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As a general rule, alcohol affects people’s mood, often in a positive way. Conversely, drinking is associated with various psychological states. “Our use of alcohol is associated with times of emotion—we drink when we feel sad, we drink when we feel happy.”

In the vast majority of cases, there is no direct relationship between drinking and a person’s psychological state, and alcohol causes no particular problems. However, for individuals with mental disorders, drinking can have serious consequences.

In fact, research has confirmed that there is a two-way link between mental illness and alcohol abuse or dependence. In this report, Éduc’alcool presents some of the research findings in everyday language, with a view to protecting those who are most vulnerable to the effects of alcohol.

The goal of this brochure is to inform the public about the relationship between mental illness and problem drinking. In it, you will find the results of population-based studies dealing with mental health, and with drinking problems among adults who suffer from mental disorders.

Without compromising scientific rigour, we have used a simple, straightforward style to explain the strong correlation between mental disorders and problem drinking. The brochure covers the reasons why people with mental health problems must be particularly careful when drinking. It explains the conditions under which drinking might even lead to mental disorders. And it provides a list of services available to those in need.

We hope this publication will be useful not only to those who suffer from mental illness, but also to the people who care about them. It serves to remind us that we are all vulnerable, that any kind of problem can affect any one of us, and that for all of us, moderation is always in good taste.

INTRODUCTION

The Éduc’alcool Board of Directors
Unfortunately, many people think of mental illness as different from other illnesses. Individuals who suffer from mental disorders are all too frequently perceived as unstable, unpredictable, dangerous or lazy. They may even be stigmatized. According to the Canadian Medical Association, barely half of us would dare admit to a friend or co-worker that a family member had been diagnosed with a mental illness.

And yet, mental health problems are common and on the rise among all segments of the population.² It can happen to anyone.

² Lesage et al., 2010.
Studies show that, over the course of a lifetime, about 60% of the population will experience a period of great stress or a traumatic event, such as the sudden death of a loved one, an assault, or a serious accident. For some, this trauma will cause long-term stress. It is estimated that 7% to 10% of the adult population suffers from chronic stress.7

One Canadian health study shows that 23% of Quebecers will suffer from a mood or anxiety disorder at some point in their lives. That's a total of more than 1.3 million Quebecers.8

In the last 12 months, 8% of Quebecers have had a mental health problem.

Mental disorders strike anywhere, regardless of sex, age, or economic position. However, in Quebec, major depression, mania, panic disorder, social phobia and agoraphobia are diagnosed9 more commonly among women (11%) than among men (6%). Men are more likely to suffer from antisocial personality disorder with impulsive behaviour.

Also, these disorders seem to be more common among young people 15-24 (13%), as opposed to older adults 25-64 (8%) or seniors 65 and older (3.3%).

What's more, people from lower-income households are more affected (15%) than those with higher incomes (6%). The same results have been observed in American studies.10

In Quebec, about 70,000 people currently suffer from schizophrenia. That's 1% of the population.

Schizophrenia typically manifests between the late teens and mid-thirties. This devastating disorder affects men and women in the same way.11

MOST COMMON MENTAL DISORDERS

Anxiety disorders. These are characterized by fear, worry and stress. The irrational and excessive manifestations of anxiety cause distress and interfere with normal daily life. The main anxiety disorders are specific phobia, social phobia, panic disorder, generalized anxiety disorder, post-traumatic stress disorder and obsessive-compulsive disorder.9

Mood disorders. These are characterized by abnormal changes in mood, emotional state, or affect. Such disorders are serious pathological conditions that influence a person's thinking, behaviour and functioning. The most common mood disorder is bipolar disorder, which manifests as alternating states of euphoria and depression (“highs” and “lows”). Also common is major depressive disorder, characterized by deep sadness and a significant loss of energy, from which the person is not able to emerge quickly without help.4

Personality disorders. There are a number of these, and their impact on interpersonal relationships varies from slight to severe. Personality disorders affect the way people do things, i.e. their habits and behaviours, which can often be very different from the social norm. Ultimately, they lead to distress or impaired functioning. In general, people suffering from personality disorders have difficulty getting along with others and can be irritable, demanding, hostile, fearful or manipulative.5

Psychotic disorders. These are considered severe and cause such a significant distortion of reality that some people are unable to tell the difference between what is real and what is not. Schizophrenia is the leading psychotic disorder.6

1 Stewart, 2009.
2 Centre for Addiction and Mental Health, 2010.
3 Health Canada, 2002b.
4 George and Blank, 2009.
5 Health Canada, 2002b.
6 Health Canada, 2002b.
7 Brillon, 2006.
8 Kairouz et al., 2008.
9 Ibid.
10 Dawson et al., 2005.
• According to the Institut de la statistique du Québec, the number of people who suffer from mental disorders is undoubtedly greater than the research indicates, as studies rarely cover all mental disorders.12 Consequently, there is little accurate data on the exact number of people who suffer from personality disorders. In the United States, it is estimated that 6 to 9 percent of the population has some form of personality disorder,13 as commonly defined.

• The use of psychotropic medications is widespread in Quebec. About 16% of adults have taken them at least once—prescribed or not—in the last 12 months.14 The most commonly used medications are for sleep disorders, anxiety and depression, in that order. The use of anti-depressants is on a sharp rise.

In 2005, Quebec physicians wrote 7.5 million prescriptions for anti-depressants. According to the Conseil du médicament du Québec (Quebec drug board), from 2000 to 2004, almost one-fifth of Quebecers (19.2%) took anti-depressants for at least a year.15

In 2006, 4.4% of Quebecers on the public prescription drug insurance plan took anti-psychotic medication, either in small doses as tranquilizers or in larger doses to treat mental disorders, such as schizophrenia.16
MENTAL HEALTH AND ALCOHOL

When it comes to alcohol, people who are traumatized, anxious or suffer from a mood or psychotic disorder are among the most vulnerable. Numerous studies confirm the frequent association between mental health problems and alcohol abuse or dependence.

Fifteen to twenty percent of people with mental disorders have substance problems, while more than 50% of people diagnosed with generalized anxiety also have substance problems.

Studies done in the United States and United Kingdom show that, compared to the general population, almost twice as many people with mental health problems have a problem with alcohol dependence.

One Canadian health study showed that people who had suffered from major depression in the previous 12 months were more likely to have abused alcohol (12.3%) than the rest of the population (7%). The same people were also more likely to suffer from alcohol dependence (5.8%) than others (2.6%).

Quebecers who acknowledge having had a mood or anxiety disorder at some point in their lives are three times more likely to have a problem with alcohol dependence than others (3.8% compared to 1.3%).

Quebecers who report having been anxious or depressed in the last 12 months are four times more likely than others to have an alcohol dependence problem (6% compared to 1.5%).

Among anxiety disorders, panic disorder is the one most closely linked to alcohol dependence.

Alcohol abuse is particularly common among people who have impulse control disorders or are thrill seekers.

People who suffer from schizophrenia are three times more likely than others to have a drinking problem. However, their problem is more likely to be alcohol abuse than dependence.

MENTAL DISORDERS AND ILLICIT DRUGS

Aside from alcohol dependence problems, people with mental disorders are vulnerable to all kinds of psychoactive substances.

Among Quebecers 15 and older, cannabis use is twice as common among those who have had a mood or anxiety disorder at some point in their lives, as among those who have not.

What’s more, cannabis use is six times more common among schizophrenics than among others.

The number of illicit drug users and addicts is twice as high among those who have had a mood or anxiety disorder at some point in their lives.

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1 Canadian Centre on Substance Abuse, 2009. 2 Alegria et al., 2010. 3 Barrett et al., 2007; Assadian et al., 1996. 4 Schütz and Young, 2009. 5 Kairouz et al., 2008. 6 Ibid. 7 Stewart, 2002. 8 Lyon and Cox, 2002. 9 George and Blank, 2009. 10 Kairouz et al., 2008.
MENTAL HEALTH AND DEPENDENCE

There is no a priori reason why people with mental disorders are more likely than others to abuse or be dependent on alcohol. Nor why the opposite is true, for that matter. Each person is a unique individual in specific circumstances, the result of a complex interaction between genetic and biological factors, personality and social environment.

Nonetheless, some experts continue working to formulate theories about the strong relationship between mental illness and problem drinking.
1• Predisposition

One theory concerns the particular personality traits, hereditary genetics, social factors and other characteristics of people with mental disorders, which may predispose them to abuse or become dependent on alcohol. Some experts even suggest that the neurological basis of mental illness may be very similar to that of alcohol dependence.

A malfunctioning of certain brain circuits associated with learning, specifically the one connecting the amygdala, hippocampus and cingulate cortex, might be a factor in both mood disorders and drinking problems.27

Other research has shown a relationship between psychotic disorders and drinking problems, based on common genes or brain abnormalities.

More specifically, psychotic disorders and alcoholism may both arise from changes to the brain caused by glutamate.28 In fact, disruptions in the functioning of the brain’s dopaminergic systems appear to make schizophrenics more sensitive to alcohol.

According to WHO29 and Health Canada,30 two widely regarded health agencies, the same treatment and prevention strategy could be used to improve both mental health and alcohol dependence, because of their neurobiological similarities. A combined therapeutic approach would treat the mental illness and the abuse problem at the same time.

In addition to genetic predispositions, a number of environmental predispositions might also explain the strong relationship between mental disorders and alcohol abuse or dependence.

The secondary consequences of stress related to serious family problems during childhood, poor parental supervision or child abuse at a very young age could increase the risk not only of addiction problems, but also of mood, anxiety and personality disorders, particularly impulsive disorder.31

Furthermore, people with drinking problems and those with mental health problems often live in the same kind of social environment. Both are very often marginalized, starting in adolescence.

2• Sensitivity

Another theory holds that people with mental illness are more sensitive than others to the harmful effects of psychoactive substances. Thus, all other things being equal, the same amount of alcohol will have a stronger effect on the person with a mental disorder.32
3• Self-medication

It is often observed that people with mental disorders drink alcohol for its soothing properties, in an attempt to make themselves feel better. This practise is known as self-medication, and it is the third main theory that seeks to explain the link between mental health and alcohol dependence.

People in distress take psychoactive substances to escape their pathological condition, or at the very least to attenuate the symptoms, which are neurobiological in origin.

In other words, they do not self-medicate in order to remedy a mental disorder, but to combat the suffering, sadness, anger or agitation it causes.33

While self-medication is common among people with all kinds of mental illness, it is particularly prevalent among those with bipolar disorder during the manic phase, as well as among those suffering from anxiety disorder.34

Between 25% and 35% of people with generalized anxiety say that they drink or take drugs to ease their anxiety.35

In fact, research has shown that, among the general population, 18.3% of people who suffer from generalized anxiety, 16.9% of those who suffer from social phobia and 15.0% of those with a specific phobia drink alcohol to calm their anxiety symptoms.36

People with generalized anxiety disorder self-medicate more than those who are phobic because generalized anxiety comes from internal stimuli. That means the frequency with which they experience those anxiety-provoking stimuli is very high.37

It is more difficult for people with generalized anxiety to avoid the stimuli they fear so much than it is for people with social phobias. Because they are so eager to evade the stimuli that they cannot escape, anxious people drink more than phobic people.

WARNING: SELF-MEDICATION IS A BAD STRATEGY!

Drinking, i.e. self-medication with alcohol, provides immediate gratification that in turn leads to more drinking. However, it is counterproductive.

Alcohol can actually alter the chemistry and physiology of the brain, in particular by artificially stimulating the production of dopamine. As the brain adapts to deal with the sudden release of dopamine, two things occur: a reduction in the number of dopamine receptors and a reduction in the natural production of dopamine. In other words, the brain loses its natural capacity to control stress, mood disorders and anxiety.
A small amount of alcohol may bring short-term stress relief, but alcohol does not treat any of the causes of the stress. Over the long term, people who self-medicate need increasingly larger amounts of alcohol to obtain an acceptable level of dopamine and feel the psychological benefits.\textsuperscript{38}

This creates a habit, which leads to increased drinking that could turn into dependence. A person with mental health problems who becomes dependent on alcohol is then caught in a vicious cycle in which each problem sustains and even aggravates the other.\textsuperscript{39}

Physicians and health professionals must warn people with anxiety disorders that, while alcohol may relieve their symptoms temporarily, drinking increases the risk of making the problem worse or even developing other mental disorders.\textsuperscript{40} What’s more, drinking increases their risk of suicide.\textsuperscript{41}

\textbf{4• Making things worse}

Generally speaking, within any given population, there are individuals presenting symptoms of anxiety, depression or psychosis who will not necessarily develop any serious anxiety, mood or psychotic disorders. Sometimes, their close relatives suffer the same pathologies. Such people are thus predisposed to mental illness, although it’s not a certainty.

Anyone who feels particularly anxious or depressed and is experiencing unusual symptoms, such as difficulty concentrating, reduced focus, sleep disturbances or a need to withdraw socially, should be very careful and avoid alcohol completely. Alcohol can make people who are genetically predisposed to mental illness even more vulnerable.

When people experiencing the warning signs of mental disorders take psychoactive substances such as alcohol, they are at greater risk of developing a mental illness.\textsuperscript{42} In fact, alcohol can alter a number of neurotransmitters, including glutamate, which is involved in schizophrenia.

Also, a genetic predisposition to certain personality disorders, such as impulsive disorder or attention deficit disorder— with or without hyperactivity—may be exacerbated if there was prenatal exposure to alcohol.\textsuperscript{43}

Thus, while mental health problems can lead to problem drinking in some people, the opposite may also occur: problem drinking can contribute to the development of mental illness.
People’s emotional stability depends significantly on the quality and quantity of sleep they get. Sleep allows both the body and the mind to regenerate and recharge. People who are tired find it more difficult to deal with life’s demands; that, in turn, leads to a build-up of stress.

Some people have difficulty falling asleep when they are stressed. They may turn to alcohol, thinking it will alleviate the problem. Alcohol can, of course, make a person drowsy. But it can also cause insomnia and frequent sleep interruptions, thus aggravating the original problem.

ADVERSE EFFECTS: MENTAL ILLNESS AND ALCOHOL

ALCOHOL AND SLEEP

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Alcohol affects the sleep cycle. People may feel tired and unwell the day after drinking a lot, even if they have slept enough. Because alcohol disrupts sleep, which is essential to mental health, anyone suffering from a mental disorder should keep drinking to a minimum.
ALCOHOL AND MEDICATION

Even normal, non-abusive drinking can negatively affect recovery in people with mental disorders, especially if they take medication.

People with mental disorders who take medication and drink at the same time are very likely to forget to take their meds. Also, the alcohol can reduce the effectiveness of those medications, or the speed at which they are eliminated from the body.

For example, some antidepressants are used as sedatives during periods of depression. If someone taking such antidepressants also drinks, the side effects of the antidepressants can be exacerbated and be even more harmful because of the way alcohol affects the liver. It’s the liver’s job to eliminate the antidepressants from the body. Alcohol abuse impairs liver function, thereby amplifying the side effects of antidepressants or greatly reducing their effectiveness.

That’s why people who take medication for mental health problems are advised to abstain from drinking.

ALCOHOL AND SUICIDE

Most people who commit suicide have some sort of mental health problem. American researchers even suggest that nine out of ten suicides have a recognized mental disorder.44

What’s more, problem drinkers are more at risk for suicide than others. According to WHO,45 about 25% of people who commit suicide have a drinking problem and 50% of them had alcohol in their blood when they killed themselves.

The risk of suicide is 5.5 times higher among people who abuse or are dependent on alcohol than among others.46 It has also been shown that people with mental disorders who drink are at greater risk of suicide.

Because alcohol removes inhibitions, it can lead a suicidal person, whose psychological state is already unstable due to a serious mental disorder, to take action. People who are contemplating suicide should therefore never drink.

44 Conwell and Brent, 1995.
45 World Health Organization.
46 Harris and Barraclough, 1997; 1998.
Éduc’alcool strongly advises anyone who chooses to drink alcohol to do so for enjoyment and for taste. Most importantly, no one should ever drink to escape their problems or drown their sorrows.

We recognize that the temptation to drink excessively or in an uncontrolled way can be strong under certain circumstances, such as during a stressful situation, an unfortunate event, a death or a separation. That’s why it is particularly important to be careful during those times.

Immoderate drinking can be even more destructive for people who are chronically unhappy and may be suffering from a mental disorder. In fact, certain hereditary genetic factors may predispose some people to both mental illness and alcohol dependence.

In such cases, “treating” oneself by drinking must be avoided at all costs. While alcohol has a disinhibiting effect and may induce a feeling of relaxation, it can be very harmful during periods of great difficulty. At such times, it is very important to ask for help, seek community services or consult a health professional who can offer integrated treatment. If necessary, both problems—mental illness and problem drinking—can be treated at the same time by the same team in the same treatment facility.

It can never be stated often enough: Alcohol is not a medication and the stores that sell it are not pharmacies.

Alcohol must never be used for self-medication. It can’t cure anything. In fact, in the case of mental disorders, it can make things worse.

These warnings are intended for people who drink and for those who care about them. Friends and family can play a significant role in helping and healing someone with psychological disorders and a drinking problem. Most notably, they can encourage people at risk to seek professional help.

It is vitally important to remain aware of your emotions and adjust your drinking accordingly. And to remember that in the most trying times, moderation is in particularly good taste.
IN THE SAME COLLECTION:

The reports in Éduc’alcool’s Alcohol and Health series are well-researched and easy to read. Each one gets straight to the point and is a valuable health, education and information resource.

All of them may be downloaded from the Éduc’alcool website www.educalcool.qc.ca or ordered by calling 1-888-ALCOOL1.

ALCOHOL AND THE HUMAN BODY
An explanation of what happens to alcohol as it passes through the body and the effects it produces.

ALCOHOL AND OLDER PEOPLE
A description of the effects of alcohol on people 65 and older. Includes valuable advice for seniors, their families, friends and caregivers.

THE EFFECTS OF MODERATE AND REGULAR ALCOHOL CONSUMPTION
A review of the research on how moderate, regular alcohol consumption affects human health.

THE EFFECTS OF ABUSIVE DRINKING
A review of the physiological and psychological effects of abusing drinking. The consequences of both chronic and occasional excessive drinking are highlighted.

LOW-RISK DRINKING: 2 3 4 5 0
A basic guide to the rules of low-risk drinking for men and women.

ALCOHOL COMBINATIONS
A brochure explaining the beneficial, harmful and downright dangerous effects of combining alcohol with various other substances or activities.

PREGNANCY AND DRINKING: YOUR QUESTIONS ANSWERED
Straight-forward answers to frequently asked questions about drinking during pregnancy and breast-feeding, for pregnant woman and those who might become pregnant.

THE EFFECTS OF EARLY ALCOHOL USE
A brochure that examines the harmful effects of early alcohol use and explains the basic reasons why young people should not have unrestricted access to alcohol.

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