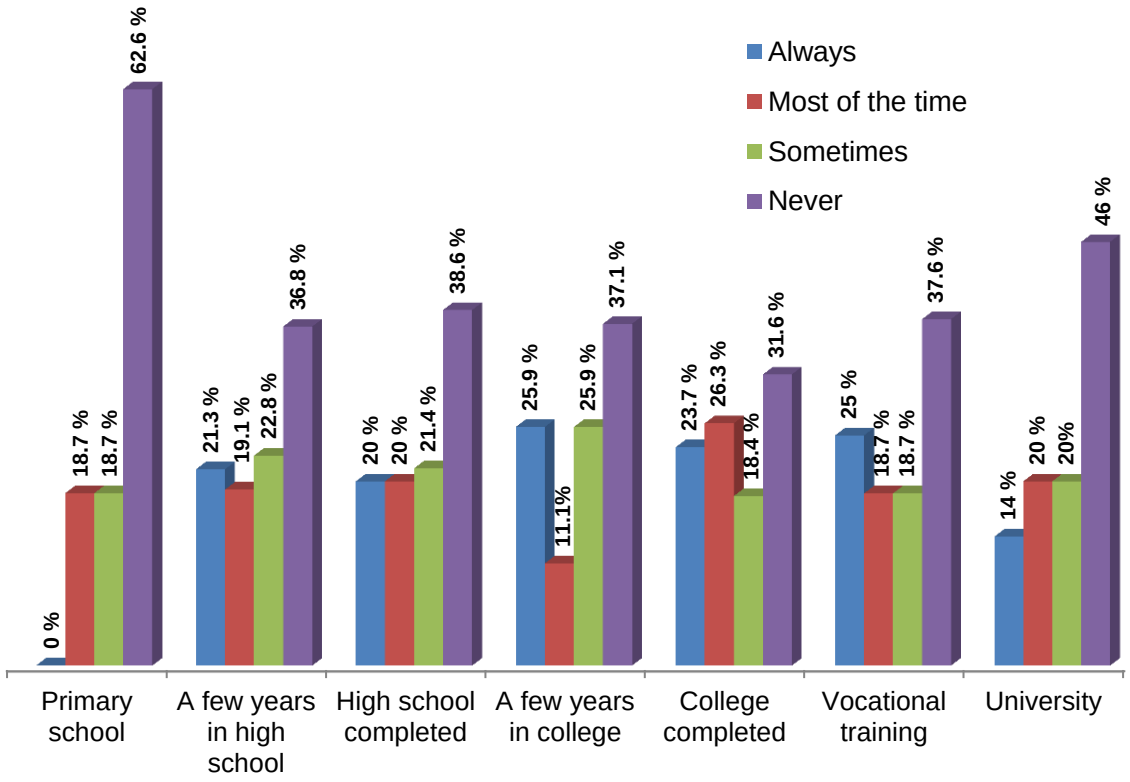
Frequency of condom use	18-28 years old		29-39 years old		40-49 years old		50-60 years old	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
Always	32	26.7	23	20.0	11	12.8	12	16.4
Most of the time	29	24.2	26	22.6	16	18.6	4	5.5
Sometimes	37	30.8	25	21.7	13	15.1	12	16.4
Never	22	18.3	41	35.7	46	53.5	45	61.6
Total	120	100	115	100	86	100	73	100

*The rates may vary because of missing values

Based on the analysis results in table 16, one can see that the use of condoms generally decreases with age. Indeed, approximately 22% of participants aged 50 to 60 reported using condoms “Always” or “Most of the time” compared to 31.4% among those aged 40 to 49, 42.6% among those aged 29-39, and 60% among those aged 18 to 28. This trend is stronger in the “Never” category where the proportion of participants aged 50 to 60 is three times higher compared to young adults aged 18 to 28.

The figure 44 allows us to analyze the frequency of condom use among participants in the survey based on their schooling level.

Figure 44 Frequency of condom use based on schooling level

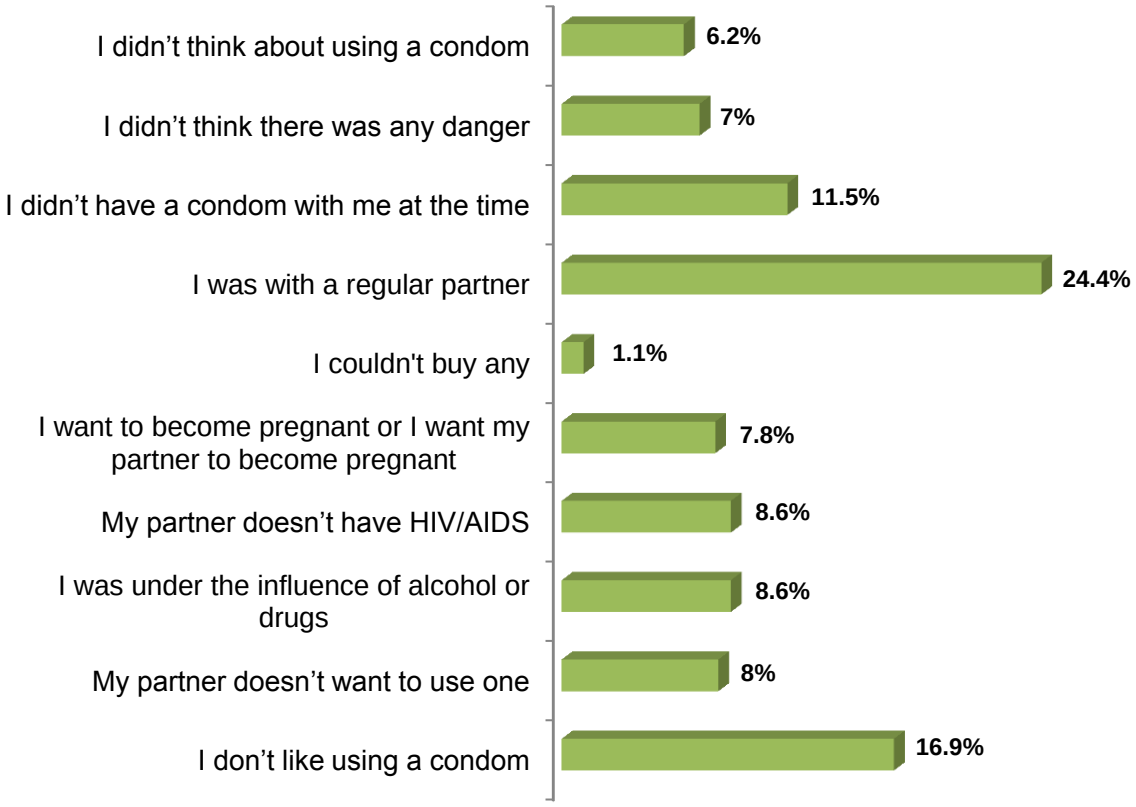


A review of the results in figure 44 shows that the various levels of schooling have a very high proportion of participants who have reported never having used a condom during sex, mainly among respondents with primary school level education. An analysis of the results based on age shows that this finding is mainly valid for participants aged 50 to 60.

3.2 Reasons for not using condoms

It is of paramount importance to determine why respondents do not use condoms. This will allow us to focus prevention programs in order to better meet the needs of First Nations community members. It must be remembered that the analysis do not take into consideration married persons with a single partners or in Common-Law marriage who had only one partner during the 12 months prior to the survey.

Figure 45 Reasons why participants did not use condoms



When respondents were asked: "What is the main reason that you do not use a condom", three main reasons were given (Figure 45):

- Because they have a regular partner (24.4%).
- Because they don't like using condoms (17%);
- Because they didn't have a condom with them at the time of the sexual relation (11.5%);

Three other reasons come in second position (Figure 45):

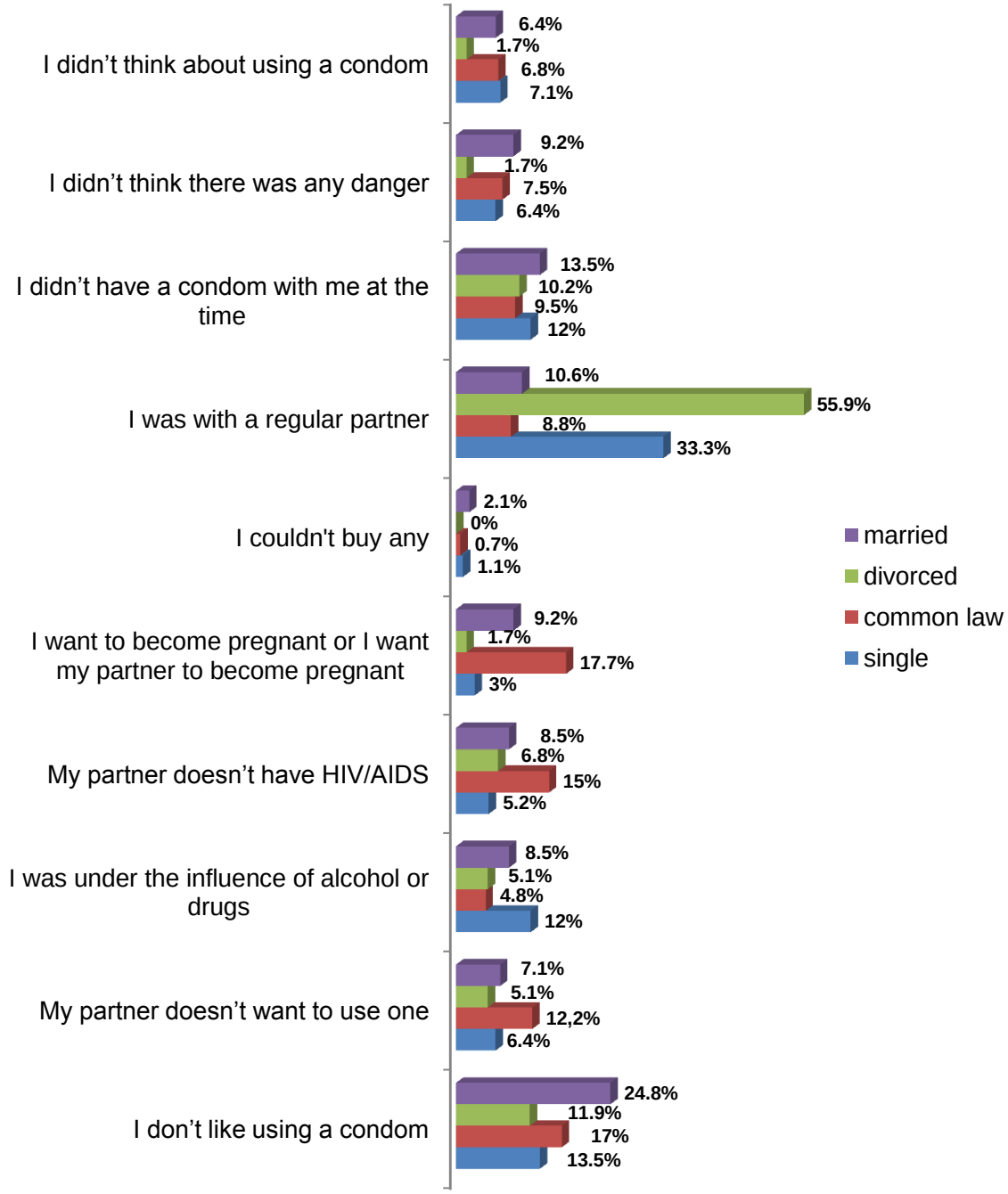
- Because they were under the influence of alcohol or drugs (8.6%);
- Because their partner doesn't have HIV/AIDS (8.6%);
- Because their partner did not want to use one (8%).

A review of the main reasons based on marital status (Figure 46) shows that these proportions are generally the highest among married participants; these reasons include "I don't like using a condom" (24,8%) and "I didn't have a condom with me at the time" (13.5%). It should be pointed out however that the same two reasons are equally widespread among the 13.5% and the 12% respectively of the singles category.

However, the highest proportion of those having indicated “I have a regular partner” is found among the divorced respondents (55.9%).

As to the reasons that came out in second position, the highest proportion of participants having indicated “they were under the influence of alcohol or drugs” was found among single participants (11%). However, when it comes to the two other reasons “My partner doesn’t have HIV/AIDS” and “My partner didn’t want to use one”, the highest proportion was found among common law participants (15% and 12.2%).

Figure 46 Reasons why participants did not use condoms, based on marital status



3.3 Use of condoms and type of partner

Figure 47 Attitudes of respondents towards the regular partner's refusal to use a condom based on gender

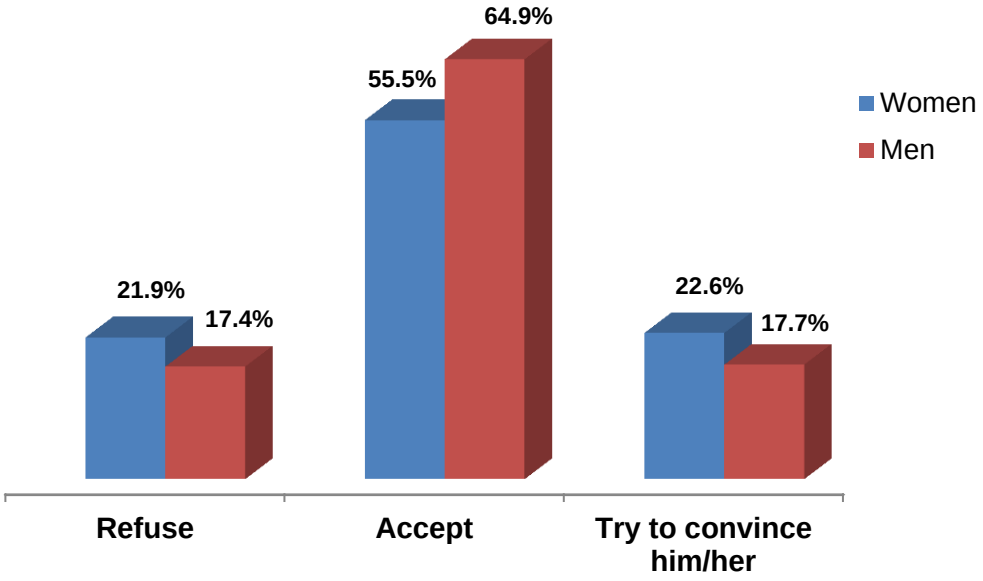
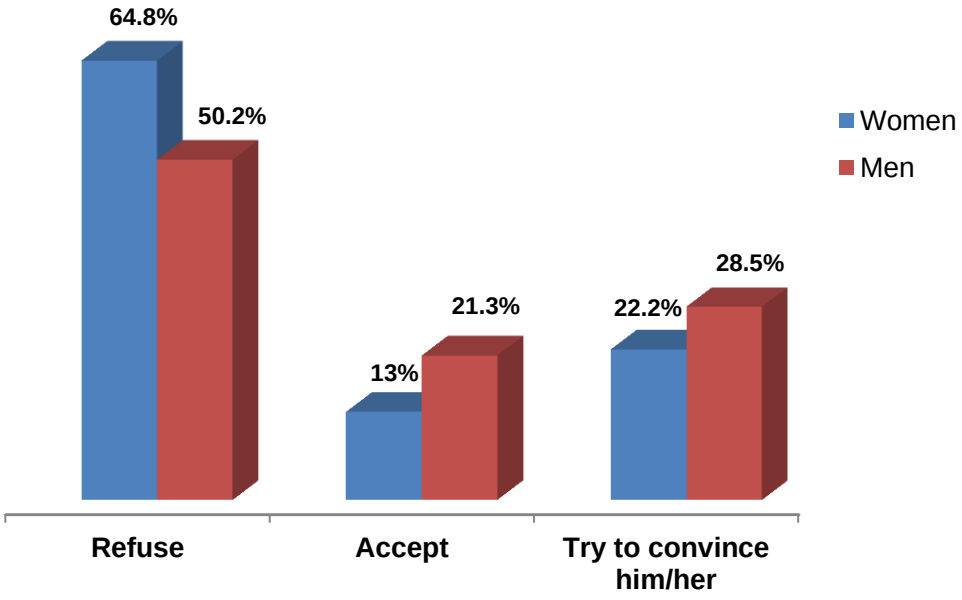


Figure 48 Attitudes towards the occasional partner's refusal to use a condom based on gender



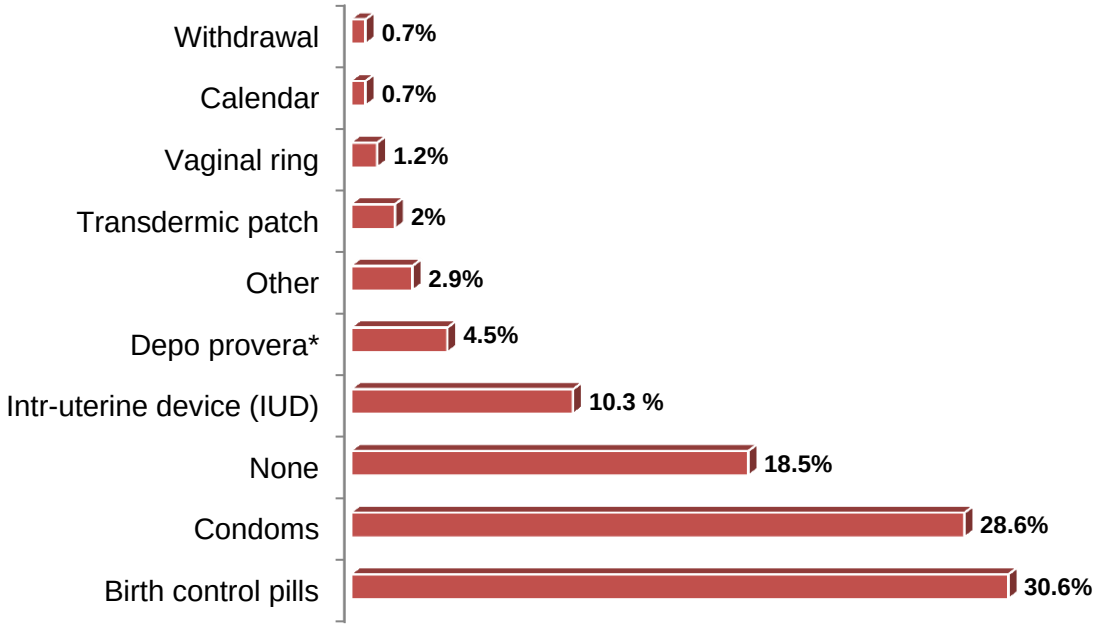
Based on the data in figures 47 and 48, it appears that there are significantly more men than women who indicate they would accept having sex with a regular (p=0.02) (65%

versus 55.5%) or occasional partner (p=0.0005) (21.3% versus 13%) who would refuse to use a condom. Among women as well as among men, the tendency to refuse having unprotected sex (without condom) is higher when it is an occasional partner (57.7%) rather than a regular partner (19.8%).

3.4 Contraceptive methods

Contraception, which is also called birth control, is used to prevent pregnancy in a sexual relation between a man and a woman. Choosing the method is a personal decision, but both partners share the responsibility. Indeed, men also bear the responsibility of unwanted pregnancy and STBBI prevention. The use and type of contraceptive and prevention methods influence the adoption of safer sex habits.

Figure 49 Contraceptive methods reported by participants in the survey



* Also called injectable contraceptive

The graph above (Figure 49) shows that birth control pills, condoms and intrauterine devices (IUD) are the contraceptive methods most frequently used by the participants. However, it should be noted that one out five respondents uses no means of contraception.

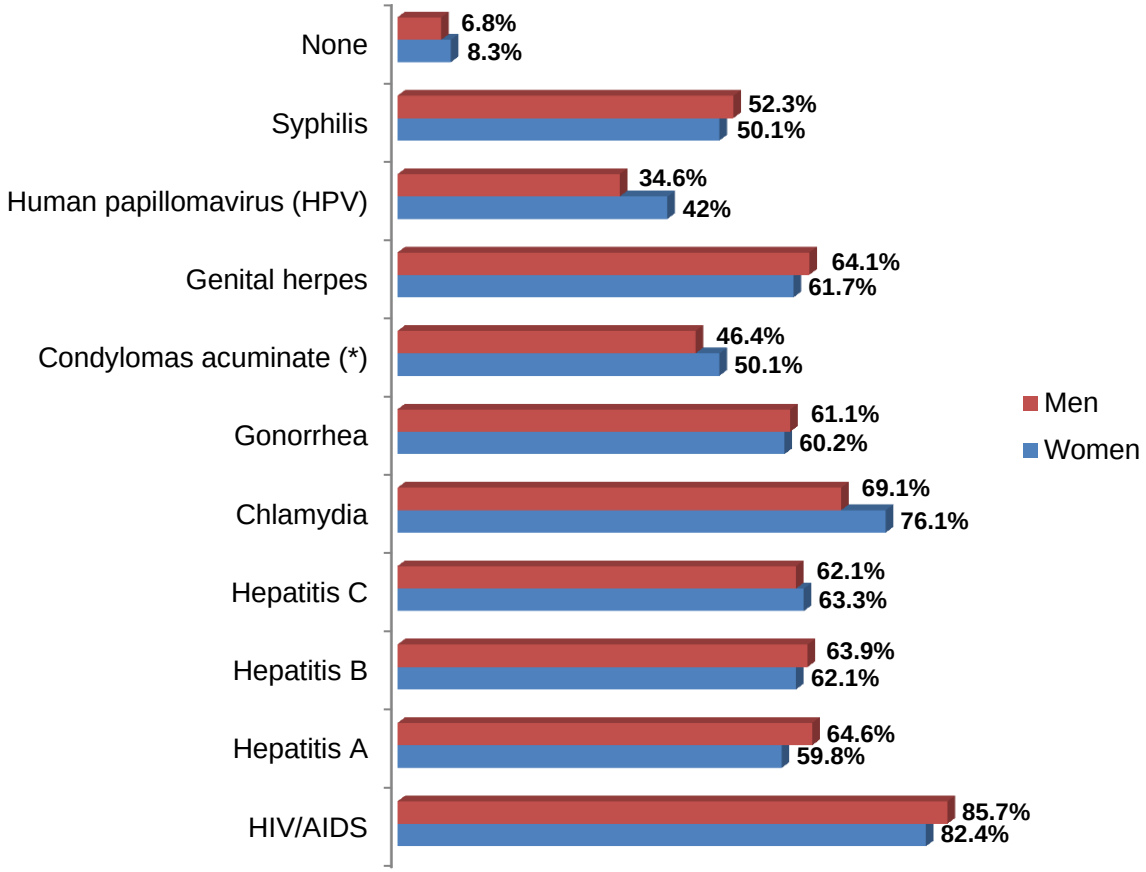
4. Knowledge and information means pertaining to HIV/AIDS and other STBBIs, transmission mechanisms and prevention means

Sexually-transmitted and blood-borne infections (STBBIs) can affect the overall health, wellbeing and reproductive capacity of the people concerned. A number of sexual risk behaviours can increase the risk of contracting a STBBI. To promote sexual health it is therefore important to inform the population on HIV/AIDS and other sexually-transmitted infections risks, as well as on the ways to avoid their adverse effects on the sexual health. In other words, knowledge is a determining factor in sexual behaviours since to protect oneself efficiently from HIV, AIDS and other STBBIs, it is necessary to understand the transmission mechanisms and know the prevention means.

In the following section, the respondents' knowledge in terms of sexual health and STBBIs was evaluated using a series of indicators. In order to identify the types of intervention that will most benefit First Nations communities of Quebec region, an attempt is also made to identify the sources of information and knowledge gaps in terms of sexual health that expose First Nations members of Quebec region to the risk of contracting STBBIs.

4.1 Knowledge of the various STBBIs

Figure 50 Proportion of respondents based on gender who have heard of the various STBBIs



* Or genital warts

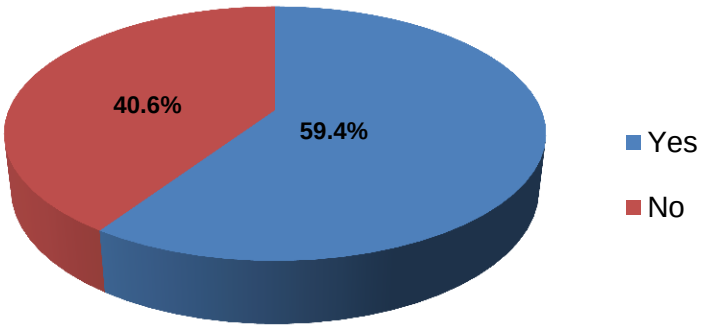
When reviewing the data in the graph (Figure 50), it appears that most participants indicated they know about HIV/AIDS whereas 16% have never heard of it. As to the other STBBIs, approximately four people out of ten reported they had never heard of Hepatitis, gonorrhea or genital herpes. As to syphilis, the human papillomavirus (HPV) and condyloma acuminata, they are the STBBIs least known by respondents.

However, in the case of chlamydia, HPV and condyloma acuminata, it can be noted that men know less (69%, 34.6% and 46%) than women (76% 42% and 50%). This gap between genders is statistically significant. As to syphilis, genital herpes and Hepatitis A, a slight gap can be noted in favour of men: 52% versus 50%, 64% versus 62%, and 65% versus 60% respectively.

4.2 Estimation of the level of knowledge

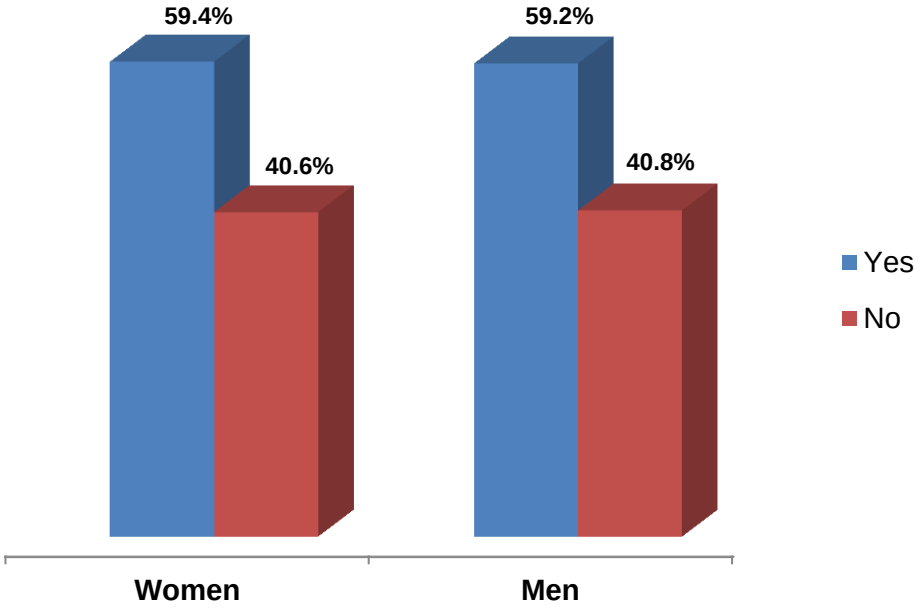
It is not all to have heard of STBBIs to be able to protect oneself adequately. Also, the level of knowledge regarding HIV/AIDS and other STBBIs can help guide interventions. For this reason, the level of knowledge was evaluated based on a collection grid that takes into account the current knowledge pertaining to STBBIs.

Figure 51 **Distribution of respondents for the question "Are you sufficiently informed on HIV/AIDS, STBBIs and Hepatitis?"**



The participants' estimation of their level of satisfaction regarding the information held on HIV/AIDS and other STBBIs (Figure 51) shows that 59% of respondents indicate they are sufficiently informed on HIV/AIDS, STBBIs and Hepatitis. Furthermore, two people out of five indicate they are not sufficiently informed on the subject.

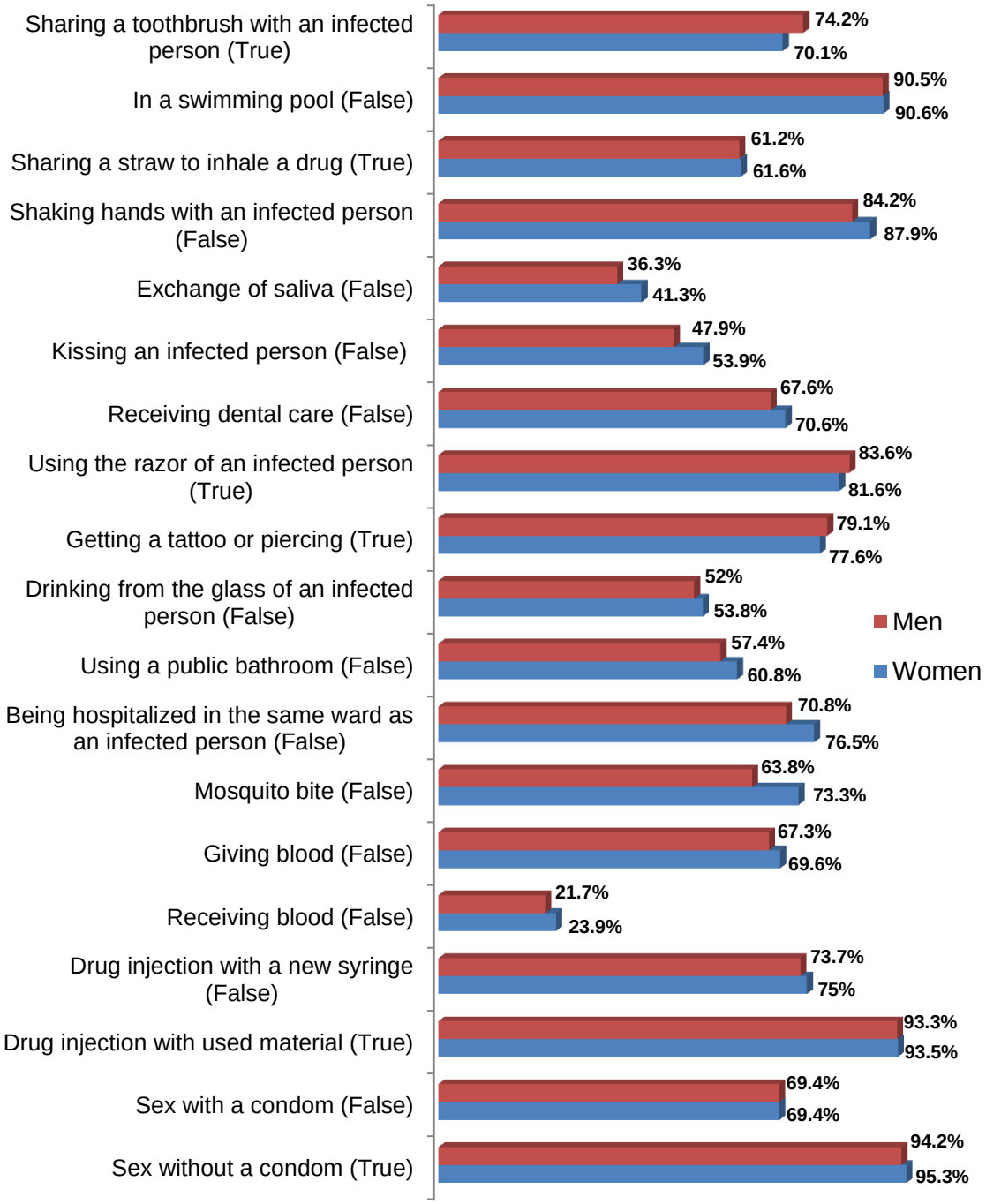
Figure 52 **Distribution of respondents based on gender for the question "Are you sufficiently informed on HIV/AIDS, STBBIs and Hepatitis?"**



The graph above (Figure 52) shows the participants' estimation of their own level of knowledge pertaining to HIV/AIDS and other STBBIs based on their gender. A comparison of women and men shows that there is a similar proportion of respondents who deem themselves sufficiently and insufficiently informed.

4.3 Knowledge of the transmission mechanisms and prevention means

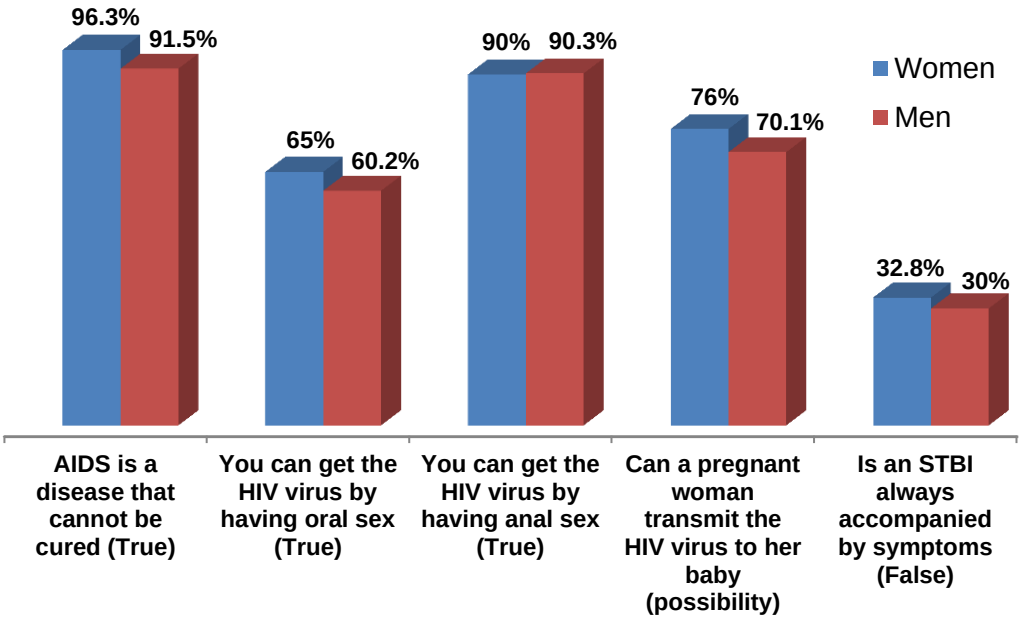
Figure 53 Knowledge of the HIV/AIDS transmission mechanisms, based on gender (% of correct answers)



Most respondents identified correct HIV transmission mechanisms (Figure 53), such as unprotected sex, sharing used drug injection material, using an infected person's razor, and tattooing or piercing. However fewer respondents identified sharing a straw to inhale drug. There are a lot of false beliefs regarding the factors that facilitate HIV/AIDS transmission. Indeed, a strong proportion of respondents think that HIV can be transmitted through receiving blood or through saliva. Half of the respondents believe it is possible to get HIV by kissing an infected person, by drinking in that person's glass, or by using public toilets. Finally, one third of respondents think it is possible to contract HIV by giving blood or through a mosquito bite. Generally, these proportions were about the same among men and women.

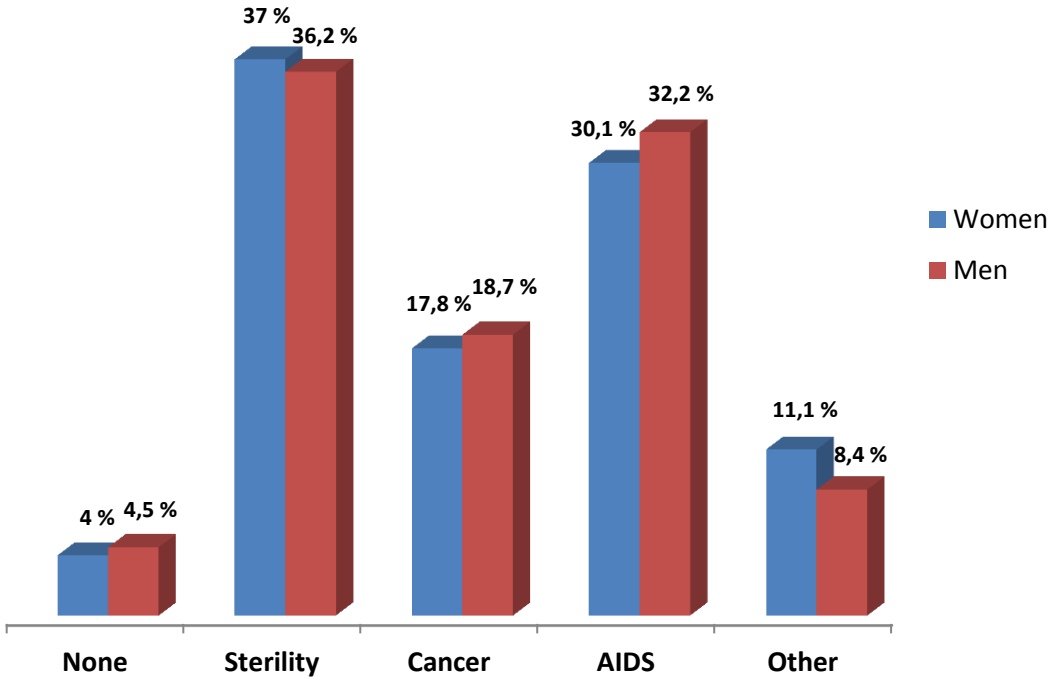
4.4 Knowledge related to HIV/AIDS and other STBBIs

Figure 54 Knowledge related to HIV/AIDS, based on gender (% of correct answers)



A majority of participants in the survey know that AIDS is an incurable disease and that it is possible to contract HIV through unprotected anal penetration (Figure 54). The possibility of a mother transmitting HIV to her foetus is known by three quarters of the respondents. However there are few respondents who know that a STBBI does not always produce symptoms and that it is possible to contract HIV through oral sex (Figure 54).

Figure 55 **Distribution of respondents based on gender for the question "What consequences can a STBBI have on a person's health in the long term?"**



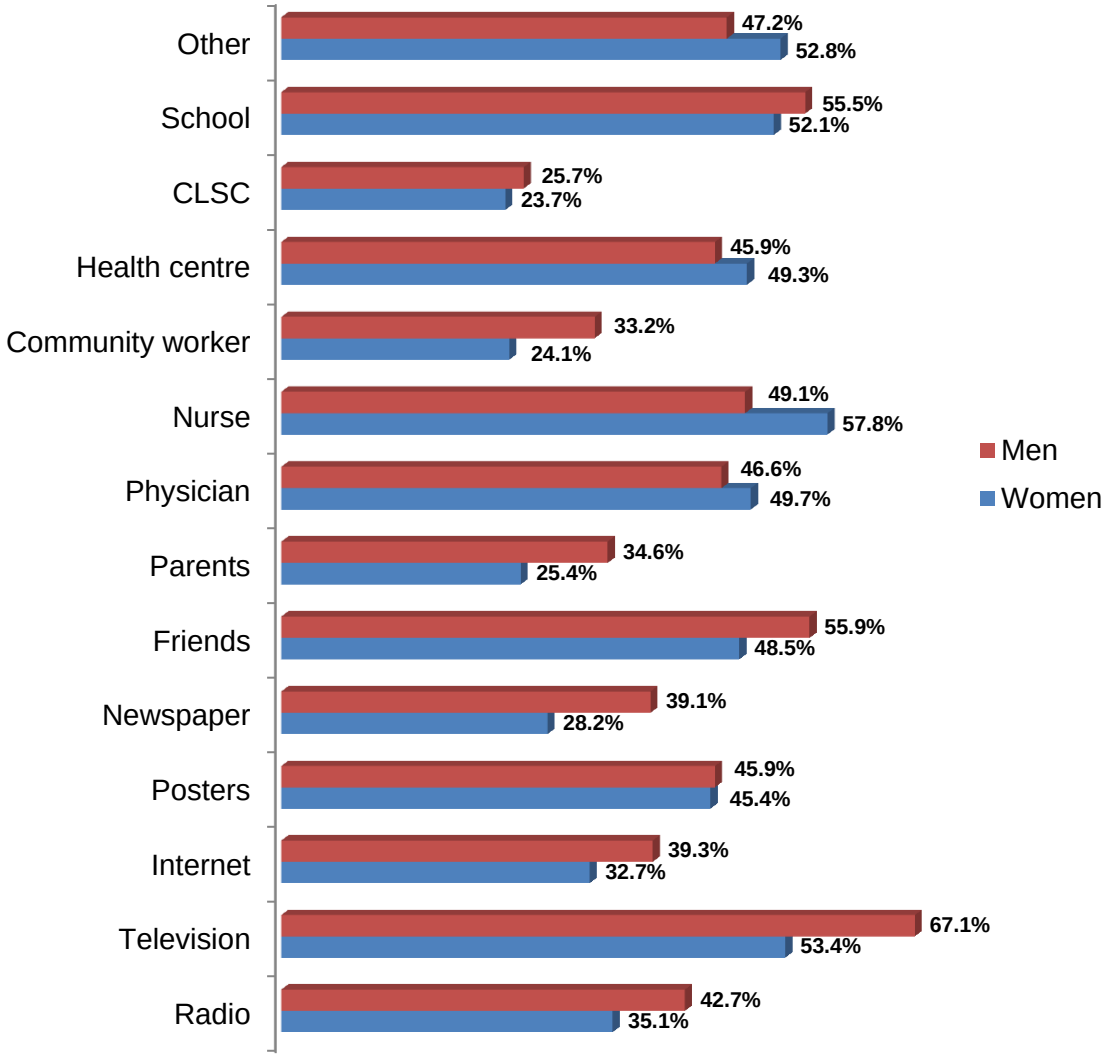
Regarding the knowledge of the potential consequences of a STBBI on a person's health on the long term (Figure 55), male and female respondents appear to have nearly the same level of knowledge. Only 37% of women and 36.2% of men identified sterility as long-term consequence of a STBBI. Approximately only 31% of participants identified AIDS as a consequence and 18% identified cancer. Furthermore, 4.5% of men and 4% of women think that STBBIs cannot have long-term consequences on a person's health.

5. Sources of information

5.1 Sources of information used by participants in the survey

The figure below lists the participants' main sources of information on HIV/AIDS and other sexually-transmitted and blood-borne infections.

Figure 56 Sources of information used by participants in the survey based on gender

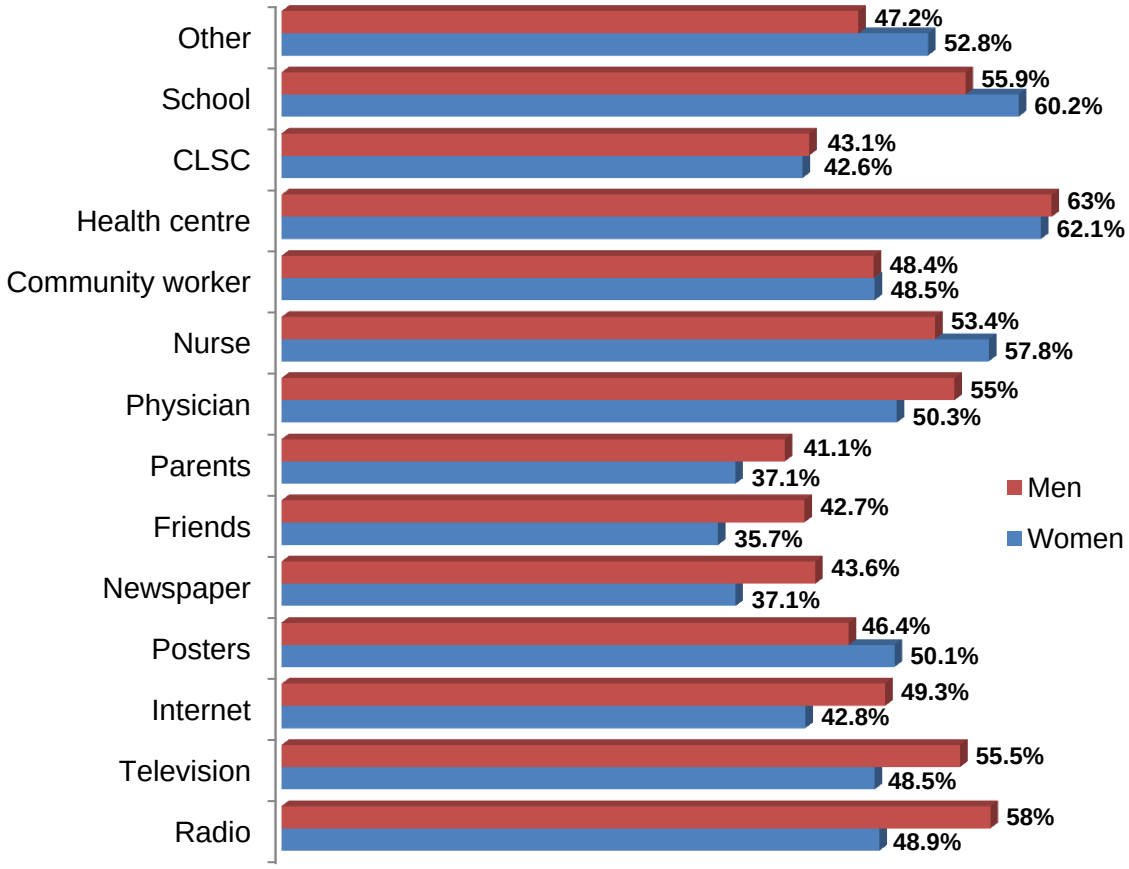


Based on the data in the graph (Figure 56), the main source of information for women (57.8%) is the nurse, whereas for men it is television (67.1%). As to the other sources of information most frequently reported by women, they are television (53.4%), school (52%), the physician (49.7%), the health centre (49.3%), friends (48.5%) and posters (45.4%). Approximately one woman out of three indicated news on the radio or internet. Less than three women out of ten indicated the newspaper as source of information, while approximately one woman out of four indicated the parents. Over half of the men indicated they had obtained information on HIV/AIDS and other STBBIs from their friends or at school, whereas approximately half of the men obtained information from the nurse. Approximately 46% obtained information from the physician, the health centre or posters. The radio, internet or the newspaper are mentioned by four men out of ten,

whereas 34.6% indicated they had obtained information from their parents. The sources of information least frequently used by both women and men are the community worker and the CLSC. It should also be noted that the media (television and radio) is a source of information indicated more frequently by men than women.

5.2 Survey participants' favourite sources of information

Figure 57 Survey participants' favourite sources of information based on gender

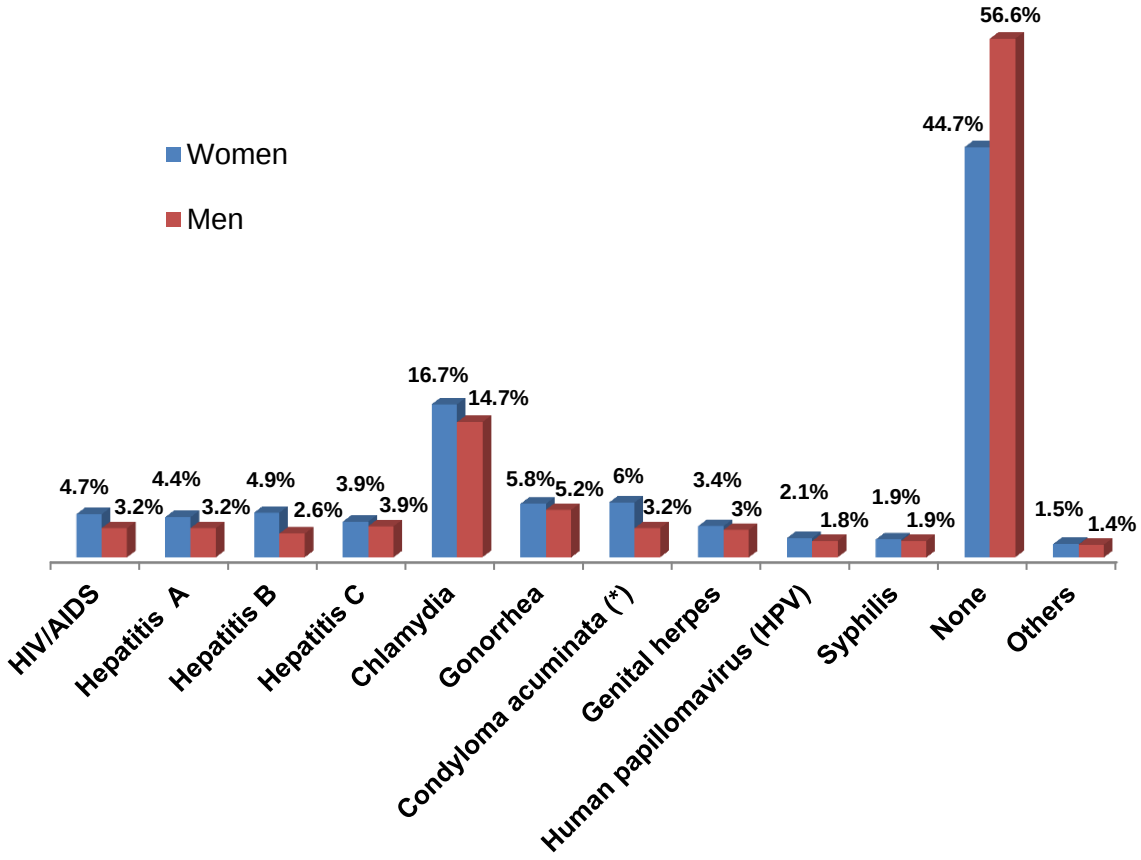


In this section we also asked participants which sources of information they preferred using to get information on HIV/AIDS and other sexually-transmitted and blood-borne infections (STBBIs).

Based on the analysis results (Figure 57), the health centre is more frequently indicated as source of information by women (62.1%) as well as by men (63%). As to the other sources of information more frequently indicated by women as well as by men, they are school, the nurse, the physician, the community worker and the media (television and radio).

6. Screening test

Figure 58 Proportion of diagnosed STBBIs reported by participants in the survey based on gender



*Genital warts

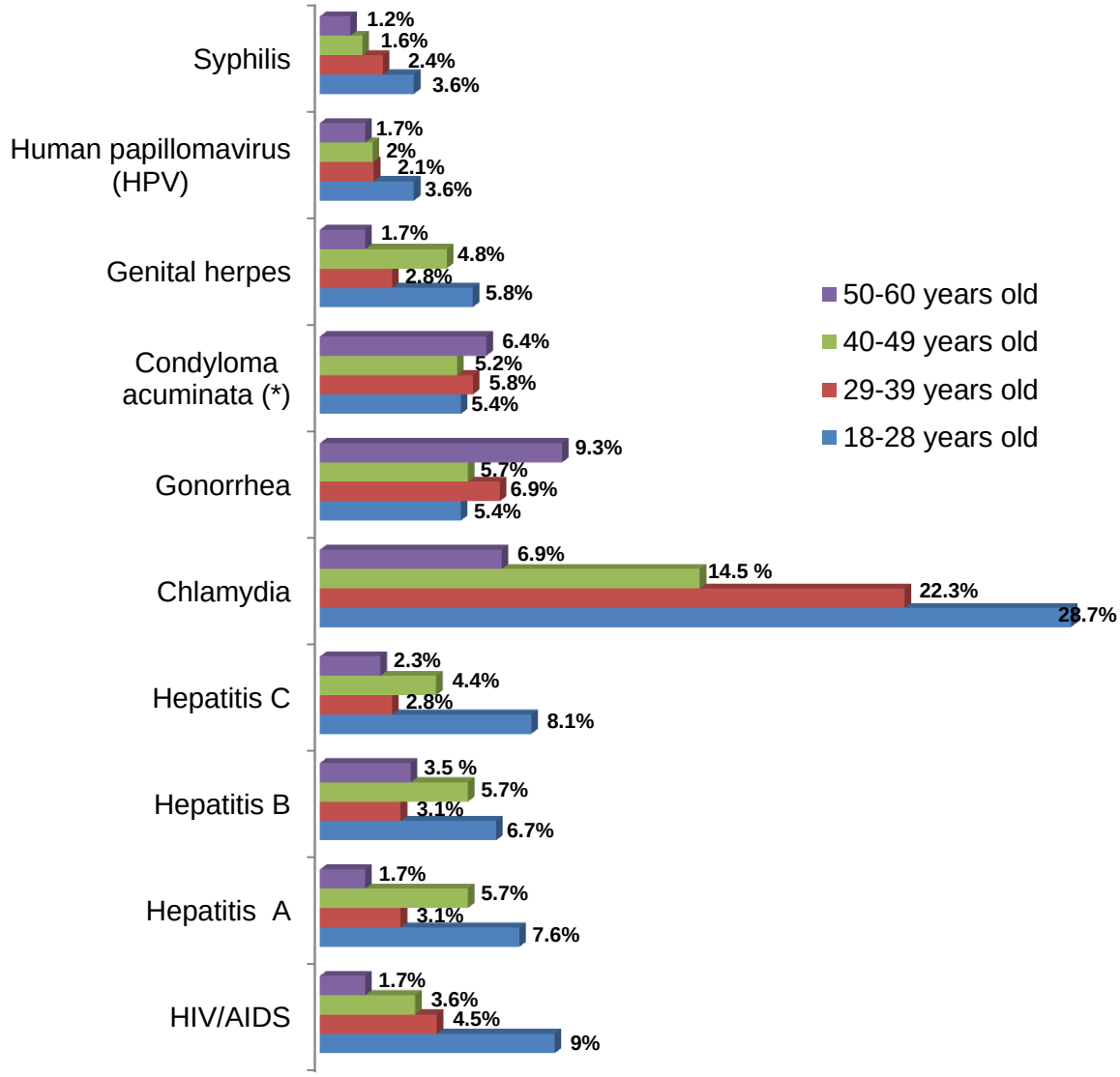
+The proportions are based on participants' self-declaration.

Approximately half of the participants (Figure 58), particularly men (56.6%), reported never having been diagnosed with one of the sexually-transmitted and blood-borne infections (STBBIs). However, 16.7% of women indicated they had been diagnosed with chlamydia compared to only 14.7% of men. The proportion of diagnosed cases of condyloma acuminata and Hepatitis B is almost twice as high among women as among men. This gap is statistically significant (p=0.01). Regarding the proportions of HIV/AIDS (4.7% versus 3.2%) and Hepatitis A (4.4% versus 3.2%) cases, the comparison by gender allowed us to find that they are slightly higher among women than among men, but this gap is statistically non-significant. As to the other STBBIs (Hepatitis C, gonorrhea, genital herpes, HPV and syphilis), the proportions of diagnosed cases among women and among men appear to be quite similar. Overall, women are more likely to report having been diagnosed with a STBBI than men.

It should also be noted that among the 45 participants who reported having been diagnosed with HIV, approximately 56% reported having been diagnosed with the Hepatitis C virus as well.

When reviewing these results based on the various age groups (Figure 59), one can note that these proportions are highest among young participants aged 18 to 28, especially chlamydia (28.7%). However, in the case of gonorrhea and condyloma acuminata a maximum proportion was noted among participants aged 50 to 60.

Figure 59 Proportion of diagnosed STBBIs reported by participants in the survey, based on age



*Genital warts

+ The proportions are based on participants' self-declaration.

Table 17 Proportion of women and men who indicated they had been screened for HIV, Hepatitis C and other STBBIs

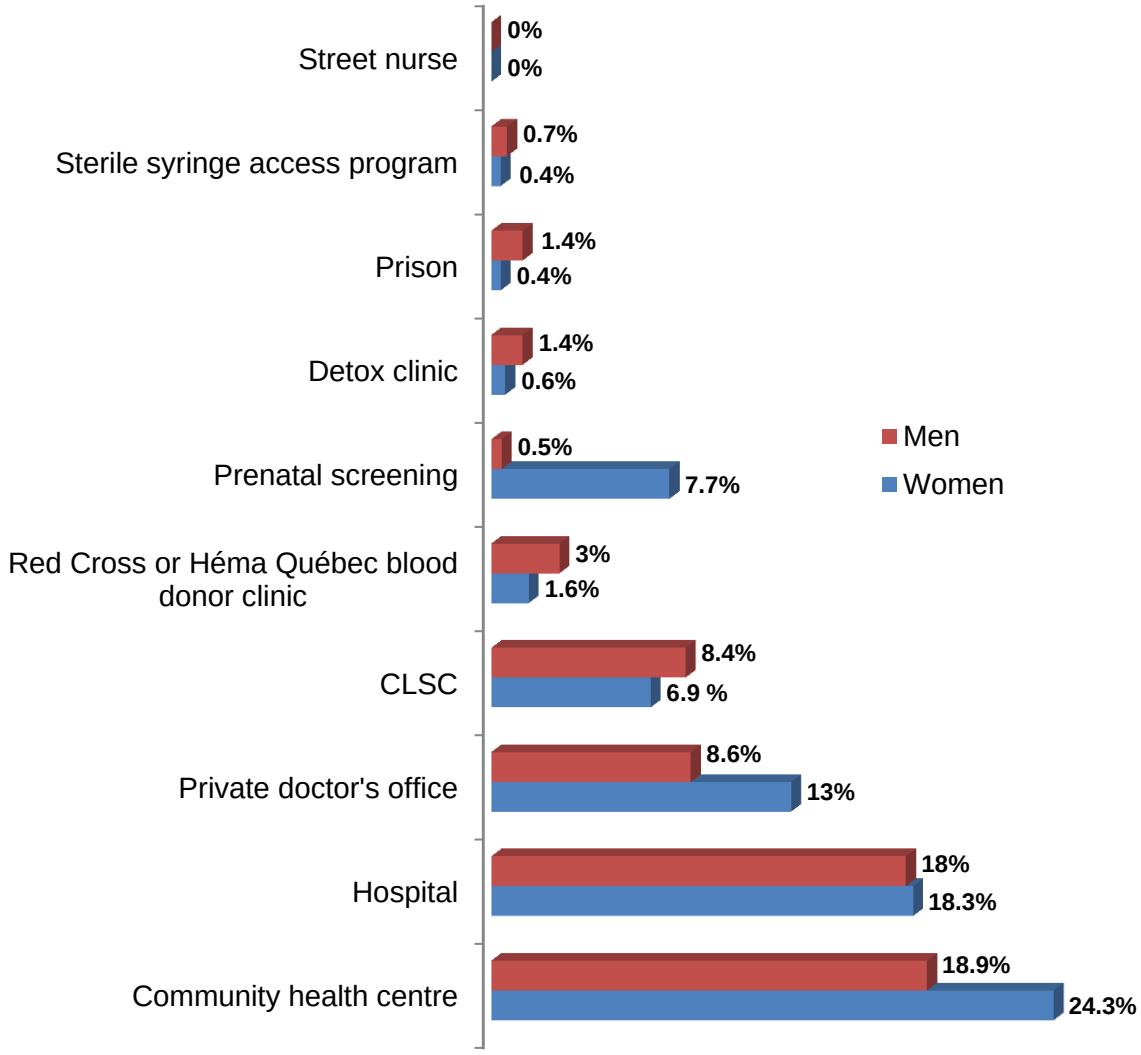
	HIV screening		Hepatitis C screening		Other STBBIs screening	
	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)
Yes, and I got my results	44.7	35.8	38.8	30.2	46.7	33.1
Yes, but I did not get my results	2.9	1.4	2.7	1.8	2.4	2
Yes, and I did not go back to get my results	1.6	1.2	2.2	1.2	1.9	1.1
No*	50.8	61.6	56.4	66.9	49.1	63.7

*People who have never been screened for these infections

An analysis of the data presented in table 17 reveals that there are more women than men who report having been screened for HIV, Hepatitis C or other STBBIs. This gap based on gender is statistically significant (p=0.02, p=0.001 and p=0.03 respectively). However, men are significantly more likely than women to report never having been screened for any of the three infections. Women, on their part, are significantly more likely than men to report having been screened but not having received the results or not having gone back to get them.

Regarding the locations where participants were screened, the analysis of the results (Figure 60) show that the community health centre is the screening location most often mentioned by women (24.3%) and by men (20%). As to the other screening locations most frequently mentioned by women and men, they are the hospital, a physician's private practice and the CLSC. Furthermore, only 7.7% of women mentioned prenatal screening.

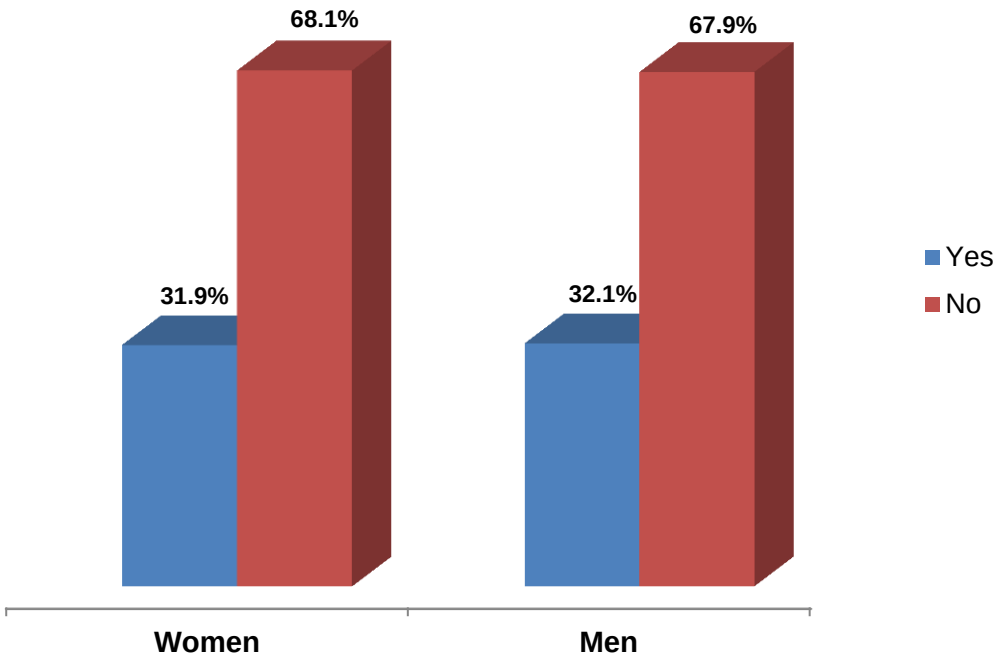
Figure 60 Locations where participants were screened based on gender



7. Attitudes and perceptions towards HIV/AIDS

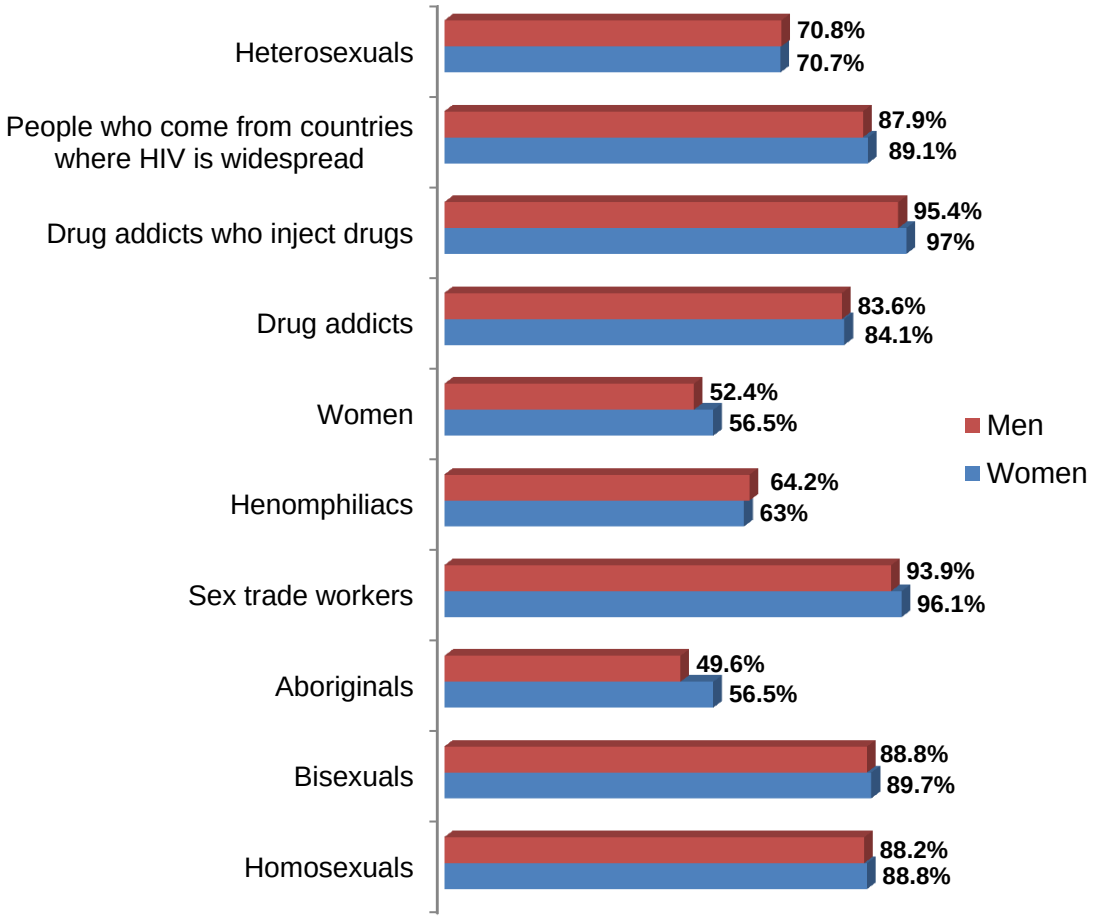
The information received by people on HIV and AIDS as well as their experiences will no doubt have an impact on their fear of the disease, their feelings towards people affected and their perceptions regarding certain aspects of sexuality. Therefore participants in the survey were evaluated on their attitudes or perceptions towards HIV/AIDS using a series of questions.

Figure 61 Distribution of respondents based on gender for the question "Do you know at least one person with HIV/AIDS?"



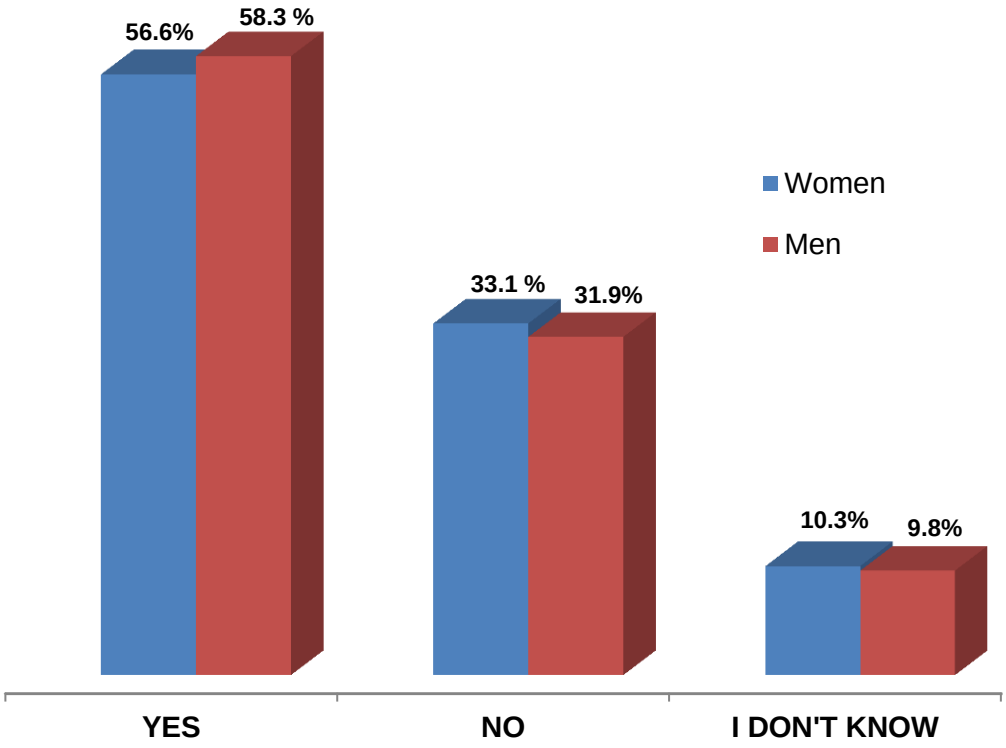
Among respondents, at least one third of them (32% of women and 32% of men) indicated they known at least one person with HIV/AIDS (Figure 61).

Figure 62 Groups at risk of HIV identified by participants in the survey based on gender



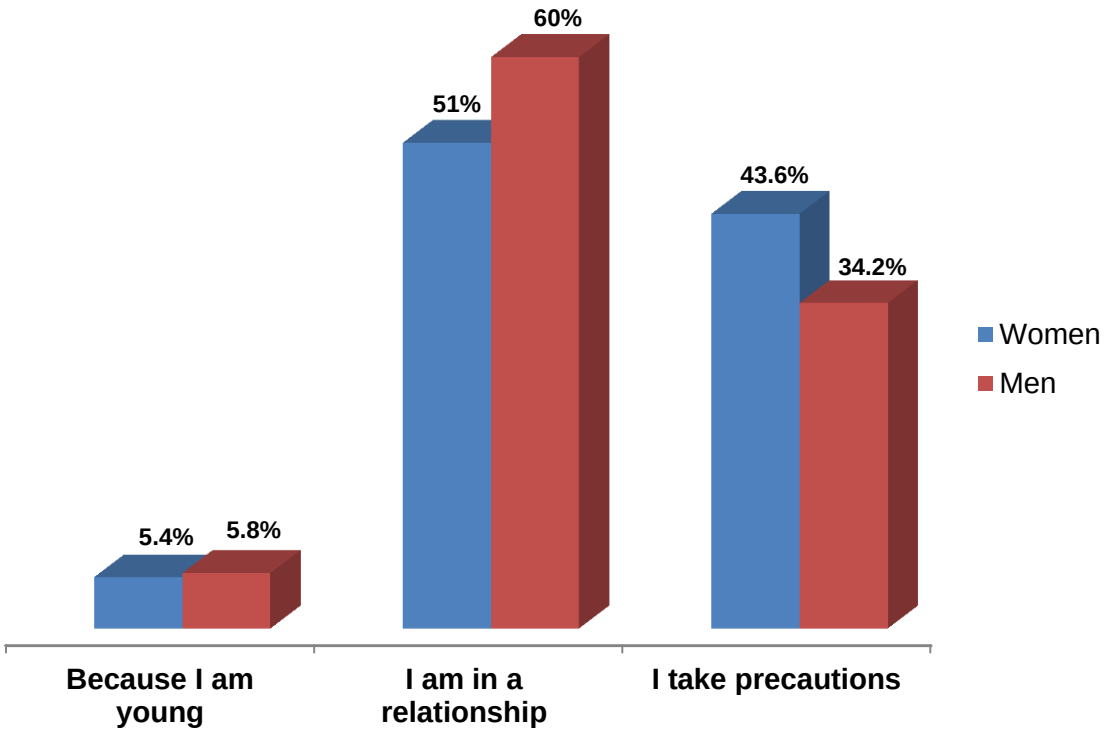
Participants in the survey were asked to identify groups at risk of HIV (Figure 62). A majority of respondents identified drug addicts who inject drugs, sex trade workers, bisexuals, homosexuals and people who come from countries where HIV is widespread as groups at risk. As with youth, one can but notice that 56.5% of women and 49.6% of men identified Aboriginals as group at risk. As well, 56.5% of women and 52.4% of men consider women to be a group at risk. It should also be noted that approximately 71% identified heterosexuals as a group at risk.

Figure 63 Distribution of respondents based on gender for the question "Are you worried about getting HIV?"



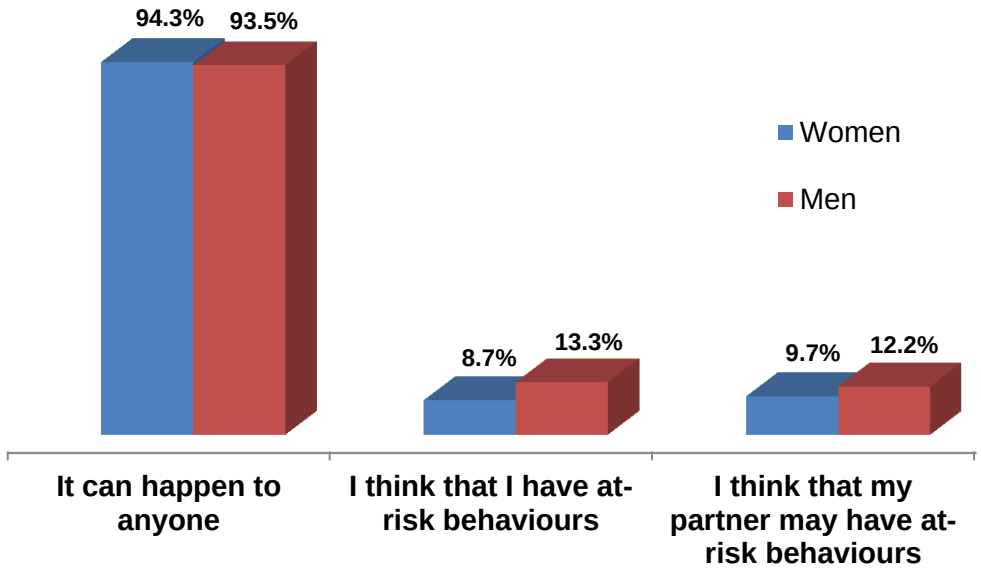
When asked about their level of concern regarding their own vulnerability to HIV and AIDS, more than half (Figure 63) of the respondents expressed their concerns (56.6% of women versus 58.3% of men). However, one third of respondents (33.1% of women and 31.9% of men) chose the category "No".

Figure 64 Reasons why HIV did not worry women and men



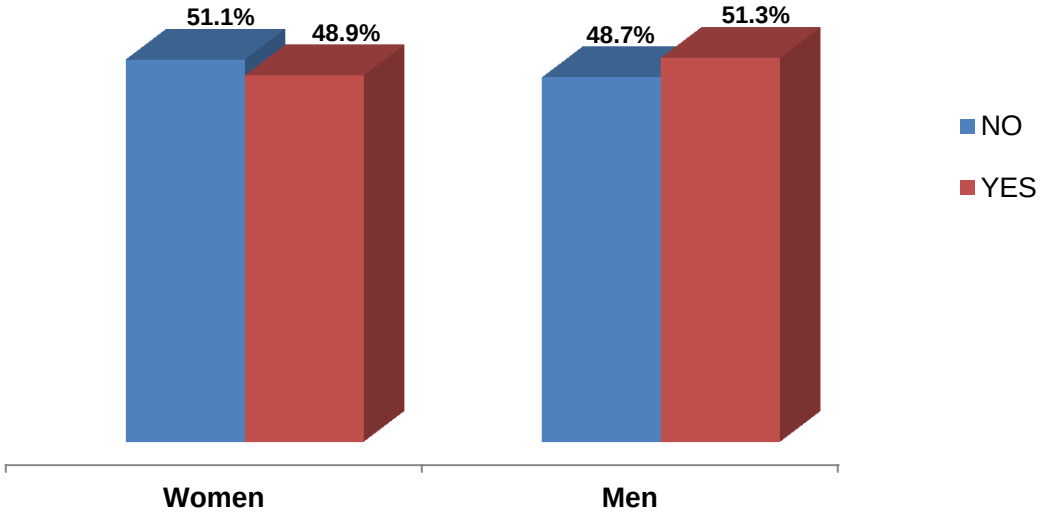
Among the respondents who expressed no worry regarding HIV (Figure 64), 55% explained this attitude by the fact they are in a relationship and 5.6% by the fact they are young. Based on the gender perspective, men appear to be slightly more likely to put this type of argument forward than women. Women explain this attitude by the fact they take precautions: 43.6% of women compared to 34.2% of men.

Figure 65 Reasons why HIV did worry women and men



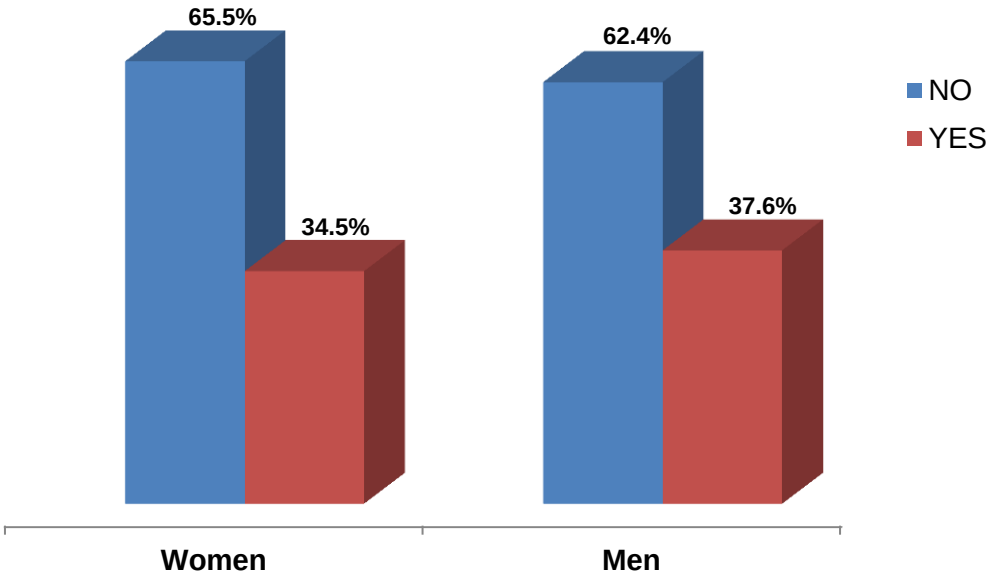
A majority (94%) of respondents who expressed their concerns regarding HIV/AIDS explained this attitude by the fact that it could happen to anyone (Figure 65). However, 13.3% of men and 8.7% of women thought they had behaviours at risk. It can be noted in the graph that, based on gender, the proportions of respondents in the various categories are nearly the same.

Figure 66 Distribution of respondents based on gender for the question "Have you ever wondered about the sexual practises of one of your partners?"



When asked about their concerns regarding the sexual practices of one of their partners (Figure 66), 51.3% of men compared to 49% of women indicated they had asked themselves about it. However, approximately 51% of women versus 49% of men answered negatively. There is a slight gap between both genders but it is not statistically significant.

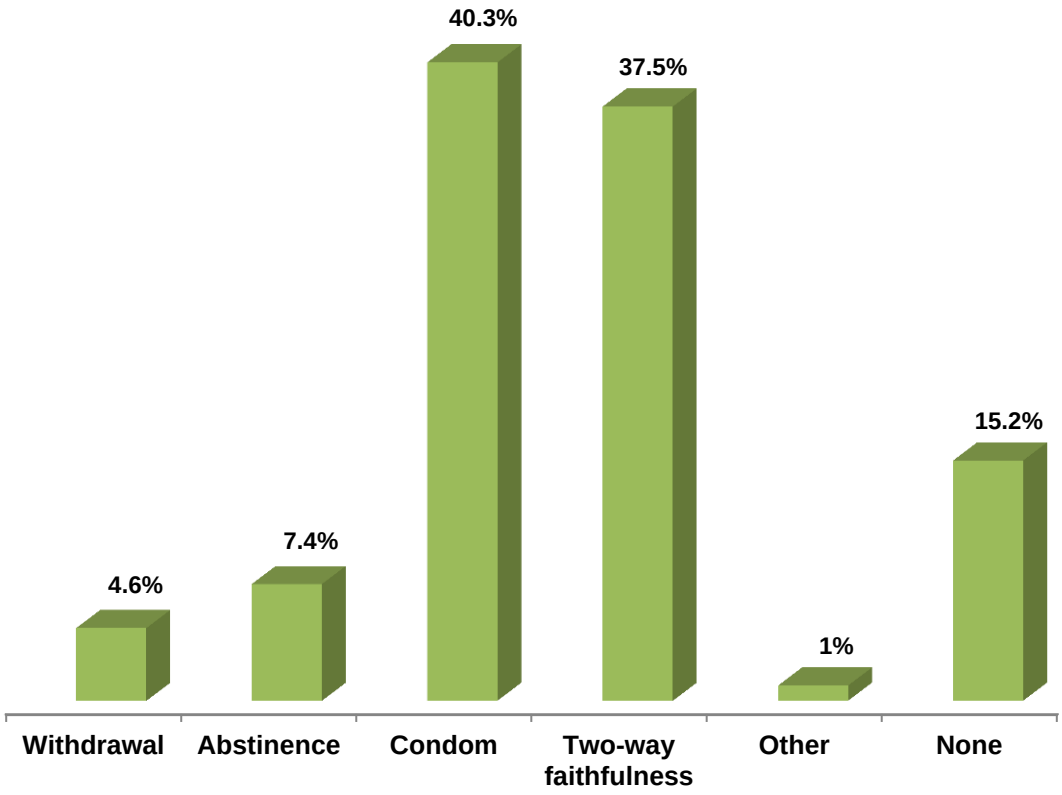
Figure 67 Distribution of respondents based on gender for the question "Have you ever wondered about the possibility that one of your partners had been using drugs?"



When asked about whether or not they had already wondered about one of their partners' drug use (Figure 67), more than half of the participants answered negatively. However, 34.5% of women compared to 37.6% of men answered the question positively. There is a very slight gap between both genders but it is not statistically significant.

8. Methods of protection against HIV and other STBBIs

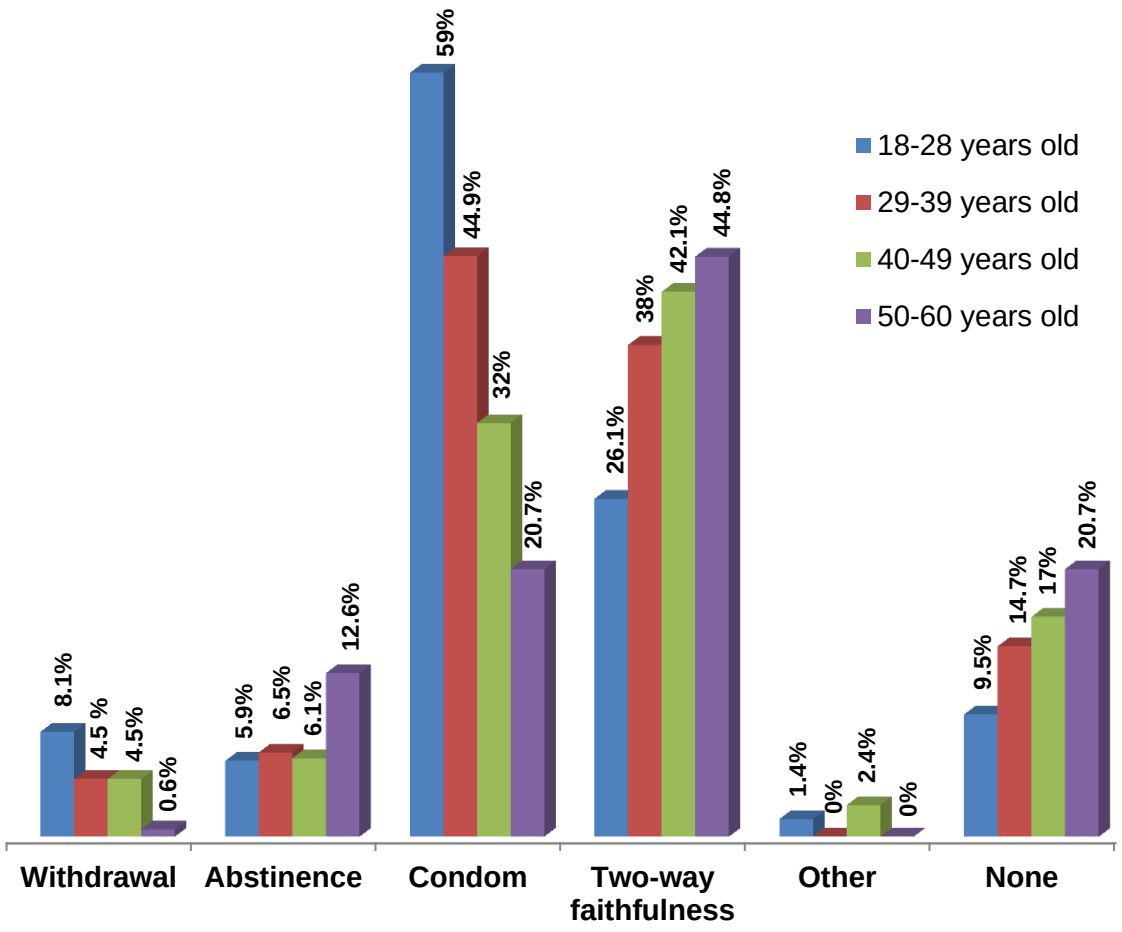
Figure 68 Methods of protection against HIV and other STBBIs used by respondents



Among the methods of protection used to prevent STBBIs and HIV (Figure 68), 40% of participants mentioned condoms as first choice, both among women (35%) and men (46%). The second choice is being faithful to each other as means of protection (37.5%). Abstinence is the third choice with only 7.4% of respondents who have chosen that method. As to withdrawal, there are twice more women than men who chose this solution. However, 15.2% did not use any protection against HIV and other STBBIs.

An analysis of this data based on the various age groups (Figure 69) shows that there are twice as many participants aged 18 to 28 who chose withdrawal before ejaculating as protection method compared to those aged 29 to 39 and 40 to 49 ans. As to protection through abstinence, there are twice as many participants aged 50 to 60 who chose this protection method compared to the other age groups. However, among the 15.2% who use no means of protection, it is seen that the proportion of respondents who report that they use no means of protection seems to increase with age (10% 18-28 years old, 14.7% 29-39 years old, 17% 40-49 years old, 20.7% 50-60 years old.

Figure 69 Methods of protection against HIV and other STBBIs, based on age



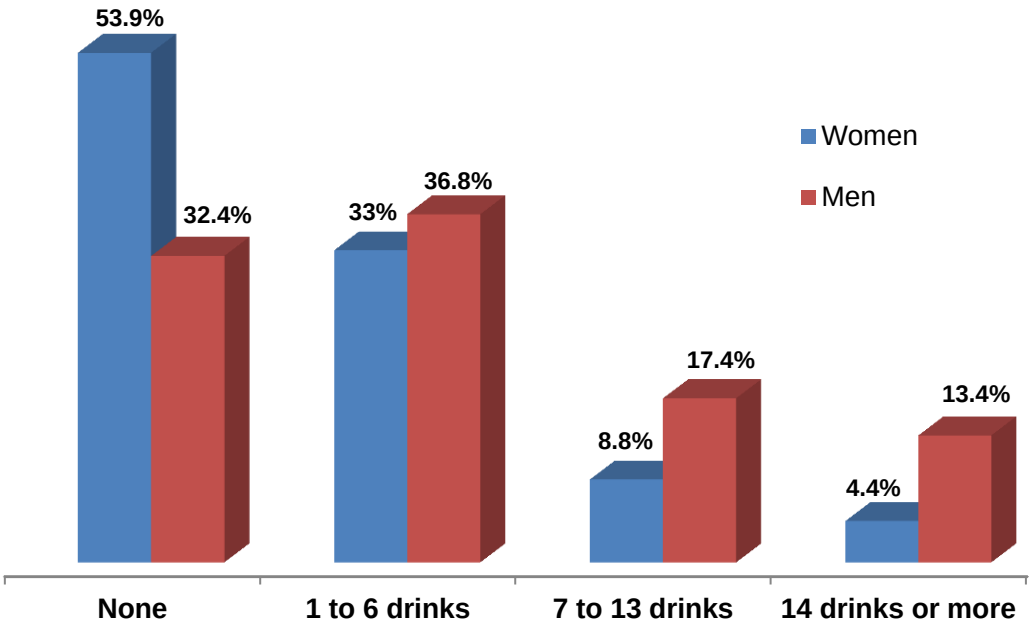
9. Use of alcohol & drugs and sexual relations

The use of alcohol and/or drugs is known to impair judgement; furthermore, it is considered as a dangerous behaviour for sexual health. For these reasons, and to evaluate their sexual behaviours as well as their use of substances, participants in the survey were asked to answer questions on their lifestyle habits in relation with the use of alcohol and/or drugs.

9.1 Alcoholic beverages

9.1.1 Drinking frequency

Figure 70 Drinking frequency over a seven-day period, based on gender



Based on the previous graph (Figure 70), approximately 54% of women compared to 32.4% of men reported they had not taken any alcohol during a seven-day period. However, alcohol intake, regardless of frequency, is very widespread among men compared to women. Indeed, there are twice more men than women who reported having had more than 7 drinks during a seven-day period (13.1% among women compared to 30.8% among men). This gap is statistically significant (<0.0001). When reviewing these results based on age groups (Table 18), it appears that the proportion of participants who reported 14 drinks or more of alcohol intake during one single period decreases with age in a statistically significant manner ($p<0.05$). However, while the prevalence of regular intake increases in a statistically non significant manner ($p>0.05$) among women and men aged 18 to 28, a decrease of the intake rate can be noted among women aged 29 to 60. This phenomenon is not present among men. Indeed, another significant increase is noted in the prevalence of the regular alcohol intake among men aged 50 to 60 during the same period.

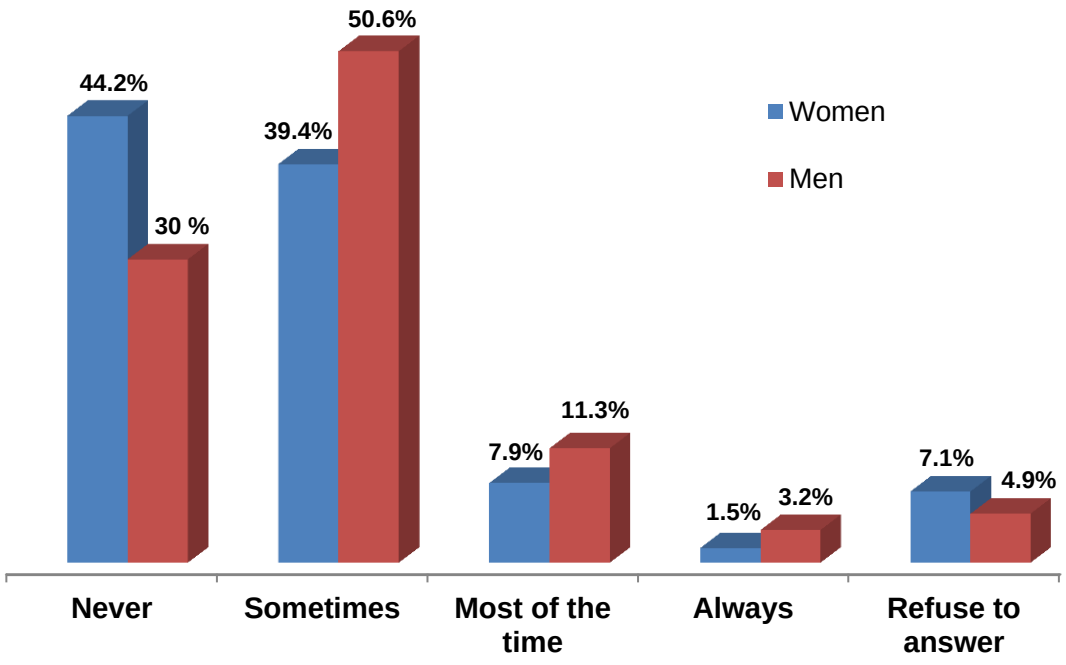
Table 18 Frequency of alcohol intake during a seven-day period, based on age

	18-28 years old		29-39 years old		40-49 years old		50-60 years old	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
None	86	40.2	115	41.1	109	45.0	88	49.7
1 to 6 drinks	67	31.3	112	40.0	87	36.0	52	29.4
7 to 13 drinks	34	15.9	27	9.6	31	12.8	25	14.1
14 drinks or more	27	12.6	26	9.3	15	6.2	12	6.8

*The rates may vary because of missing values

9.1.2 Alcohol intake and sexual relations

Figure 71 Frequency of alcohol intake before sex in the 12 months preceding the survey, based on gender



Based on the graph (Figure 71), 44.2% of women compared to 30% of men reported never having had a drink before sex in the twelve months preceding the survey. However, more men than women reported having had a drink before sex in the twelve months preceding the survey (Figure 71), a statistically significant gap (<0.0001).

Table 19 Frequency of alcohol intake before sex in the 12 months preceding the survey, based on age

	18-28 years old		29-39 years old		40-49 years old		50-60 years old	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
Always	8	3.7	7	2.5	5	2	1	0.6
Most of the time	36	16.5	26	9.2	16	6.5	10	5.9
Sometimes	99	45.4	151	53.2	107	43.5	52	30.8
Never	57	26.2	85	29.9	103	41.9	99	58.6
Refusal	18	8.3	15	5.3	15	6.1	7	4.1

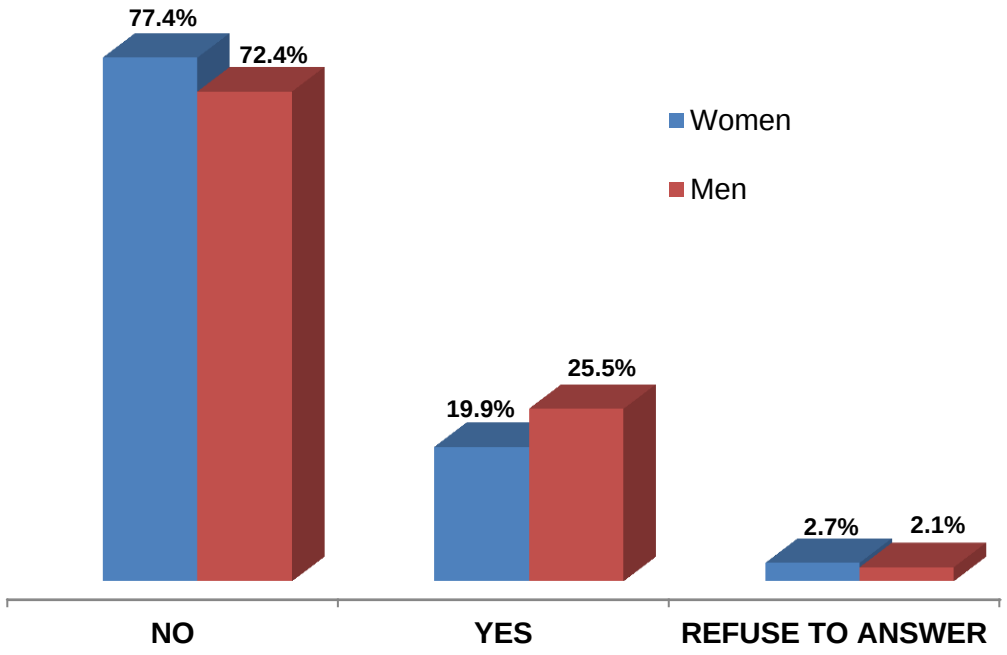
*The rates may vary because of missing values

The analysis of the results based on the various age groups (Table 19) shows that, overall, the alcohol intake before sex in the twelve months preceding the survey appears to decrease significantly with age (<0.0001). This trend is most common among those who reported “always” or “most of the time” having alcohol before sex in the twelve months preceding the survey.

9.2 Drug use

Maximum vigilance is indicated even with a moderate use of drugs. There are several risks associated with using drugs and the impacts on the overall health and sexual health more specifically.

Figure 72 **Proportion of respondents who reported using illegal drugs in the 12 months preceding the survey, based on gender**



Based on the graph (Figure 72), it can be noted that approximately one quarter (25.5%) of men compared to one woman out of five (20%) reported having used illegal drugs at least once in the 12 months preceding the survey (non significant gap). However, approximately 75% indicated they had never used drugs during the same period.

Table 20 **Proportion of respondents based on age who indicated they had used illegal drugs in the 12 months preceding the survey**

	18-28 years old		29-39 years old		40-49 years old		50-60 years old	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
Yes	74	36.6	76	27.0	40	16.6	16	9.5
No	128	63.4	26	73.0	16	83.4	10	90.5

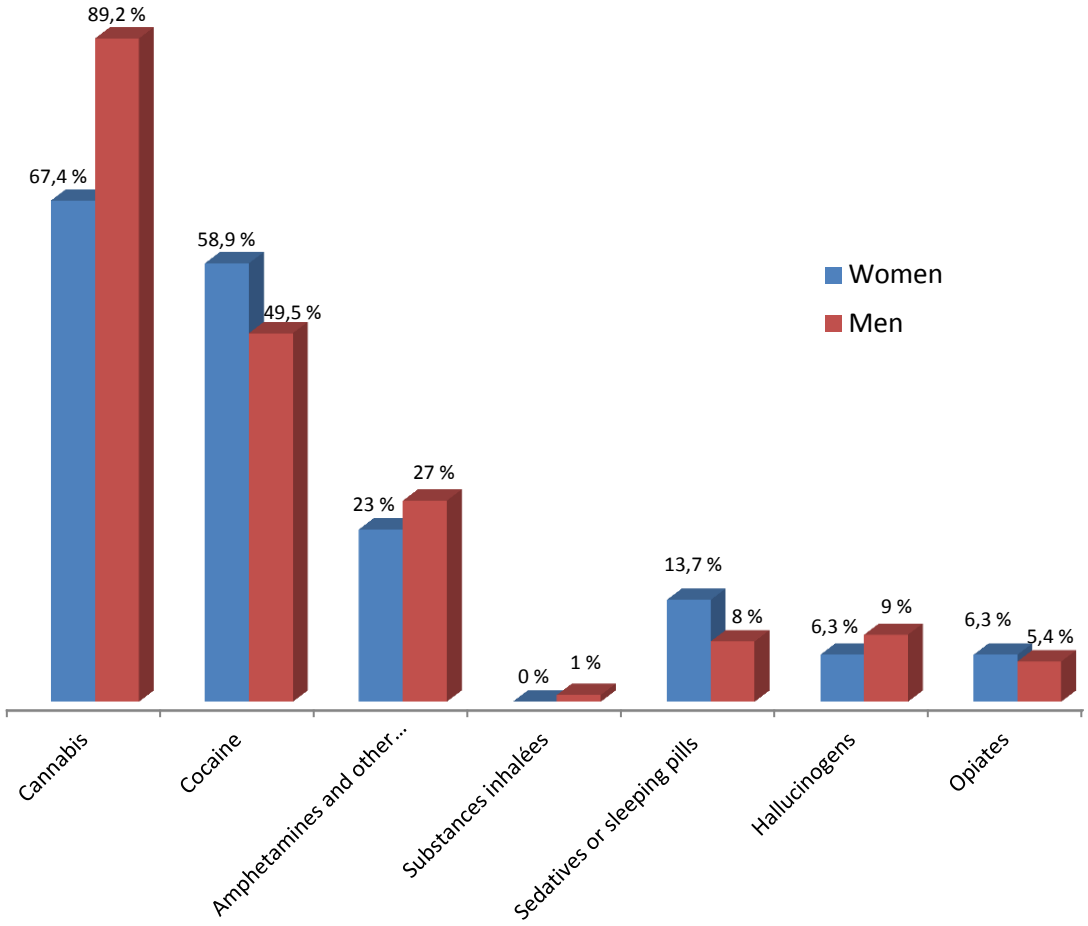
*The rates may vary because of missing values

An analysis of the results in table 20 shows that the use of drugs in the 12 months preceding the survey generally decreases as age increases, among women as well as among men, in a statistically significant manner (<0.0001). However, based on the gender perspective, while the prevalence of drug use increases significantly among women and men aged 18 to 28, a significant decrease in the prevalence of drug use can

be noted among women aged 29 to 60. This phenomenon does not apply for men. Another significant increase in the prevalence of drug use can be noted among men aged 29 to 39 followed by a sharp decrease of drug use.

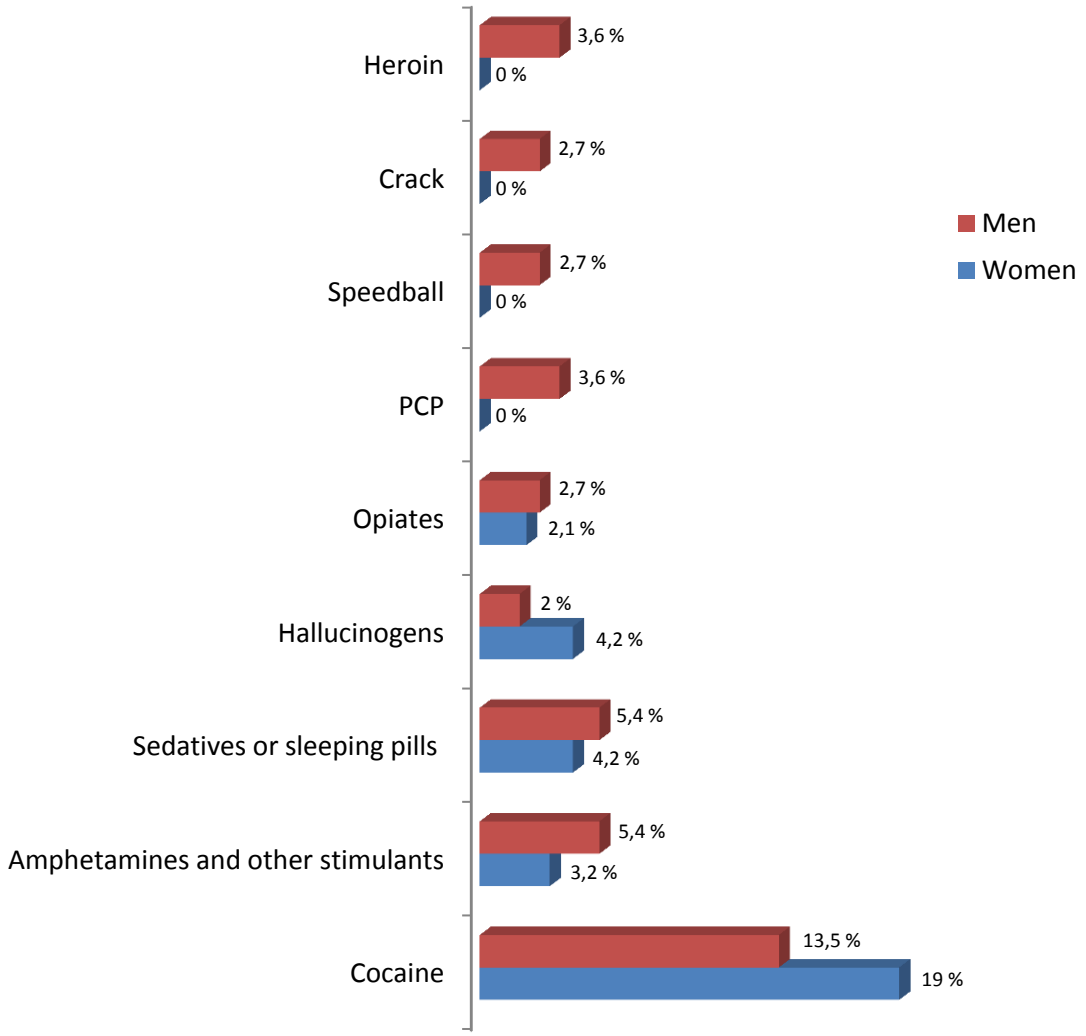
9.2.1 Drugs consumed by the survey respondents

Figure 73 Types of drug used in the 12 months preceding the survey among drug users, based on gender



Based on the previous graph (Figure 37), among respondents who reported using drugs, cannabis is the most often used illegal drug by women as well as by men: approximately 89% of men compared to 67.4% of women have used cannabis at least once in the 12 months preceding the survey. As to the other illegal drugs most often used, they are cocaine (59% of women versus 49.5% of men), amphetamines (23% versus 27%), followed by sedatives (14% versus 8%), hallucinogens (6.3% versus 9%) and opiates (6.3% versus 5.4%).

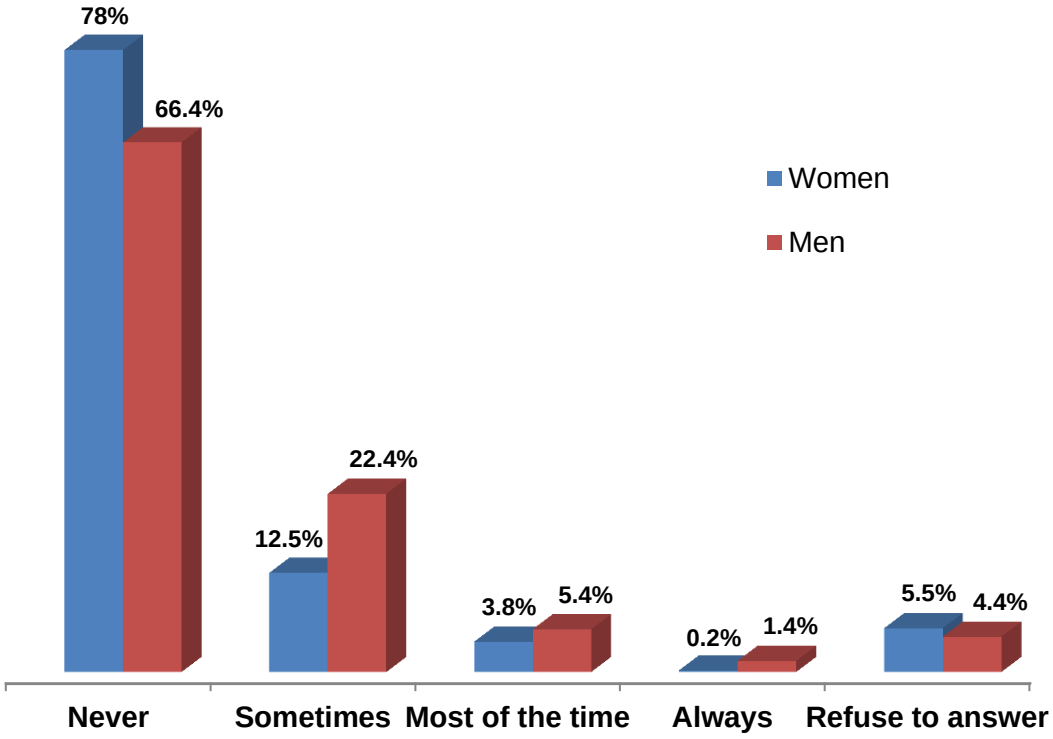
Figure 74 **Types of drugs injected in the 12 months preceding the survey among drug users, based on gender**



The graph above (Figure 74) shows the prevalence of the various illegal drugs injected in the 12 months preceding the survey. Among the illegal drugs most often used by women as well as by men, there is cocaine (19% versus 13.5% respectively), sedatives (4.2% versus 5.4%), and amphetamines (3.2% and 5.4%), followed by hallucinogens (4.2% versus 2%) and opiates (2.7% versus 2.1%). However, only men reported having used PCP and heroine (3.6%), followed by speedball (2.7%) and crack (2.7%).

9.2.2 Drug use and sexual relations

Figure 75 Frequency of drug use before sex in the 12 months preceding the survey, based on gender



A majority of participants have never used drugs before sex in the twelve months preceding the survey (Figure 75). However, 29.2% of men compared to 16.5% of women reported having used drugs before sex during that period (Figure 75). An analysis of the results based on age (Table 21) shows that the frequency of drug use before sex in the 12 months preceding the survey decreases significantly as age increases ($p<0.0001$). However, while the frequency of drug use before sex during the same period increases significantly among women and men aged 18 to 28, a significant decrease of that frequency can be noted among women aged 29 to 60. Furthermore, this phenomenon does not apply to men. Indeed, another significant increase can be noted in the frequency of drug use before sex among men aged 29 to 39, followed by a significant decrease of this frequency during the same period.

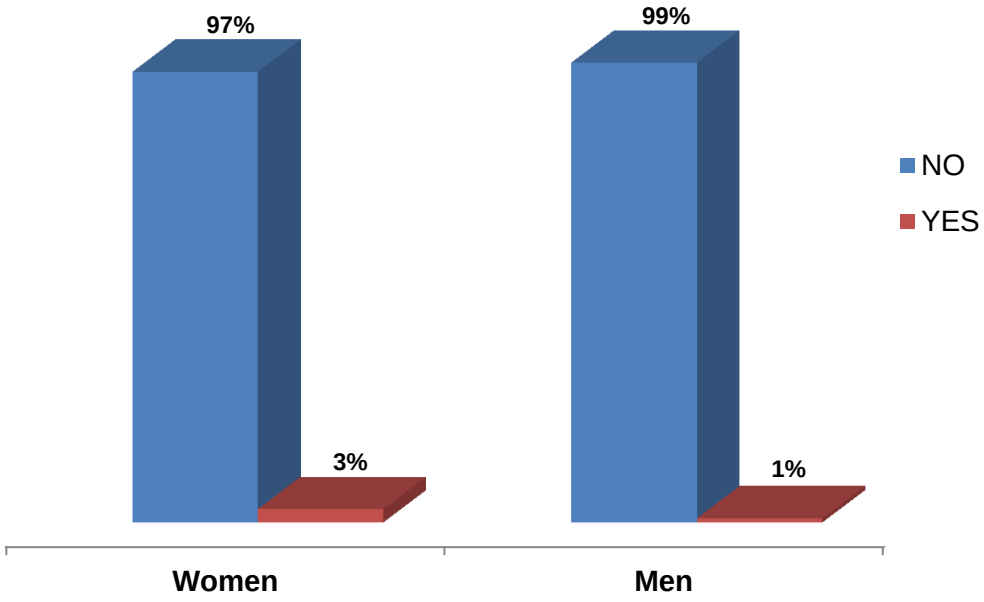
Table 21 **Frequency of drug use before sex in the 12 months preceding the survey, based on age**

Frequency of drug use	18-28 years old		29-39 years old		40-49 years old		50-60 years old	
	N(*)	%	N(*)	%	N(*)	%	N(*)	%
Always	4	2.0	3	1.1	0	0.0	0	0.0
Most of the time	17	8.5	16	5.9	6	2.6	2	1.3
Sometimes	55	27.5	58	21.5	31	13.4	12	7.6
Never	125	62.0	193	71.5	194	84.0	144	91.1
Total	201	100	270	100	231	100	158	100

*The rates may vary because of missing values

9.2.3 Material used to inject drugs

Figure 76 **Proportion of women and men who have shared injection drug material in the 12 months preceding the survey**



A majority of participants reported never having shared injection material in the 12 months preceding the survey (Figure 76). However, 3% of women compared to 1% of

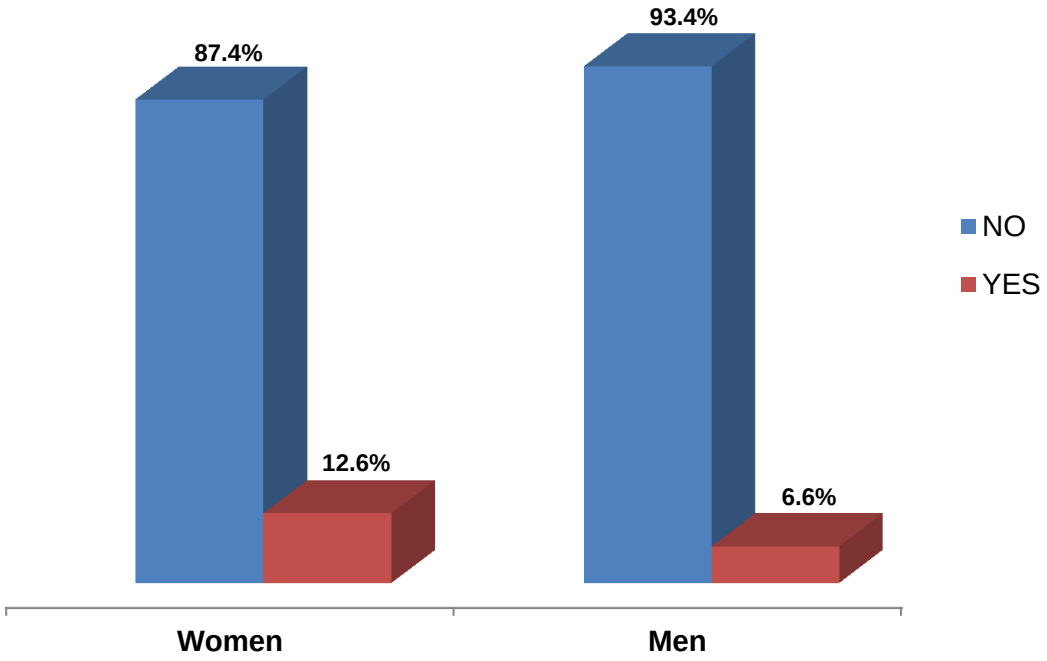
men reported having used injection drug material that had been used at least once by other people (including their sexual partner) during that period.

When reviewing these results among respondents who reported having used illegal drugs at least once in the 12 months preceding the survey, it can be noted that 10.5% of women and 7.5% of men reported having used injection drug material that had been used at least once by other people during that period.

10. Piercing or tattooing

Body piercing and tattooing are considered dangerous behaviours since they may result in infection or facilitate the transmission of blood-borne diseases such as STBBIs.

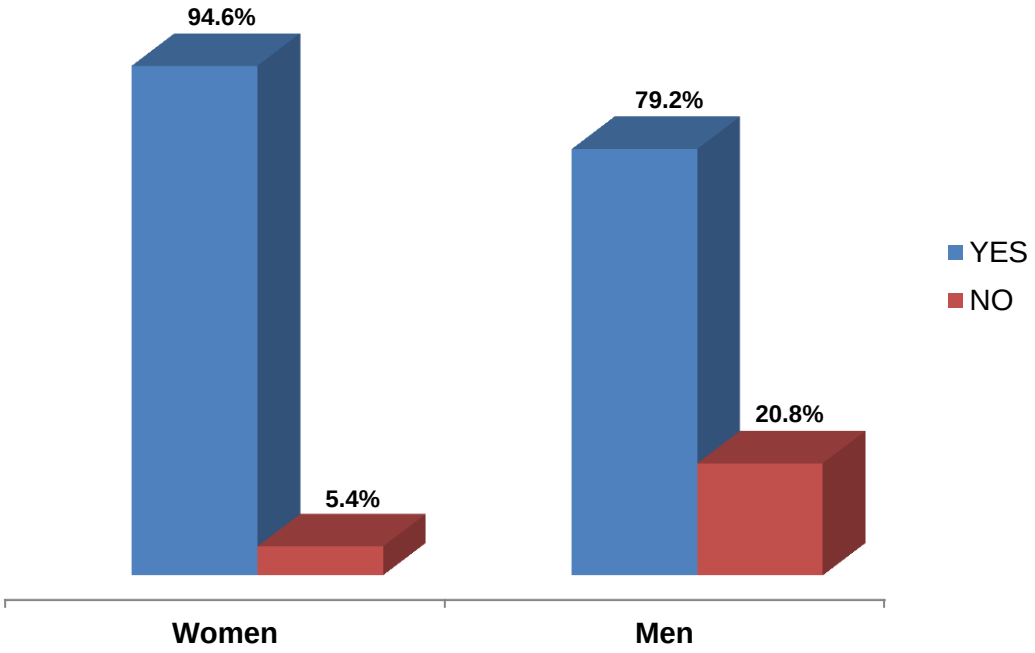
Figure 77 Proportion of women and men having been tattooed or pierced in the 12 months preceding the survey



Based on the previous graph (Figure 77), a majority of participants reported not having been tattooed or pierced in the 12 months preceding the survey. However, 12% of women compared to 6.6% of men reported having done it.

10.1 Verifying the condition of the tattooing or piercing material

Figure 78 **Distribution of respondents based on gender for the question "Did you make sure that the needles were new or adequately disinfected before using them?"**



Among the respondents who reported having been tattooed or pierced in the 12 months preceding the survey, approximately 21% of men compared to 5.4% of women indicated they had not checked whether the needles used were new or adequately disinfected.

DISCUSSION

The average age of men (15.3 years old) at their first sexual relation is significantly lower than that of women (15.7 years old). However, an analysis based on generations reveals a trend among youth to have a first sexual relation at a younger age compared to the previous generations, particularly among young women. Indeed, the gap noted between generations is 1.5 year among men and 3 years among women. An analysis of these results shows that women appear to be sexually active at an increasingly earlier age than men. This precocity could expose youth to a greater risk of contracting STBBIs, particularly young women. A number of studies have demonstrated that an early onset of sexual activity is linked to a greater risk of STBBI, and would be associated to higher STBBI rates (4).

Sexual activity exposes to several risks such as an unwanted pregnancy and contracting a STBBI or HIV/AIDS infection. However, the level of risk varies according to the frequency of sexual intercourse, the number of partners and the use of prevention means. Overall however, there does not seem to be any significant difference between the proportions of men and women who have had sex in the 12 months preceding the survey: a majority (91.3%) of men and women reported having had sex. However, men report more sexual partners than women during the same period. Overall, sexually-active men are more likely than women to report multiple sexual partners. This disparity could be explained by what is referred to as the *sexual double standard*, according to which a given sexual behaviour is evaluated differently if it is adopted by a man or woman (30). Thus, while a large number of sexual partners could be a source of pride and respect for men, among women, this behaviour could lead to a bad reputation. This double standard with respect to sexual behaviour could cause men to declare a falsely high number of sexual partners, whereas it could have an effect to the contrary among women. From the respondents' age point of view, having multiple partners is relatively more frequent among younger generations than among older generations. Indeed, young male and female respondents aged 19 are much more likely to have multiple partners than older respondents. This could expose these young adults to a greater risk of contracting STBBIs. Regarding homosexual relations, 14 women and 51 men reported having same sex partners in the 12 months preceding the survey. Among these respondents, 28% of men compared to 14% of women indicated they had more than one partner during that period.

The results of the analysis reveal that oral sex is a much more common sexual practice than anal sex. Indeed, oral sex is practiced twice (61%) as much as anal sex (30%). Compared to women, significantly more men report oral (71% versus 61%) or anal (39% versus 21%) sex practices. From the sexual health point of view, specialists agree that the risks of HIV transmission related to the practice of unprotected oral sex are extremely low, almost insignificant (31). However, the transmission risks of a number of STBBIs (syphilis, herpes, etc.) are real. Indeed, some STBBIs are present in sperm,

vaginal fluids, saliva and other body fluids, and can therefore be transmitted through cuts and lesions in the genital area. So giving or receiving oral sex increases the exposure risk to a number of STBBIs.

Furthermore, 3.3% of respondents reported having accepted money or drugs in exchange for sex (4.1% of men and 2.5% of women). Among men, these proportions reach a peak among those aged 50 to 60. This might be explained by the fact that they did not understand the meaning of the question asked. In other words, they counted the number of times where they themselves had given money or drugs in exchange for sex.

Ninety-five percent (95%) of respondents confirmed they had never had sex with a person infected with HIV/AIDS and 73% reported they had never had sex with a person with a STBBI. This could result from the poor knowledge of STBBIs, notably their often asymptomatic nature. There are however 16.4% of respondents who reported having had sex with a person with a STBBI, particularly 19-yer old young adults.

Among the respondents who were not married and not in a relationship and who had at least two partners in the 12 months preceding the survey, 80% (83% of women and 78% of men) still did not use condoms. Men seem slightly more likely than women to use condoms. Although the use of condoms decreases with age, there are still nearly 73% of young adults aged 18 to 28 who reported not always using condoms (18.3% reported never having used them). There are three main reasons to this: because they have a regular partner (35%); because they did not have condoms with them at the time (13%) and because they were under the influence of alcohol or drugs. These reasons might imply a carefree attitude regarding sexual health that exposes youth aged 18 to 28 to a greater risk of contracting a STBBI. As to the participants' attitude towards their partner's refusal to use condoms, significantly more men (21.3%) than women (13%) indicate they would accept having sex with an occasional partner who would refuse to use condoms. These results highlight men's as well as women's misunderstanding of the level of risk they expose themselves to by having unprotected sex, and of the benefit of condoms as prevention means against the various STBBIs.

Therefore knowledge seemed to be a determining factor in participants' sexual behaviours since to protect oneself adequately against HIV, AIDS and other STBBIs, one must have a good understanding of the transmission mechanisms and prevention means. For this reason, we evaluated participants' knowledge in terms of sexual health and STBBIs, as well as the sources of information and the knowledge gaps regarding sexual health. The analysis results show that not many respondents know about STBBIs, particularly the human papillomavirus (HPV), condyloma acuminata and syphilis. There are also a lot of false beliefs regarding the HIV/AIDS transmission factors. There are many respondents who know that a STBBI does not always produce symptoms and that it is possible to contract HIV through oral sex. Also, a number of participants believe that withdrawal at the time of ejaculation is a protection method against HIV and other STBBIs.

The main source of information for women is the nurse whereas it is television for men. As to the other sources of information most frequently indicated by women, they are television, school, the physician, the health centre and friends. For men, they are friends, school, the nurse, the physician and the health centre. The sources of information least frequently indicated by women and by men are the community worker and the CLSC. The geographical remoteness and the distance between some communities do not foster access to CLSC services. This could explain why the CLSC was identified as a less frequent source of information. As to the community health worker, who is present in several communities, one could think that this resource is not in contact with community members on a regular basis. It should however be pointed out that 40% of men and women do not feel that they are informed.

The survey results analysis shows that women are more likely than men to report having received a STBBI diagnosis. This could be explained by the fact that there are significantly more women than men who report having been screened. It can also be explained by the fact that it is easier to reach women in a confidential manner during an annual check-up (PAP test) or during a consultation for a contraceptive method. Also, given the asymptomatic nature of most STBBIs and the fact that men are less inclined to show up for a screening test, this increases the risk of exposure to the STBBI of sexual partners. However, it might prove particularly important to study the reasons why fewer men than women go for screening.

Among the STBBIs reported, chlamydia (19%) and gonorrhea (6.6%) are the most widespread among respondents. These findings are supported by those of the fourth National Report on the Health Status of the Population of Québec (1)[*]. The analysis of the proportion of reported cases for various STBBIs, based on age, shows that these proportions are at their highest among young adults aged 18 to 28, particularly among young women. To be noted, among others, is the proportion of reported HIV/AIDS cases which is 9%: 12% of women and 6% of men. Knowing that in Canada, in 2008, the prevalence of HIV among Aboriginal peoples was estimated at approximately 0.5% (35), it is therefore necessary to be cautious when interpreting the results obtained in our study. In fact, it is highly probable that an information bias had an influence on the results. For example, the respondents may have interpreted the term “diagnosis” while confusing it with the word “screening”, which would have the effect of over-estimating the number of diagnosed cases among the participants.

This finding may be explained by the analyses results. Indeed, analysis revealed an early onset of sexual activity, multiple partners and a refusal to use condoms on a regular basis, which are all sexual behaviours that increase the young adults’

[*] Free translation.

vulnerability to HIV and other STBBIs. Furthermore, HIV infection is fostered by the presence of other STBBIs. Added to this is young adults' carefree attitude towards HIV at an age where risk represents an incentive. Indeed, when asked about their level of concern regarding their own vulnerability to HIV and AIDS, approximately 38% answered "no" or I don't know". Among those who reported not being worried, 16% explained this attitude by the fact that they are still young. Moreover, young women are often more likely to be abuse or sexually assaulted in the communities (33), and this makes them more vulnerable to demand safe sex, women may suffer the consequences of this high-risk behaviour, which exposes them to contracting HIV and other STBBIs or the risk of an unwanted pregnancy. It is also important to note that among the 45 HIV diagnosed cases reported, 8 cases reported having homosexual relations, 20 cases having used illegal drugs at least once in the 12 months preceding the survey, 6 of them being injection drugs.

Hepatitis C and HIV co-infection means the person contracted both the Hepatitis C and HIV viruses. It is not rare to see people who contracted HIV also contract Hepatitis C. Indeed, among the 45 participants who reported having been diagnosed with HIV, more than half of them (56%) also reported having been diagnosed with Hepatitis C. Among these people, 52% reported having used drugs.

Regarding the question on groups at risk of HIV/AIDS, more than half of the respondents identified Aboriginals and women as groups at risk.

The analysis of the data shows that alcohol intake, regardless of the frequency, is significantly (<0.0001) more widespread among men than among women. As to the use of illegal drugs, 26% of men compared to 20% of women reported having used drugs at least once in the 12 months preceding the survey. As well, significantly more men than women reported having had a drink, 65% versus 49% ($p<.0001$) or used drugs 29% versus 16.6% ($p=0.0001$) before sex. These findings are most common among young adults aged 18 to 28. Based on a study, using drugs and alcohol can have a significant adverse effect on preventive behaviours (26). In other words, these substances impair judgment by increasing desire, reducing sexual inhibitions and therefore distract from prevention. Consequently, this could be identified as at-risk behaviour that increases the risk of contracting HIV and other STBBIs. Furthermore, cocaine is the most widely used psychotropic substance after cannabis. It is also the drug which is most frequently used among respondents.

Limitations of the survey

In the part on high school youth (part 1), recruiting participants was done only in First Nations community high schools for reasons of convenience. As such, the selection process for students did not ensure all units the same chances of being in the sample. These could induce a selection bias. It should also be noted that some difficulties in recruiting participants limited the size of the youth sample in the school setting. Thus a

number of analyses could not be carried out because of the low number of respondents to some questions. This therefore limits the scientific scope of the results and these results can therefore only provide indications and orders of magnitude likely to help in refining some hypothesis and making recommendations.

This survey is based on the auto-declared sexual behaviour, a subject that can prove sensitive for First Nations, this can induce a social desirability bias in the answers in favour of healthy behaviours. In other words, participants could perceive the truth as being socially inacceptable or undesirable, especially when living in a setting where everybody knows everybody. A memory bias can also occur, especially for questions with temporal reference points such as number of partners and frequency of alcohol and drug use.

CONCLUSION

All of this data highlights at-risk sexual behaviours such as sexual precocity, having multiple partners, the non systematic use of condoms, and the interest among youth for oral sex as compared to anal sex. Analysis results also revealed the lack of knowledge among First Nations youth and adults regarding the various sexually-transmitted and blood-borne infections (STBBIs) and the sources of information. This makes First Nations community members more vulnerable to the risk of contracting STBBIs and blood-borne pathogens, especially adolescents, young adults and women.

In view of this, in order to try to improve the performance of prevention initiatives intended for First Nations communities of the Quebec region, it is obvious than a number of recommendations will help guide workers in improving their prevention and education activities.

Recommendations:

Improve the knowledge of youth, adults and case workers

- Because of the early age at which sexual intercourse is first experienced, youth would make more informed choices if they could rely on a solid basis of personal resources acquired at an early age and if there were information, education, prevention and support means in terms of sexual health as early as grade 5 or 6 in primary school.

- Sex education at school should be carried out in a more sustained manner throughout secondary school in a time slot specifically assigned to this subject. The survey shows there is a lack of knowledge among youth on STBBIs and their transmission as well as on sexuality in general. It would also be desirable that STBBIs be given a significant place in the curriculum in order for everybody to have a good understanding of all of them and be able to identify prevention means.

- Since friends are a popular source of information among youth, peer training would be a privileged way to transmit information, but also to ensure the accuracy of the information transmitted.

- In order to integrate parents in the discussion and raise their awareness with regards to the early onset of sexual behaviours among youth, organizing information sessions or parent-child workshops would be a way to initiate discussion and therefore bring youth and parents on the same wavelength.

- The survey also revealed adults' lack of knowledge pertaining to STBBIs and their transmission modes. It is therefore important to intensify information measures in various formats (workshop, documentation, information sessions, radio clips...), as

well as education and communication activities on HIV/AIDS and other STBBIs, notably at community events. Measures should also be initiated to promote lesser-risk sexual behaviours and practices and prevention means. Consequently, these individuals will also be able to contribute to their children's acquisition of accurate knowledge pertaining to HIV/AIDS transmission and prevention modes.

- Prevention activities shall also target individuals living with HIV/AIDS in order to prevent the transmission of the infection to their partners.

- It is equally important to provide ongoing training to the case workers who provide education to individuals to ensure that they fully understand the messages to be conveyed (health workers, teachers)

Encourage STI/HIV/AIDS Screening

- STBBI and HIV/AIDS screening must be encouraged by making screening locations more anonymous and accessible in order to limit the risk of STBBI and HIV spread. Moreover, screening is an opportunity to meet individuals on a one-to-one basis, in a confidential manner, in order to review their sexual risk behaviours and provide advice on practices that are safer for their health and their partners.

Reduce High Risk Behaviours

- It is also necessary to have individuals become more responsible towards their own sexual behaviours and those of others through awareness campaigns.

- Alcohol intake and drug use, regardless of their frequency, is widespread among First Nations, especially youths. These substances are known to impair judgement and can therefore have significant adverse effects on preventive behaviours in terms of sexual health. Also, the use of injection drugs is known for its contribution to the spread of the HIV/AIDS epidemic. Given this, information activities on the impacts of substance use on the sexual health as well as addiction treatment will contribute to the reduction of addiction rates, especially addiction to injection drugs.

This survey's main objective is to develop the overall portrait of the sexual behaviour, perceptions, attitudes and knowledge pertaining to HIV and STBBIs of youth and adults in First Nations communities of the Quebec region. This will, on one hand, help identify useful types of intervention that will benefit these communities and reduce their risk of contracting STBBIs, and, on the other hand, to highlight the status of STBBIs for the population. Furthermore, to our knowledge, no regional survey has ever been conducted on sexual behaviours and the knowledge pertaining to STBBIs in First Nations communities of the Quebec region. In this context, our survey will fill a major void by allowing the production of an overall portrait of the targeted population's situation in terms of STBBIs.

However, given how important this issue is, other investigations would be necessary to gain a better understanding of the issue. It may be particularly important, for instance, to identify the determinants of at-risk sexual behaviours in an explanatory approach, to study the reasons why fewer men than women get screened, or to highlight the mechanisms through which certain socio-cultural and economic factors influence at-risk sexual behaviours.

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APPENDIX

APPENDIX 1

COMMISSION DE LA SANTÉ ET DES SERVICES SOCIAUX
DES PREMIÈRES NATIONS DU QUÉBEC ET DU LABRADOR
FIRST NATIONS OF QUEBEC AND LABRADOR
HEALTH AND SOCIAL SERVICES COMMISSION
CSSSPNQL/FNQLHSSC • 250, Place Chef Michel-Laveau, Wendake (Québec) G0A 4V0
Téléphone/Telephone : (418) 842 1540 Télécopieur/Fax: (418) 842 7045

PARENTAL CONSENT FORM:

Survey on the sexual behaviours, attitudes and knowledge regarding STBBI (sexually-transmitted and blood-borne infections) among the youth and adults of the First Nations in Quebec

Dear parent(s) or legal guardian(s):

We are writing to request your permission to have your child participate in a survey being conducted by the First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC) on the sexual behaviours, attitudes and knowledge of teenagers in the Quebec First Nations regarding STBBI (sexually-transmitted and blood-borne infections).

The overall objective of the survey is to better understand the factors which expose young people in the Quebec First Nations to the risk of contracting STBBI, so that we may identify useful types of intervention and establish measures for purposes of reducing the potential harm that STBBI can cause to these young people.

As you know, the decisions young people make during adolescence with regards to sexual activity are of crucial importance in determining whether or not they will be at risk of contracting an STBBI. Teenagers can make better decisions if they are better informed from an early age through sexual health information, education, prevention and support activities. All of the data that we obtain from the survey will allow us to improve prevention programs, thus ensuring that they are culturally adapted and that they respond more effectively to the needs.

For the survey, high school students will be asked to complete a questionnaire at school. The questionnaire will be administered in the classroom, with participation on a voluntary basis. The questionnaires will remain fully anonymous; students will not give their names. All of the information will be considered confidential and individual results will not be made available.

The survey will take place in the spring of 2009 and we are requesting your agreement for your child's participation in it. We would therefore be grateful if you could complete and return the attached form to the school.

If, after receiving this letter, you have any questions about the survey or would like to receive additional information that may help you make your decision about your child's participation, please do not hesitate to contact the principal of your child's school.

DECLARATION OF CONSENT

I understand that my child's participation in this survey is entirely on a voluntary basis and that I am free to refuse his/her participation in it, or to withdraw my consent at any time, without prejudice.

I, the undersigned (name of parent or legal guardian):

As being legally responsible for my child (first name and last name of child):

❒ I authorize my child's participation in completing the questionnaire for the Survey on sexual behaviours, attitudes and knowledge regarding STBBI (sexually-transmitted and blood-borne diseases) among the youth and adults of the First Nations in Québec.

❒ I do not authorize my child's participation in the survey.

Date: ----------Signature: ----------

Thank you for completing and returning this form to your child's school.

APPENDIX 2

COMMISSION DE LA SANTÉ ET DES SERVICES SOCIAUX
DES PREMIÈRES NATIONS DU QUÉBEC ET DU LABRADOR
FIRST NATIONS OF QUEBEC AND LABRADOR
HEALTH AND SOCIAL SERVICES COMMISSION
CSSSPNQL/FNQLHSSC • 250, Place Chef Michel-Laveau, Wendake (Québec) G0A 4V0
Téléphone/Telephone : (418) 842 1540 Télécopieur/Fax: (418) 842 7045

CONSENT FORM (ADULTS)

Survey on the sexual behaviours, attitudes and knowledge regarding STBBIs (sexually-transmitted and blood-borne infections) among the youth and adults of the First Nations in Quebec

Dear Sir/Madam,

The First Nations of Quebec and Labrador Health and Social Services Commission (FNQLHSSC) is requesting your participation in a survey on the sexual behaviours, attitudes and knowledge of the youth and adults in the Quebec First Nations regarding STBBI (sexually-transmitted and blood-borne infections).

Objective of the survey

The overall objective of our survey is to better understand the factors which expose youth and young adults of the First Nations in Quebec to the risk of contracting STBBI, so that we may identify useful types of intervention and establish measures for purposes of reducing the potential harm that STBBI can cause to First Nations. The conclusions will assist us in reducing the risk of transmitting STBBI in all of the communities.

Advantages and impacts

As you know, sexual health is an important aspect of overall health, one which affects people of all ages and at all stages of life. Indeed, adolescence and early adulthood are the periods when people begin making decisions about their sexual activity. A number of behavioural tendencies are established, leading to the risk of contracting sexually-transmitted infections, HIV and AIDS. However, people are able to make better decisions if they are better informed from an early age through sexual health information, education, prevention and support activities. All of the data obtained by the survey will allow us to provide culturally-adapted prevention programs which meet people's needs.

Protection of personal information

The survey will be conducted by means of a fully anonymous questionnaire. It will take place in the summer of 2009 and we are requesting your consent to be a participant in it. Your participation in the survey is voluntary; you are in no way obligated to take part in it. But if you decide to be a participant, we would be grateful if you could complete, sign and return the attached consent form to confirm your agreement to participate.

All of the personal information obtained regarding you through the survey will be treated confidentially; and the data which we obtain will be identified by a code number. This survey comes under the exclusive ownership, control, access and possession of the First Nations (OCAP principles).

Questions

If you have any questions about the survey or would like to receive additional information that may assist you in making a decision concerning your participation, please do not hesitate to call Ms. Zineb Laghdir or Ms. Louise Tanguay of the FNQLHSSC at 418-842-1540.

Declaration of Consent

I understand that my participation in this survey is entirely on a voluntary basis and that I am free to refuse to participate in it or to withdraw my consent at any time, without prejudice.

❒ I agree to participate in this study by completing the questionnaire for the Survey on sexual behaviours, attitudes and knowledge regarding STBBI (sexually-transmitted and blood-borne diseases) among the youth and adults of the First Nations in Quebec.

❒ I do not wish to participate in the survey.

If you wish to participate in the draw please indicate your home address:

Signature of survey participant: _____ Date: _____

Address of survey participant: _____

Signature of interviewer: _____ Date: _____

APPENDIX 3

Name of community: _____

Name of interviewer: _____

Date: _____

Consent form no.: _____

Please take the time necessary for completing this questionnaire. Thanks to your answers, the First Nations will have access to important information allowing them to adopt effective solutions for improving the health and well-being of the First Nations communities.

What is the purpose of this survey?

The overall purpose of the survey is to obtain a better understanding of the factors which expose the First Nations communities in the region of Quebec to the risk of contracting STBBI (sexually-transmitted and blood-borne infections) and, on the basis of that understanding, to identify the types of interventions that will be useful to the communities in reducing the risk of contracting STBBI. This will be accomplished by the survey, which will allow us to learn about the socio-cultural, socio-environmental and inter-personal determinants involved in sexual activities, and about people's perceptions and knowledge related to STBBI. The conclusions of the survey will serve to identify the best approaches for helping to reduce the risk of transmitting STBBIs in all of the communities. This survey comes under the exclusive ownership, control, access and possession of the First Nations (OCAP principles).

You are under no obligation to complete this questionnaire. However, everyone's opinion is important and if a large number of people participate in the survey, the results will be more accurate. Please be assured that the questionnaire is entirely confidential.

1- Do not write your name on the questionnaire.

2- Place and seal your questionnaire in the attached envelope.

The envelope will then be opened by the members of the research team, who will process and record the answers you have given. Your envelope will be added to the others; it will thus be impossible to identify the respondents.

SOCIO-DEMOGRAPHIC DATA

1. What is your date of birth?

Day Month Year

2. What is your gender?

- ❒ Male
- ❒ Female

3. What is the name of the community where you normally live?

_____

4. What language or languages do you speak the most often in your everyday life? You may indicate several answers.

- ❒ English
- ❒ French
- ❒ First Nations language
- ❒ Other (specify): _____

5. Do you understand or speak a First Nations language?

- ❒ Yes
- ❒ No → If not, go directly to question 7
- ❒ Refuse to answer

6. Please circle the First Nations language or languages that you understand or speak.

Innu
Cree
Atikamekw
Algonquin
Mi'kmaq
Naskapi
Mohawk

7. Education and occupational training

7.1 What is the highest level of education that you have completed?

- ❒ Never gone to school
- ❒ A few years of elementary school
- ❒ Elementary school completed
- ❒ A few years of high school
- ❒ High school completed
- ❒ A few years of college or trade school
- ❒ Occupational training (please specify) _____
- ❒ College or trade school completed
- ❒ A few years of university
- ❒ University completed
- ❒ Other(s) (specify): _____

7.2 Location where you went to school (select the category which best represents your situation)

- ❒ In a First Nations community
- ❒ One part in a First Nations community and another part away from the community
- ❒ Away from the community for all my studies
- ❒ Indian residential school
- ❒ Refuse to answer

8. Marital status

- ❒ Single (never married)
- ❒ Married
- ❒ Divorced / separated
- ❒ Common-law partner
- ❒ Widowed
- ❒ Other (specify): _____

9. Are you currently working as a salaried employee or as a self-employed person?

- ❒ Yes (go to question 12)
- ❒ No
- ❒ Refuse to answer

10. Are you currently looking for a job?

- ❒ Yes (go to question 12)
- ❒ No
- ❒ Refuse to answer

11. If not, which of the following statements best describes your situation?

- ❒ Illness or disability
- ❒ Seasonal worker
- ❒ Retired
- ❒ Caring for a parent at home
- ❒ Student
- ❒ On paternal or maternal leave
- ❒ Income security recipient
- ❒ Am no longer motivated to look for a job
- ❒ Other (specify): _____

12. What was your total personal income from all sources, before taxes and deductions, in the year ending December 31, 2007? Please indicate in which of the following categories it is situated.

- ❒ No income
- ❒ $1 - $4,999
- ❒ $5,000 - $9,999
- ❒ $10,000 - $14,999
- ❒ $15,000 - $19,999
- ❒ $20,000 - $24,999
- ❒ $25,000 - $29,999
- ❒ $30,000 - $39,000
- ❒ $40,000 - $49,000
- ❒ $50,000 - $59,999
- ❒ $60,000 - $69,999
- ❒ $70,000 - $79,999
- ❒ $80,000 or more
- ❒ Don’t know
- ❒ Refuse to answer
- ❒ Not applicable

13. How big a role does spirituality play in your life?

- ❒ Very important
- ❒ Important
- ❒ Not very important
- ❒ Not important at all
- ❒ Don’t know

SEXUAL BEHAVIOURS

14. At what age did you first have sex?

(For this survey, sex is defined as penetration by the penis in the vagina or anus, or as an oral-genital sexual relation)

_____ (If your answer is “Never,” go directly to question 28)

15. Have you had sex during the past 12 months?

❒ Yes
❒ No → In this case, go to question 18
❒ Refuse to answer

16. With how many male partners did you have sex during the past twelve months?

❒ None
❒ 1 partner
❒ 2 partners
❒ 3 partners
❒ 4 partners or more
❒ O Refuse to answer

17. With how many female partners did you have sex during the past twelve months?

❒ None
❒ 1 partner
❒ 2 partners
❒ 3 partners
❒ 4 partners or more

❒ Refuse to answer

18. How often do you use a condom for sex?

❒ Always → In this case, go to question 20
❒ Most of the time
❒ Sometimes
❒ Never
❒ Refuse to answer

19. What is the main reason that you do not use a condom?

(Please indicate the answer or answers that correspond best to your situation).

❒ I don't like using a condom.
❒ My partner doesn't want to use one.
❒ I was under the influence of alcohol or drugs.
❒ My partner doesn't have HIV/AIDS.
❒ I want to become pregnant or I want my partner to become pregnant
❒ I can't afford to buy condoms.
❒ I have a regular partner.
❒ I didn't have a condom with me at the time.
❒ I didn't think there was any danger.
❒ I didn't think about using a condom.
❒ Other (specify): _____

20. If you have a regular partner, what do you do if he refuses to use a condom?

❒ I refuse to have sex with him/her.
❒ I agree to have sex anyway.
❒ I try to convince him/her to use a condom.
❒ Other (specify): _____

21. If you have an occasional partner, what do you do if he refuses to use a condom?

- ❒ I refuse to have sex with him/her.
- ❒ I agree to have sex with him/her anyway.
- ❒ I try to convince him/her to use a condom.
- ❒ Other (specify): _____

22. What contraceptive method or methods do you or your partner use?

- ❒ Birth control pills
- ❒ Transdermic patch
- ❒ Vaginal ring
- ❒ Injectable contraceptive or Depo Provera
- ❒ Intra-uterine Device (IUD)
- ❒ Sponge and spermicidal foam
- ❒ Diaphragm
- ❒ Condom for women
- ❒ Condom for men
- ❒ Other (specify): _____

23. Have you ever practised anal penetration?

- ❒ Yes
- ❒ No
- ❒ Don’t know

24. Have you ever practised oral sex?

- ❒ Yes
- ❒ No
- ❒ Don't know

25. Have you ever accepted money or drugs in exchange for sex?

- ❒ Yes
- ❒ No
- ❒ Don't know
- ❒ Refuse to answer

26. Have you ever had sex with a person who has HIV/AIDS?

- ❒ Yes
- ❒ No
- ❒ Don't know
- ❒ Refuse to answer

27. Have you ever had sex with a person who has a STI (sexually-transmitted infection: hepatitis, chlamydia, herpes, etc.)?

- ❒ Yes
- ❒ No
- ❒ Don't know
- ❒ Refuse to answer

KNOWLEDGE

28. Which of the following sexually-transmitted and blood-borne infections (STBBI) have you heard about? (Check all applicable answers)

- ❒ HIV/AIDS
- ❒ Hepatitis A
- ❒ Hepatitis B
- ❒ Hepatitis C
- ❒ Chlamydia
- ❒ Gonorrhea
- ❒ Condyloma acuminata (genital warts)
- ❒ Genital herpes
- ❒ Human Papillomavirus (HPV)
- ❒ Syphilis
- ❒ None of the above

29. How did you hear about them? (Check all applicable answers)

- ❒ Radio
- ❒ Television
- ❒ Internet
- ❒ Posters
- ❒ Newspaper
- ❒ Friends
- ❒ Parents
- ❒ Doctor
- ❒ Nurse
- ❒ Community intervener
- ❒ Health centre
- ❒ CLSC

- ❒ School
- ❒ Other (specify): _____

30. In what way would you like to hear about them? (Check all applicable answers)

- ❒ Radio
- ❒ Television
- ❒ Internet
- ❒ Posters
- ❒ Newspapers
- ❒ Friends
- ❒ Parents
- ❒ Doctor
- ❒ Nurse
- ❒ Community intervener
- ❒ Health centre
- ❒ CLSC
- ❒ School
- ❒ Other (specify): _____

31. Do you think you are adequately informed about STI, HIV and hepatitis?

- ❒ Yes
- ❒ No

32. Indicate, by a yes or no answer, whether HIV/AIDS can be transmitted in each of the following situations:

Situations	Yes	No
Having sex without a condom		
Having sex with a condom		
Injecting a drug using material used previously by someone else (spoon, syringe, etc.)		

Situations	Yes	No
Injecting a drug using a new syringe		
Receiving blood		
Giving blood		
Mosquito bite		
Being hospitalized in the same ward as an infected person		
Using a public bathroom		
Drinking from the glass of an infected person		
Getting a tattoo or piercing		
Using the razor of an infected person		
Receiving dental care		
Kissing an infected person		
Exchange of saliva		
Shaking hands with an infected person		
Sharing a straw to inhale a drug		
In a swimming pool		
Sharing a toothbrush with an infected person		

33. AIDS is an illness that never heals

❒ True

❒ False

34. You can get the HIV virus by having oral sex

❒ True

❒ False

35. You can get the HIV virus by having anal sex

❒ True

❒ False

36. Can a pregnant woman transmit the HIV virus to her baby?

- ❒ It is possible
- ❒ It will automatically happen
- ❒ Never

37. Is an STBBI always accompanied by symptoms?

- ❒ Yes
- ❒ No
- ❒ Don't know

38. What are the consequences that an STBBI can have on a person's health in the long term?

- ❒ None
- ❒ Sterility
- ❒ Cancer
- ❒ AIDS
- ❒ Other (specify): _____

39. Have you ever been diagnosed with any of the following conditions? (Please check all applicable answers)

- ❒ HIV/AIDS
- ❒ Hepatitis C
- ❒ Hepatitis B
- ❒ Hepatitis A
- ❒ Chlamydia
- ❒ Gonorrhea
- ❒ Condyloma acuminata (genital warts)
- ❒ Genital herpes

- ❒ Human Papillomavirus (HPV)
- ❒ Syphilis
- ❒ Other (specify): _____
- ❒ None

PERCEPTIONS

40. Do you know at least one person with HIV/AIDS?

❒ Yes

❒ No

41. From among the following groups of people, indicate the group or groups which present a high risk of getting HIV/AIDS:

Groups of people	Yes	No
Homosexuals (people who are sexually attracted to others of the same sex)		
Bisexuals (individuals who are both heterosexual and homosexual)		
Aboriginal people		
Sex trade workers (prostitutes)		
Hemophiliacs (people with hemophilia, a hereditary illness manifested by poor blood coagulation which can lead to extended bleeding)		
Women		
Drug addicts		
Drug addicts who inject drugs		
People who come from countries where HIV is widespread		
Heterosexuals (people who are attracted to the opposite sex)		
None of these groups		
All of these groups		

42. Many people are worried about getting HIV. Are you worried as well?

❒ Yes (go to question 44)

❒ No (go to question 43)

❒ Don't know (go to question 45)

43. If not, why not? (Please check all applicable answers)

- ❒ Because I am young
- ❒ I am in a relationship
- ❒ I take precautions
- ❒ Other (specify): _____

44. If so, why? (Please check all applicable answers)

- ❒ It can happen to anyone
- ❒ I think that I have at-risk behaviours
- ❒ I think that my partner may have at-risk behaviours
- ❒ Other (specify): _____

45. Have you ever been tested for a STI, Hepatitis C or HIV?

	Yes, and I received my results	Yes, but I DID NOT receive my results	Yes, but I did NOT GO BACK for my results	No	Refuse to answer	Don't know
STI						
Hepatitis C						
HIV						

46. If you have previously been tested for a STI, Hepatitis C or HIV, where were you tested? (if not, go directly to question 47)

- ❒ Community health centre
- ❒ Sterile syringe access program
- ❒ Private doctor's office
- ❒ Hospital
- ❒ CLSC

- ❒ Detoxification clinic
- ❒ Street nurse
- ❒ Prison
- ❒ Red Cross or Héma-Québec blood donor clinic
- ❒ Prenatal testing
- ❒ Other (specify): _____
- ❒ Don't know
- ❒ Refuse to answer

47. Have you ever wondered about the sexual practises of one of your partners?

- ❒ Yes
- ❒ No

48. Have you ever wondered about the possibility that one of your partners has been using drugs?

- ❒ O Yes
- ❒ O No

49. What method do you use to protect yourself from STI and HIV? *(Check the answer or answers which correspond to your situation).*

- ❒ Withdrawal just before ejaculation
- ❒ Contraceptive pills
- ❒ Abstinence
- ❒ Condom
- ❒ My partner and I are faithful to each other
- ❒ Other (specify): _____
- ❒ None

LIFESTYLE HABITS

50. How much alcohol do you drink per week (i.e., every 7 days)? *(Check the answer that corresponds best to your situation.) (One drink equals one beer, one glass of wine or one ounce of spirits)*

❒ None
❒ About 1 to 6 drinks
❒ About 7 to 13 drinks
❒ About 14 drinks or more

51. Have you consumed alcohol before having sex during the past 12 months?

❒ Every time
❒ Most of the time
❒ Sometimes
❒ Never
❒ Refuse to answer

52. Have you used or injected yourself with drugs during the past 12 months?

❒ Yes
❒ No → In this case, go to question 55
❒ Refuse to answer

53. What drug or drugs did you use during the past 12 months?

- ❒ Cannabis (marijuana, pot, weed, hash, etc...)
- ❒ Cocaine (coke, crack, etc...)
- ❒ Amphetamines and other stimulants (crystal-methamphetamine, speed, ecstasy, etc.)
- ❒ Inhalants (solvents, glue, gasoline, paint thinner, etc...)
- ❒ Sedatives or sleeping pills (Valium, Serepax, Rohypnol, etc...)
- ❒ Hallucinogens (LSD, acid, mushrooms, PCP, ketamine, etc...)
- ❒ Opiates (heroin, morphine, methadone, codeine, etc…)
- ❒ Other (specify) _____

54. During the past 12 months, which of the following drug or drugs did you inject yourself with?

- ❒ Cocaine (coke)
- ❒ Crack
- ❒ Heroin
- ❒ Heroin/cocaine mix (speedball)
- ❒ Opiates (dilaudid, oxycodone, morphine, methadone, codeine, etc…)
- ❒ Ritalin alone or Talwin and Ritalin (T and R)
- ❒ PCP
- ❒ Fentanyl skin patch
- ❒ Amphetamines and other stimulants (crystal-methamphetamine, speed, ecstasy, etc…)
- ❒ Inhalants (solvents, glue, gas, paint thinner, etc…)
- ❒ Sedatives or sleeping pills (Valium, Serepax, Rohypnol, etc…)
- ❒ Hallucinogens (LSD, acid, mushrooms, PCP, ketamine, etc…)
- ❒ Other (specify) _____

55. During the past 12 months, have you used drugs before having sex?

- ❒ Always
- ❒ Most of the time

❒ Sometimes
❒ Never
❒ Refuse to answer

56. If you injected yourself with drugs during the past 12 months, did you use syringes, needles and/or other injection material that had already been used once before by other persons (including your sexual partner or partners)?

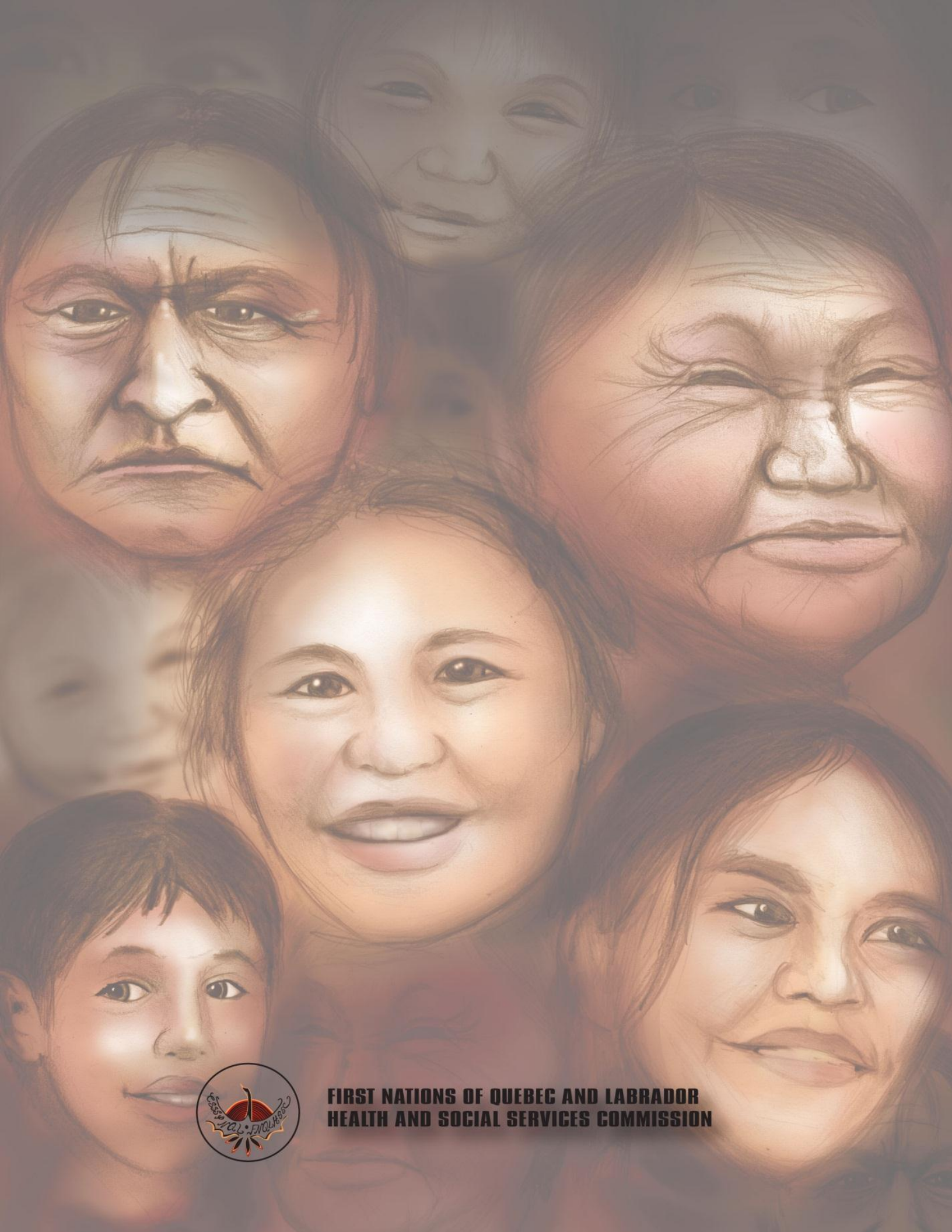
❒ Yes
❒ No
❒ Refuse to answer

57. During the past 12 months, did you get a tattoo, ear piercing or skin piercing?

❒ Yes
❒ No
❒ Refuse to answer

58. If so, did you make sure that the needles were new or adequately disinfected before using them?

❒ Yes
❒ No
❒ Refuse to answer



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HEALTH AND SOCIAL SERVICES COMMISSION