USE OF ALCOHOL AND DRUGS, CYBERADDICTION AND ISSUES RELATED TO GAMBLING

Highlights

Alcohol

- Alcohol abuse trends have remained fairly stable since RHS 2002.
- More than half of adolescents and elders do not drink alcohol, but one in four adolescents drink excessively.
- About two out of three adults 18-64 years old drink alcohol. Half of young adults (18-34 years old) drink excessively.

Drugs

- Cannabis is the most commonly used drug in all age groups.
- Cannabis tends to be used more regularly by males than by the females and by adults more than adolescents.
- Most drug users limit their use to cannabis, with the exception of young adults (18-34 years old). Among them, one in five uses stimulants.
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Cyberaddiction

- About 30% of adolescents and 20% of young adults show signs of cyberaddiction. This is an emerging problem — especially among young people.

Gambling

- One in ten adults who have gambled over the past year is showing signs of problems related to gambling.

CONTEXT

This booklet draws a portrait of four behaviours that can lead to addiction: use of alcohol, use of drugs, Internet use and gambling. These behaviours can have a severe impact on physical and mental health, not only for those who indulge in them, but also for their loved ones. For example, in the long term, people who drink alcohol excessively can develop cirrhosis of the liver, cannabis smokers can develop lung cancer and pathological gamblers can suffer from major depression. As the RHS questionnaire does not enable us to address these issues, this booklet will focus primarily on the following three key questions:

1. How has the portrait of these behaviours evolved in recent years?
2. What is the current portrait of these behaviours?
3. How does this portrait differ according to the different characteristics of the population (e.g., based on gender, age group or geographic zone)?

USE OF ALCOHOL

FIGURE 1 shows the evolution of drinking habits since RHS 2002, revealing a modest decrease in the proportion of drinkers, but no significant variation in the proportion of drinkers drinking excessively at least once a month.

† Drinkers using alcohol excessively = People who drank excessively on the same occasion (four or more drinks for females, five or more drinks for males).
BOX 1
Alcohol abuse

Alcohol abuse is associated with several health conditions such as cirrhosis of the liver, pancreatitis, cardiovascular problems and cancer. In the RHS, excessive drinking is defined as:

1. Drinking four or more drinks for females or five or more drinks for males on one occasion, at least once per month.
2. Drinking on more than five occasions in a single week. In the RHS questionnaire, this corresponds to people drinking alcohol on a daily basis.

FIGURE 2 shows that drinking habits vary greatly from one age group to another. The majority of adults 18-64 years old are drinkers, while the majority of adolescents and elders do not drink. Although one-third of the population drinks excessively, the phenomenon is more prevalent among adults 18-34 years old. In this age group, one in two people drinks excessively.

FIGURE 2
Use of alcohol among individuals 12 years and over, based on age group

Risk factors of alcohol abuse

According to the scientific literature, alcohol abuse is more prevalent among males than females and among tobacco smokers or drug users. As illustrated in FIGURE 3, these tendencies can be observed in the 12 years and over age group.

FIGURE 3
Use of alcohol among individuals 12 years and over, based on gender, cannabis use and tobacco use
USE OF DRUGS

FIGURE 4 shows the evolution of behaviours associated with drug use since RHS 2002. Despite a modest decrease in the proportion of users, trends are rather stable, particularly with regard to cannabis use.

FIGURE 4
Evolution of cannabis and other drug use among individuals
12 years and over since RHS 2002

Use of alcohol and drugs, cyberaddiction and issues related to gambling

Box 2
Use of drugs

Use of drugs can affect many spheres of life, including physical and mental health. It can affect cognition and impair performance at school or work. It can also lead to financial, interpersonal, psychological and legal problems. Even if used on an occasional basis, it can skew judgment and increase the risk of unprotected sex. Finally, a person who buys an illicit drug does not always get the product for which they paid. As a general rule, drug users are therefore exposed to a multitude of risks, regardless of the product they use. The table below summarizes the effect of different types of drugs on the central nervous system:

<table>
<thead>
<tr>
<th>Dissociative drugs and hallucinogens</th>
<th>Depressants</th>
<th>Stimulants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis</td>
<td>Alcohol</td>
<td>Amphetamines</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>GHB (e.g., date rape drug)</td>
<td>(e.g., speed, peanut, etc.)</td>
</tr>
<tr>
<td>Ketamine (special K)</td>
<td>Opioids (e.g., heroin, fentanyl)</td>
<td>Methamphetamine (e.g., crystal meth)</td>
</tr>
<tr>
<td>LSD (e.g., blotter, acid)</td>
<td></td>
<td>Cocaine (powder or crack)</td>
</tr>
<tr>
<td>MDMA (ecstasy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCP (mescaline)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General (short-term) effects
- Changes the way the senses work
- Causes disorientation
- Can cause confusion, affect coordination and how the body functions
- Can distort perceptions
- Causes excitement and agitation

Some of these drug categories include prescription drugs such as analgesics and opioids (e.g., fentanyl, codeine), used to treat pain and anxiety, or stimulants (e.g., Ritalin), used to treat attention deficit disorders. These drugs can be addictive and lead to problems similar to those related to illicit drugs, as illustrated by the alarming increase in deaths from fentanyl overdoses in Canada.
FIGURE 5 shows the main drugs used by people 12 years and over based on gender. Two major trends emerge. First, the most commonly used drugs are cannabis and stimulants (mostly cocaine or amphetamines). Second, males are more likely to use drugs than females.

FIGURE 5
Use of drugs† among individuals 12 years and over, based on gender

<table>
<thead>
<tr>
<th>Drug Type</th>
<th>Total</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>30%</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>Cannabis</td>
<td>36%</td>
<td>22%</td>
<td>11%</td>
</tr>
<tr>
<td>Stimulants‡</td>
<td>34%</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>2%*</td>
<td>1%*</td>
<td>4%*</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>4%*</td>
<td>2%*</td>
<td>1%*</td>
</tr>
<tr>
<td>Total Cannabis</td>
<td>33%</td>
<td>21%</td>
<td>9%</td>
</tr>
<tr>
<td>Stimulants‡</td>
<td>48%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>9%</td>
<td>6%*</td>
<td>2%*</td>
</tr>
</tbody>
</table>
| Ecstasy          | 5%*   | 3%*     | 2%*   | 1%*   | 3%*

†This figure only includes drugs that are used by at least one percent of the population 12 years and over.
‡Stimulants include cocaine, amphetamines and methamphetamines.

FIGURE 6 shows the main drugs consumed by individuals 12 years and over based on age group. First, one in three adolescents had used drugs over the past year, and most of the time, the drug they used was cannabis. In young adults (18 to 34 years old), the use of drugs is both more frequent and more diverse: one in two used cannabis and one in five used stimulants. The proportion of users and the diversity of drugs used declines from one adult age group to another, so that among individuals 65 years and over, the proportion of users is small and includes almost exclusively cannabis users.

FIGURE 6
Use of drugs† among individuals 12 years and over, based on age group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>12-17</th>
<th>18-34</th>
<th>35-64</th>
<th>65 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>30%</td>
<td>51%</td>
<td>48%</td>
<td>33%</td>
<td>34%</td>
</tr>
<tr>
<td>Cannabis</td>
<td>24%</td>
<td>33%</td>
<td>20%</td>
<td>11%</td>
<td>3%*</td>
</tr>
<tr>
<td>Stimulants‡</td>
<td>28%</td>
<td>21%</td>
<td>9%</td>
<td>2%*</td>
<td>2%*</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>11%</td>
<td>3%*</td>
<td>4%*</td>
<td>1%*</td>
<td>2%*</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>21%</td>
<td>9%</td>
<td>6%*</td>
<td>2%*</td>
<td>5%*</td>
</tr>
</tbody>
</table>

†This figure only includes drugs that are used by at least one percent of the population 12 years and over.
‡Stimulants include cocaine, amphetamines and methamphetamines.
Cannabis use

Cannabis is the most commonly used illicit drug in the general population. When smoked, it tends to increase the risk of developing respiratory problems [5]. In addition, cannabis use is often associated with mental health conditions (not necessarily triggering them), such as depression, anxiety, and psychotic events. The more a person uses cannabis, the more likely they are to present these problems. Finally, chronic cannabis use can impair performance at school or work and lead to financial, interpersonal, psychological or legal problems.

FIGURE 7 shows patterns of cannabis use based on age. It reveals that males are more likely to use cannabis than females and, moreover, tend to do so on a more regular basis. Three times more males than females use cannabis daily. On the other hand, regular cannabis use is more prevalent among young adults than in other age groups.

Use of prescription drugs

About 19% (17%-22%) of individuals 12 years and over report having used prescription drugs over the past year. Of all prescription drug users, 31% (24%-38%) did not receive a prescription for all the prescription drugs they used and 7%* (4%-13%) modified the product before using it. Of all users who received a prescription, 13%* (8%-19%) skipped doses or took the drug for longer than prescribed.
“Cyberaddiction” (or addiction to the Internet) is manifested by several signs, such as the difficulty of controlling one’s Internet use. After getting off the Internet, a cyberaddicted person will quickly anticipate the moment of his or her next connection – sometimes obsessively. This can lead people who are cyberaddicted to neglect certain aspects of their lives (e.g., professional or social). The precise manifestation of the addiction may vary from person to person, but it usually affects at least one of the following categories:

1. Pornography
2. Social interactions (e.g., social networks, chatting)
3. Activities related to money (e.g., online gambling, shopping and online transactions)
4. Search for information (e.g., compulsively browsing the Internet, searching multiple databases)
5. Online gaming (e.g., World of Warcraft)

People who are cyberaddicted tend to have increased risks of insomnia, anxiety, depression and stress. Their addiction can also lead to a decrease in self-esteem. There may be other problems depending on the precise manifestation of the addiction.

About 84% (82%-87%) of individuals 12 years and over reported using the Internet at the time of the survey. In this group, individuals showing signs of cyberaddiction were recognized using seven questions (TABLE 1) from a proven screening tool. According to the data collected, it seems that some behaviours associated with cyberaddiction are present, but the problem remains marginal, at least when we focus on all Internet users 12 years and over.

### TABLE 1
Results of the questionnaire on cyberaddiction submitted to Internet users

<table>
<thead>
<tr>
<th>Behaviours associated with cyberaddiction</th>
<th>Proportion of positive responses (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Do you stay on the internet longer than planned?</td>
<td>35% [32%-39%]</td>
</tr>
<tr>
<td>2 Do you use the internet as a way to avoid daily problems or to escape from negative emotions (guilt, anxiety, depression, solitude)?</td>
<td>20% [17%-24%]</td>
</tr>
<tr>
<td>3 Do you feel that you are preoccupied or obsessed with the internet? (Do you think about the last time you used the internet and the next time you are going to use it?)</td>
<td>19% [16%-22%]</td>
</tr>
<tr>
<td>4 Have you made several unsuccessful attempts to limit or control the amount of time you spend on the internet?</td>
<td>16% [13%-19%]</td>
</tr>
<tr>
<td>5 Have you ever lied to your family or anyone else in order to have more time to spend on the internet?</td>
<td>7% [5%-9%]</td>
</tr>
<tr>
<td>6 Have you risked losing a relationship, your job or a career opportunity because of internet use?</td>
<td>7% [5%-9%]</td>
</tr>
<tr>
<td>7 Do you feel exhausted, depressed or irritable when you try to limit or stop your internet use?</td>
<td>6% [4%-8%]</td>
</tr>
</tbody>
</table>

| Internet users at risk of cyberaddiction (3-4 positive answers) | 12% [10%-15%] |
| Internet users with signs of cyberaddiction (5-7 positive responses) | 4% [3%-5%] |
The risks of cyberaddiction no longer appear as marginal when age is taken into account. As illustrated in FIGURE 8, the proportion of Internet users with risks or clear signs of cyberaddiction is around 30% among adolescents, 20% among people 18-34 years old, and 10% among people 35-64 years old. Respondents 65 years and over are not shown in this figure because none have clear signs of cyberaddiction and only one can be considered “at risk.” In addition, no statistically significant difference was found based on gender or geographic zone.

FIGURE 8
Proportion of Internet users with risks or clear signs of cyberaddiction, based on age group

PROBLEMS ASSOCIATED WITH GAMBLING

BOX 4
Gambling Problems (pathological gambling)\(^{[5-8]}\)

“Gambling” refers to a multitude of activities such as bingo, card or dice games, sports betting, slot machines, lotteries, etc. For some people, gambling leads to serious personal, family, financial, and other problems. Pathological gamblers usually have some of the following characteristics:

- Feel continually preoccupied about their gambling activities;
- Gamble more money than they can afford (sometimes, get into debt or sell their property to get money to gamble);
- Want to stop gambling, but can’t;
- After losing, gamble again to regain their losses;
- Pretend to make money while they lose money;
- Try to hide their gambling problems from their loved ones;
- Receive criticism from loved ones about their gambling problems;
- Feel guilty about gambling;
- Argue over their gambling problems;
- Neglect their work or studies to gamble;
- Borrow money from friends or family to gamble.
FIGURE 9 shows the evolution of gambling behaviours since RHS 2008. In general, trends remain stable.

FIGURE 9
Evolution of behaviours associated with gambling since RHS 2008

The 2015 RHS questionnaire included questions from the South Oaks Gambling Screen, a screening tool used to identify people who may have gambling problems. According to the responses collected, at the time of the survey approximately one in ten gamblers were at risk of presenting or developing a problem associated with gambling. There is no statistically significant difference based on age, gender or geographic area.
ADDICTIONS AND PSYCHOLOGICAL DISTRESS

Although the prevalence of the problems that are the subject of this booklet have been presented separately, they tend to be related to each other. In particular, people with behaviours associated with pathological gambling have an average of 2.6 problems among the four problems discussed in this booklet (FIGURE 10). This result is not surprising: gambling problems are often accompanied by alcohol abuse or drug use.

FIGURE 10
Average number of risk behaviours for people with drug, alcohol, Internet or gambling problems
FIGURE 11 shows that at the time RHS 2015 was conducted, the prevalence of psychological distress indicators was higher among people with risk behaviours related to use of alcohol, drugs or the Internet. Due to insufficient numbers, gambling was not displayed in this figure.

FIGURE 11
Prevalence of psychological distress indicators, based on use of alcohol, drugs or the Internet†

These results do not imply a causal association between these behaviours and psychological distress. One could not conclude, for example, that cannabis use “causes” suicidal thoughts, since some people were already “depressed” before using cannabis – which served as an outlet for them. Similarly, alcohol is both a depressant and a way to temporarily soothe the symptoms of depression. Among the cyberaddicted behaviours presented in TABLE 1, the second most common behaviour was using the Internet to avoid daily problems or to escape from negative emotions. In this case, the cyberaddicted behaviour did not appear as the cause, but as the consequence of a psychological distress.

While we have presented the prevalence of psychological distress indicators separately for each risk behaviour, most people with risk behaviours have more than one. For example, a large proportion of users of stimulants also use cannabis or drink excessively.
TREATMENT OF ALCOHOLISM AND DRUG ADDICTION

During the year prior to the survey, 7% (5%-10%) of people who drank alcohol received treatment for alcoholism, while 8% (6%-12%) of people who used drugs received addiction treatment. Of these, about three in five followed their treatment until the end (FIGURE 12). These results are encouraging, but show that efforts under the National Native Alcohol and Drug Abuse Program (NNADAP) must continue (BOX 5).

<table>
<thead>
<tr>
<th>Drug abuse</th>
<th>Alcoholism</th>
</tr>
</thead>
<tbody>
<tr>
<td>¬Treatment completed</td>
<td>39%</td>
</tr>
<tr>
<td>¬Treatment not completed</td>
<td>61%</td>
</tr>
</tbody>
</table>

BOX 5

National Native Alcohol and Drug Abuse Program (NNADAP). There are currently six NNADAP treatment centres in Quebec. Services are available in English and French in all centres, as well as in Innu in one centre. One centre is exclusively for young people, and the other five for adults. In addition to the centres, additional services are provided by NNADAP agents in the communities (on average, two agents per community). These professionals are required to attend continuing education on addictions and mental health.
CONCLUSION

The use of alcohol and drugs has remained much the same since RHS 2002, while cyberaddiction is an emerging problem among adolescents and young adults. Finally, few people are affected by issues related to gambling, but those who are generally are dealing with at least one other addiction. In general, we associate the adoption of one of the problem behaviours discussed in this booklet with a higher degree of psychological distress. The prevalence of the problems discussed in this booklet is generally higher among people 18-34 years old than in any other age group, particularly with regard to the use of alcohol and drugs. With respect to drugs, cannabis use is present in almost all strata of the population, while the consumption of stimulants (usually cocaine or amphetamines) is most prevalent among young adults (18-34 years old) – about one in five used stimulants in the year preceding the survey.

BIBLIOGRAPHY


METHODOLOGY IN BRIEF

The third phase of the First Nations Regional Health Survey (RHS) aims to describe the health status of the population in First Nations communities in Quebec. It was conducted from February 2015 to May 2016 in 21 communities from eight nations and reached 3,261 people (825 children aged 0 to 11 years, 769 adolescents aged 12 to 17 years and 1,667 adults aged 18 years and over) who responded to an electronic questionnaire submitted by field agents.

Data followed by the “*” sign have a coefficient of variation of 16.6% to 33.3% and should be interpreted with caution. The sign “**” indicates a coefficient of variation greater than 33.3%. This data is not published, except for estimates below 5%, which must be interpreted with caution. The lines presented in the bar or line charts are the confidence intervals calculated using a 95% confidence level.

In certain cases, the data are presented according to the geographic zone of the community of the respondents. These zones are defined as follows:⁴

- Zone 1 (urban): less than 50 km from a service centre with road access;
- Zone 2 (rural): between 50 and 350 km from a service centre with road access;
- Zone 3 (isolated): more than 350 km from a service centre with road access;
- Zone 4 (difficult to access): no road.

Service centre: The nearest access to suppliers, banks and government services.

In the context of the RHS, the term “community” is used to represent “Indian reserves.”

For more details, please refer to the Methodology booklet of the RHS.

The RHS report consists of 20 thematic booklets. All the booklets can be consulted at the FNQLHSSC documentation center: https://centredoc.cssspnql.com.

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Use of alcohol and drugs, cyberaddiction and issues related to gambling

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