

Substance Use in Children and Youth: Information for Professionals



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Summary: Substance use is common in children and youth. Primary care physicians can play a key role in promoting healthy behaviours – for example, the longer that a child/youth delays experimentation, the more their risk of substance abuse is reduced. Primary care physicians can also play a key role in early identification of substance use issues, and ensure that youth are referred to appropriate resources.

Epidemiology

- Most adults who have substance abuse problems report that their problems started in youth.

Presentation

- Youth with behavior changes
- Problems functioning at school or home

Screening

- Screening for substance use is recommended for all adolescents (JAACAP, 2005)

History and Interview

Identifying data	Age and Gender
HPI	Past and recent quantity / frequency of abuse (includes isopropyl alcohol) Since when did the substance use start? Any problems caused by the substance use? Stages of change -- does the patient believe there is a problem? What is patient's stage of change?

DSM-5 Criteria for Substance Use Disorder

Substance use disorder in DSM-5 combines the DSM-IV categories of substance abuse and substance dependence into a single disorder measured on a continuum from mild to severe.

Criteria:

1. Taking the substance in larger amounts or for longer than the you meant to
2. Wanting to cut down or stop using the substance but not managing to
3. Spending a lot of time getting, using, or recovering from use of the substance
4. Cravings and urges to use the substance
5. Not managing to do what you should at work, home or school, because of substance use
6. Continuing to use, even when it causes problems in relationships
7. Giving up important social, occupational or recreational activities because of substance use
8. Using substances again and again, even when it puts the you in danger
9. Continuing to use, even when the you know you have a physical or psychological problem that could have been caused or made worse by the substance
10. Needing more of the substance to get the effect you want (tolerance)
11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

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Common comorbid conditions include:

- Anxiety
- Depression,
- Disruptive behavior disorders (such as ADHD)

Physical Exam (Px)

- General
 - Vitals: Autonomic arousal may indicate possible withdrawal syndrome (such as alcohol)
 - Weight loss
 - Hypertension (cocaine, amphetamine)
 - Hypotension (heroin)
 - Hyperthermia (cocaine, amphetamine)
 - Hypothermia (heroin)
 - Tachycardia (marijuana, cocaine, amphetamine)
- Head and Neck
 - Pupils (dilated versus pinpoint)
- Skin
 - Abscesses
 - Vascular dilation
 - Clubbing/edema
 - Dupuytren's contractures
 - Palmar erythema
 - Cigarette burns
 - NV needle marks (i.e. "Track marks")
 - Jaundice (indicative of liver failure)
 - Tattoos

- Neurologic
 - Change in sensorium
 - Poor coordination
 - Ataxia (amphetamine)
 - Hypo- or hyperreflexia (marijuana, cocaine, amphetamine)
- Abdominal
 - Hepatomegaly
 - Stigmata of liver failure (caput medusae)

Investigations

- American Academy of Paediatrics (AAP) does not recommend routine testing for drug use in children and adolescents in a primary care office, unless part of a comprehensive treatment plan that involves addictions specialists.
- Testing on its own, implies mistrust of a youth, and does not build a therapeutic relationship with the youth; in treating substance use, forming a relationship between youth and adults is the key to successfully treating substance use

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Management

- **If the patient reports substance experimentation**
 - Health care professional can educate about the risks of such behaviors.
 - Connect first
 - Validate any underlying, healthy goal that you can find
 - Professional: "I know that as a teen, you want to fit in with your peers / feel better / cope with stress / etc."
 - Solve second
 - Talk about the negative behaviours and its consequences
 - Professional: "I'm worried about using drugs as a way of fitting in. There are serious problems that drugs can cause. What if we could help you find a way to fit in, or have friends, in a different way, one that doesn't involve using drugs?"
- Medications
 - There are no medications that can treat substance use per se.
 - There are medications however, that may be useful if there are problems with withdrawal syndromes.
 - For alcohol withdrawal
 - Supportive care (hydration, glucose, electrolytes)
 - Thiamine 100 mg/day plus multivitamin while being treated for withdrawal (give thiamine before glucose when practical to prevent Wernicke encephalopathy)
 - For opioid withdrawal
 - Medications such as opioid agonists (methadone), opioid partial agonists (buprenorphine), alpha 2-agonists (clonidine)
 - Naloxone for acute overdose
 - Benzodiazepine withdrawal
 - Gradual taper and carbamazepine as adjunct
 - Flumazenil (benzodiazepine antagonist) 0.4-1 mg reverses effects of overdose, however, typically only used in Emergency Department / ICU settings
 - However, medications may be helpful for specific comorbid conditions, such as:
 - Antidepressants for mood problems
 - Stimulants for untreated Attention Deficit Hyperactivity Disorder (ADHD)

When to Refer

- When a child/youth has a substance use issue, it is usually necessary to refer to addictions specialists
- Even after a youth is referred, primary care physicians can still be engaged
- For example, at future follow-up visits, the physician can ask how the treatment is going, and how the substance use is
- If the youth has stopped treatment, then the physician can use motivational enhancement interviewing techniques, in the hope of helping restore motivation so that the youth can re-engage in treatment
- In the area of addictions, drop outs are common, and are not a sign of failure

Where to Refer

- Addictions treatment services
 - Residential or
 - Outpatient treatment programs
- Support services such as Alcoholics Anonymous
- Mental health professionals can be helpful if there are comorbid mental health concerns such as anxiety, depression

References

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About this Document

Written by members of the eMentalHealth.ca/PrimaryCare team which includes members of the Department of Psychiatry and Family Medicine at the University of Ottawa. Reviewed by members of the Family Medicine Program at the University of Ottawa, including Dr's Farad Motamedi; Mireille St-Jean; Eric Wooltorton.

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