

MODULE FOUR

Youth and Alcohol Use

Normal Adolescent Brain Development

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Alcohol Use and Gender

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Youth and Alcohol Use

Alcohol use during the teen years can increase the “probability of forced and unsafe sex, contracting a sexually transmitted infection, making a suicide attempt, dropping out of school, unemployment, social isolation, depression, and neuropsychological impairment” (Stewart et al., 2005, pp 1). Youth can be defined as persons aged 15 to 24 years of age (National Alcohol Strategy Working Group, 2007).

NORMAL ADOLESCENT BRAIN DEVELOPMENT

Research using magnetic resonance imaging (MRI) has been conducted to map the structural changes in the maturing adolescent brain (Paus, 2005; Giedd, et al., 1999). It was found that the brain continues to develop and change throughout the adolescent years with the greatest changes occurring in the frontal lobe. This area of the brain is responsible for self-control, judgment, emotions and organization. This may explain why youth may be poor decision-makers, reckless and have emotional outbursts (ACT for Youth Upstate Center of Excellence, 2002).

RATES OF ALCOHOL USE

Youth drinking behaviours are diverse; varying not only between countries, but also between societies, social groups, age groups, and time periods. International comparisons of alcohol and cannabis use among youth show that Canada ranks high for frequency and prevalence (Vega, Aguilar-Gaxiola, Andrade, & Bigil, 2002). In Saskatchewan and overall in Canada, alcohol is the most abused of all legal and illegal substances (Saskatchewan Executive Council, 2007).

At present, the number of Canadian youth who use alcohol is at an all-time high. A recent survey revealed that 82.9% of youth over the age of 15 had consumed alcohol within the previous year, and that approximately 91% had done so in their lifetime. On average this survey showed that youth began drinking at 15 years of age (National Alcohol Strategy Working Group, 2007).

Saskatchewan has the highest rate of youth alcohol dependence in Canada (Donovan, 2006). Adlaf, Paglia, Ivis, and Lalomiteanu (2000) determined that the frequency and amount that Canadian high school students drink has increased significantly since the 1990s. Those who begin drinking at younger ages are seen to drink heavily more frequently than those who start later (National Alcohol Strategy Working Group, 2007).

BINGE DRINKING

Binge drinking is a trend among Canadian youth. Specifically, when youth rates of drinking are compared to adults, youth not only consume *twice* the amount, but also show a higher incidence of drinking-related harms, e.g., violence and risky sexual situations (Statistics Canada, 2003).

According to the National Alcohol Strategy Working Group, 2007, youth reported the following behaviour in relation to alcohol consumption:

Table 4.1: Youth and Alcohol Consumption Behaviour

Behaviour	% of youth who reported
Consumed alcohol in the last year	82.9%
Consumed 5 or more drinks each time.	33.7%
Consumed alcohol heavily at least once a week	13.9%
Consumed alcohol heavily at least once a month	46%

ALCOHOL USE AND GENDER

Historically, males have consistently been found to drink more frequently and consume more at one time than females. However, there has recently been an increase in female alcohol use rates (Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002). This is of serious concern as alcohol is by far the most commonly abused substance among females (National Organization on Fetal Alcohol Syndrome, 2007). Researchers have begun to pinpoint specific subgroups in which female drinking has increased significantly. The demographic with the most rapidly rising rates are females between the ages of 15 and 19, who have been found to not only match, but to actually *surpass*, their male counterparts in alcohol use (Canadian Centre on Substance Abuse, 2004). There are also extremely high rates of drinking among female undergraduate students, to the extent that approximately 80% of female students drink alcohol (Canadian Centre on Substance Abuse, 2004).

RISK FACTORS

Risk factors for youth substance use are multiple. Individual factors, such as impulsivity, can be compounded by interpersonal factors, such as family and peer interactions, peer substance use, and school related factors. Finally, as mentioned previously, societal and cultural factors, like the widespread use of alcohol in adult social settings, play a significant role (Pagilia-Boak & Adalf, 2007).

Recent research indicates that youth have varying degrees of knowledge about the risks associated with drinking alcohol. For instance, research indicates that youth are well informed about drinking and driving, but spend little time considering other potential outcomes (Ontario Public Health Initiative, 2007).

ADOLESCENCE, ALCOHOL AND PREGNANCY

Engaging in unprotected sexual activities is a risk factor that has been strongly linked to the use of alcohol, tobacco and other drugs (Canadian Pediatric Society, 2006). In relation to FASD, one of the risks of unprotected sexual activities is pregnancy. Although pregnancies among Canadian youth have decreased, rates are still fairly high. In Saskatchewan, youth pregnancy rates are much higher than nationally.

Table 4.2: Pregnancy Rates among Canadian and Saskatchewan Adolescents, 2005

Age Group	Canadian Rates	Saskatchewan Rates
Younger than 20 years	24.6 per 1000	36.9 per 1000
18 to 19 years	59.0 per 1000	70.6 per 1000
15 to 17 years	15.8 per 1000	25.5 per 1000
Younger than 15 years	1.9 per 1000	3.2 per 1000

Adapted from Statistic Canada Data. Pregnancy outcomes by age Group.

www.cansim2.statcan.gc.ca/cgi-win/cnsmcgi.pgm.

Adolescent pregnancy is not easy to detect and may go several months unnoticed. Menstrual irregularities present in early adolescence, fear, shame, social situations, and lack of sexual health information can all play a role in the late detection of pregnancy in youth (Canadian Pediatric Society, 2006). As adolescence is also a high risk time for alcohol use and many pregnancies during this time are unintended, risk for alcohol use during early pregnancy increases.

In Canada, adolescent pregnancy rates are highest in populations that have the lowest socioeconomic status (Ordolis, 2007). This includes aboriginal youth whose adolescent pregnancy rate is four times higher than national norms (Canadian Institute for Child Health, 2000). Although social stigma may not be high depending on cultural values placed on infants and pregnancy, young aboriginal women are still faced with a variety of challenges, including poverty, homelessness, substance use, illness, lack of nutrition, and lower education levels (Canadian Institute for Child Health, 2000; Kirmayer, Brass & Tail, 2000).

CASE STUDIES

Case Study 4.1: Muriel

Part One

Muriel is a 16 year old high school student getting ready for a party at her friend's house. Her friend's parents are out of town and will not be returning home until Sunday night. Muriel gets to the party and finds there to be about 20 people in the house drinking and partying. She doesn't want to feel left out so she starts drinking the vodka coolers that her friend's older brother bought for her. Muriel drinks two of the coolers quickly and spots the cute guy, Warren, from her biology class in the corner. She has always been too nervous to talk to him but has found some courage after drinking the alcohol.

For Part One of this case study, reflect on the questions below:

1. What are some of the factors influencing Muriel's choice to drink alcohol?
 - *Her age*
 - *Peer pressure*
 - *Not wanting to feel left out*
 - *To relax*
2. What are some of the risk behaviours associated with alcohol consumption?
 - *Increased probability*
 - *Forced or unsafe sex*
 - *Sexually transmitted infections*
 - *Suicide attempts*
 - *Dropping out of school*
 - *Unemployment*
 - *Social isolation*
 - *Depression*
 - *Neuropsychological impairment*

Part Two

Muriel and Warren continue to drink and party throughout the night. One thing leads to another and they engage in unprotected sexual intercourse. Four months later Muriel realizes that she is pregnant. During the previous three months, Muriel had continued to binge drink on the weekends at parties. She stops drinking as soon as her pregnancy is confirmed.

For Part Two of this case study, reflect on the questions below:

1. Why did it take so long for Muriel to realize she was pregnant?
 - *Menstrual irregularities*
 - *She may have been afraid, shamed, in denial*
 - *Lack of knowledge of sexual health information*
 - *She may not have a doctor or money to buy a test*

2. What are some of the potential risks to the baby considering Muriel's binge drinking?
 - *The baby may be at risk for an FASD*
 - *Muriel may miscarry the baby before she realizes she is pregnant*
3. How can you support Muriel to have a healthier pregnancy?
 - *Build a trusting relationship with Muriel, listening and supporting her*
 - *Use the guiding principles of working with women: hope, respect, understanding, compassion and cooperation*
 - *Share information with her that is at her level of understanding*
 - *Address her needs and her priorities*

Activities

Activity 4.1: Assessing Personal Levels of Risk with Alcohol Use

Purpose: To provide students an opportunity to assess their own pattern of alcohol use.

Materials:

- Website:
<http://rethinkingdrinking.niaaa.nih.gov/IsYourDrinkingPatternRisky/WhatsYourPattern.asp>

Instructions:

- Access website.
- Have students assess their alcohol use/patterns.
- Move through the slides using different scenarios.

Discussion:

1. Were you surprised by your level of risk?

Activity 4.2: Myths about Alcohol

Purpose: To dispel myths about alcohol use and youth.

Materials:

- Website:
<http://www.collegedrinkingsprevention.gov/CollegeStudents/alcoholMyths.aspx#>

Instructions:

- Access website and move through slides.

Discussion:

1. Have you ever held any of these beliefs?
2. Were you surprised by any of the myths?

Activity 4.3: How Alcohol Affects the Body

Purpose: To increase awareness of how alcohol affects different body organs.

Materials:

- Website:
http://www.collegedrinkingprevention.gov/CollegeStudents/anatomy/InteractiveBody_flash.aspx

Instructions:

- Access website and move through slides.

Discussion:

1. Does any of the information surprise you?
2. Now that you know this information, will it change the way you drink alcohol?

DISCUSSION QUESTIONS

1. What are some of the reasons why youth engage in alcohol use?

- *Impulsivity*
- *Peer pressure – to be accepted*
- *Socially acceptable by family and community*
- *Boredom*
- *Cope with stress, anxiety and/or family issues*

2. Why do you think that the rates of youth alcohol use are high in Saskatchewan?

- *Isolation*
- *Socially acceptable*

3. How can you raise awareness of the risks of alcohol use in the youth population?

- *Education in schools*
- *Media*
- *Health promotion campaigns*
- *Encourage and support youth to become involved and be positive peer models*

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