

PedsCases Podcast Scripts

This is a text version of a podcast from PedsCases.com on “**Adolescent Substance Use.**” These podcasts are designed to give medical students an overview of key topics in pediatrics. The audio versions are accessible on iTunes or at www.pedsCases.com/podcasts.

Adolescent Substance Use

Developed by Megan Howlett and Dr. Karen Leslie for PedsCases.com.
January 13, 2019.

Introduction

Welcome to PedsCases! My name is Megan Howlett, a recent graduate of the University of Alberta and current Psychiatry resident at the University of Calgary. This podcast was made with the help of Dr. Karen Leslie, Professor of Paediatrics at the University of Toronto and Hospital for Sick Children Division of Adolescent Medicine. Today we will be going through an introduction to substance use in adolescents, a common concern as many teenagers bridge the gap into adulthood.

The objectives of this podcast are as follows:

Objectives

1. To review the prevalence of substance use in adolescents
2. To discuss the risk factors for adolescent substance use
3. To outline potential complications of substance use
4. To review the management of substance use in adolescents

Let's begin with a case:

Clinical Case

A 16 year old male comes into your medical clinic accompanied by his very concerned mother. She shares that she had to “practically force” him to come in today to see you. The patient is of medium build with a disheveled appearance and is sitting in the chair with his arms crossed and eyes mostly closed throughout the conversation. He replies in one-word answers and short phrases to your questions but you are able to determine that over the past six months he has had increasing difficulties at school, has begun binge drinking and daily use of tobacco and marijuana. When you speak to him alone, he divulges that he has also tried cocaine and ecstasy at a party.

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What is your approach to a teenager reporting this kind of substance use behaviour?

Background

Substance use is a common problem faced by adolescents and young adults in Canada. Ready for the stats? Here they come! In general, tobacco and alcohol are the two most commonly used drugs by youth in Canada and Canada ranks amongst the leading countries for prevalence and frequency rates of use for these two substances. Studies have found the average age in Canada at which young people first try alcohol is 11 years old and cannabis is 12.6.

Binge drinking is defined as drinking more than 5 drinks over a single occasion. Of those between 12-19 years of age who drink alcohol, greater than 25% reported they had had 12 or more episodes of binge drinking in the last year. Approximately 12.5% of students ages 12-14 indicate they have tried a substance other than alcohol, cannabis or tobacco. Drug use increases with age throughout adolescence and rates have been previously higher amongst males although this gender gap may be shrinking according to recent research. Many of these studies fail to capture youth who are not currently attending school due to other factors, including those without a fixed address, of whom there is a reported higher rate of substance use. Other types of substances used by youth in Canada include hallucinogenics or “magic mushrooms”, and to a lesser extent prescription medications, oxycontin and methamphetamines.

Risk factors for substance use

You may be wondering, what risk factors predispose youth to becoming involved with substance use? Risk factors include a concurrent mental health disorder, living on the streets or *low socioeconomic status*, being a member of the LGBTQ+ or First Nation, Inuit or Aboriginal communities, male gender, personality factors (such as impulsivity), levels of peer substance use, academic failure, sexual, physical or emotional forms of abuse, dysfunctional family dynamics, or a family history of substance use disorder. These are important factors to ask about on history when assessing an adolescent with potential substance use.

Complications or risks of substance use in youth include increased or risky sexual activity which in turn leads to increased risk for sexually transmitted infections and unplanned pregnancies. In addition, other risks include driving under the influence or with someone else who is impaired, worsening depression or anxiety, self-harm or suicide attempts, disruptions to education, and an increased risk of becoming involved with the legal system. Drug and alcohol abuse in adolescence is a serious risk factor for developing substance use disorder that persists into adulthood and early identification and treatment can prevent chronic complications such as alcohol associated liver disease, neurocognitive deficits, cancer, and infectious diseases such as Hepatitis B, Hepatitis C and HIV (which are linked to intravenous drug use). There is increasing evidence that chronic, heavy cannabis use in adolescence is associated with the

development of schizophrenia in those with existing vulnerability, as well as demonstrated changes to the still developing adolescent brain (in particular to the frontal lobes).

Assessment

Every youth should be screened for substance use through screening tools such as CRAFFT or AUDIT.

The CRAFFT screening tool is related to involvement with alcohol or other drugs in the previous 12 months. In this tool the questions include yes or no responses to the following:

1. The 'C' stands for car. Have you ever ridden in a **CAR** driven by someone (including yourself) who was high or had been using drugs or alcohol?
2. The 'R' is for relax. Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?
3. The 'A' is for alone. Do you ever use alcohol or drugs while you are **ALONE**?
4. The first 'F' is for forget. Do you ever **FORGET** things you did while using alcohol or drugs?
5. The second 'F' is for family or friends. Do your **FAMILY** or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?
6. The 'T' is for trouble. Have you ever got into **TROUBLE** while using alcohol or drugs?

When interpreting the CRAFFT screening tool, 0-1 answers of yes suggests the degree of problem is likely minimal and no action is required. If the patient answers yes to 2 or more questions then there is an increased likelihood of alcohol and substances causing a functional impairment in their life and further assessment is required.

Similarly the AUDIT screening tool stands for Alcohol Use Disorders Identification Test and involves rating on a scale of 0-4 for each question regarding the frequency of their actions related to alcohol use. This tool can be administered by a clinician or done by self-report. Although designed for alcohol use screening, the principles of this tool can apply to other substances as well. The questions that should be asked include:

- How often do you have a drink containing alcohol?
- How many drinks containing alcohol do you have on a typical day when you are drinking?
- How often do you have 5 or more drinks on one occasion?
- How often during the last year have you found you were not able to stop drinking once you had started?
- How often during the last year have you failed to do what was normally expected of you because of drinking?

- How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
- How often during the last year have you had a feeling of guilt or remorse after drinking?
- How often during the last year have you been unable to remember what happened the night before because of your drinking?
- Have you or someone else been injured because of your drinking?
- Has a relative, friend, doctor or other health care worker been concerned about your drinking or suggested you cut down?

The assessment and management of adolescents with problematic substance use often requires a broad approach that takes into account several psychosocial variables.

Management

The most important first step in both assessment and management is to create a safe space in order to build rapport with your young patient. This includes clarifying aspects of confidentiality with the patient (and their family if present at the visit). The patient should be made aware that anything discussed between the two of you will stay private unless they are at risk of harming themselves or others in which case you are mandated to disclose this information appropriately to prevent harm. Also during your assessment it is important to screen for other comorbid psychiatric diagnoses including major depressive disorder and generalized anxiety disorder. There is growing evidence indicating the value of both motivational interviewing and harm reduction approaches to substance use in adolescents. Motivational interviewing includes addressing ambivalence or resistance to changing behaviours and motivating the individual to take action to reduce potential harms.

Harm reduction is an approach that ranges from encouraging a reduction or elimination of the use of alcohol and/or other substances, or if an individual is not interested or able to change their patterns of use, then the goal is to help them in identifying ways of using that minimize the associated risks. Examples of harm reduction strategies may include encouraging less binge drinking (for example avoiding drinking games), providing clean needles, safe injection sites or prescription methadone, as well as educational programs that provide young people with information about the substance they are using to help them make informed decisions about their use .

There is also evidence to indicate that treating a concurrent mental health disorder may help with substance misuse. Interventions should aim to be culturally relevant and geared towards prevention of predisposing factors and promoting factors associated with resilience. Finally, all medical complications resulting from substance use should be addressed and treated accordingly, which is beyond the scope of this initial podcast.

Clinical Case

Let's get back to our case. It is evident that building rapport with this 16 year old patient is the first and most important step to moving forward. You create a safe space and explain the limits of confidentiality to the patient. A complete history and physical exam are carried out and the patient is otherwise healthy. You complete the screening tool CRAFFT for his substance use and further assessment is deemed to be warranted. You also screen this patient for comorbid mental health concerns and find the patient is suffering from anxiety for which they feel the alcohol and marijuana improve their symptoms. You discuss alternative options including starting an antidepressant medication and setting up an appointment with a psychologist. The patient is open to some of the options you have discussed. Utilizing motivational interviewing and harm reduction principles throughout the interview has led to your patient agreeing to try and cut back on alcohol, tobacco and marijuana and to steer clear of any other drugs over the next month. You are satisfied with the steps taken during this encounter and set up a follow up appointment for two weeks time to discuss further.

Review of Key Points

Let's go over a review of the main points from this podcast in relation to our case:

1. Substance use is very common in Canadian adolescents and all adolescents should be screened for substance use disorders. If one substance is identified, ensure to screen for others as polysubstance use is common.
2. Many risk factors exist for the development of a substance use disorder in adolescents, including male sex, being a member of the LGBTQ+ or First Nation, Inuit or Aboriginal communities, having a comorbid mental health disorder, living on the streets, or having suffered from abuse in the past.
3. There are many medical and psychosocial complications that can result from substance use, including dysfunctional relationships, infectious or blood borne disease, malignancy, disrupted education, and worsening depression or anxiety.
4. The overarching principles of working with any patient with substance use concerns are creating a safe and supportive space, engaging patients through the use of motivational interviewing techniques, and harm reduction approaches.

Thank you for tuning into PedsCases and this podcast on adolescent substance use. Thank you to Dr. Karen Leslie and the PedsCases team at the University of Alberta for their help in creating this podcast.

Resources

"Youth substance use and abuse: challenges and strategies for identification and intervention," Dr. Karen Leslie, Canadian Medical Association Journal (2008), 178 (2).

“Substance Abuse in Canada: Youth in Focus”, Canadian Centre on Substance Use (CCSA), September 2007.

“A new brief screen for adolescent substance abuse”, Knight JR, et al., Arch Pediatr Adolesc Med. 1999 Jun;153(6):591-6. PMID: 10357299

“The AUDIT”, National Institute on Alcohol Abuse and Alcoholism,
<https://pubs.niaaa.nih.gov/publications/Practitioner/YouthGuide/AUDIT.pdf> (Accessed: April 25, 2018)