Alcohol Abuse in Youth: Information for Primary Care

Summary: Many youth will experiment with alcohol and drugs, however some will proceed on to have problems with alcohol and drug abuse. Primary care physicians can help identify and screen youth for problems. Using strategies such as motivational interviewing, primary care physicians can also directly help youth to stop their alcohol use, as well as help direct them to specialized addictions treatment.

Summary

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Epidemiology

- 10% of population abuses drugs/alcohol, and 20% of patients seen by family physicians have substance-abuse problems (not including tobacco) (Mersy, 2003)
- Prevalence of DSM-IV alcohol abuse and alcohol dependence in the US between 2001 and 2002 was estimated to be
  - Alcohol abuse — 17.8 percent lifetime, 4.7 percent past 12 months
  - Alcohol dependence — 12.5 percent lifetime, 3.8 percent past 12 months (Hassin, 2011)

Signs/Symptoms

- Medical problems
  - Frequent trauma or accidents
  - GI problems such as epigastric distress, diarrhea, weight changes
  - Sexual problems
- Psychiatric
  - Mood or anxiety problems
- Impaired function
  - Decreased social function
  - Changes in friends, with decreased involvement with old friends and more involvement with new friends who use drugs, along with reluctance to introduce parents to new friends
  - Decreased function at home
  - Decreased function at school
  - Skipping classes and missing days
○ Worsening grades
○ Decreased function at work
○ Frequent absences

**DSM-5**

**Criteria for Alcohol Abuse**

1. Alcohol is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol or recover from its effects.
4. Craving or a strong desire or urge to use alcohol.
5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school or home.
6. Continued alcohol use despite having recurrent social or interpersonal problems.
7. Social, occupational or recreational activities are given up or reduced because of alcohol use.
8. Recurrent alcohol use in situations in which it is physically hazardous.
9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
10. Tolerance, as defined by either of the following:
   a) Increased amounts of alcohol are needed to achieve the same effect
   b) Marked diminished effect with use of the same amount of alcohol
11. Withdrawal, as manifested by either of the following:
   a) The characteristic withdrawal syndrome for alcohol
   b) Alcohol (or a closely related substance such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms

**DSM 5 criteria for Alcohol Intoxication**

- Recent use of substance
- Clinically significant maladaptive behavioural or psychological changes that developed during, or shortly after use (inappropriate sexual or aggressive behaviour, mood lability, impaired judgement)
- One (or more) of the following signs or symptoms developing during, or shortly after use
  - Slurred speech
  - Incoordination
  - Unsteady gait
  - Nystagmus
  - Impairment in cognition (e.g. attention, memory)
  - Stupor or coma
- Signs or symptoms not attributable to another medical condition, mental disorder, including intoxication with another substance.

More...

**DDx**

- Mood and anxiety disorders can both be a result of drug use, but also, drug use can be an attempt to cope with or self-medicate a mood and anxiety disorders
- Attention deficit hyperactivity disorder (ADHD)

**Hx/Interviewing Questions**

- CRAFFT is a mnemonic for screening addictions for children/youth up to age 21, recommended by the American Academy of Paediatrics.
  - C)ar: "Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs?"
- R)elax: "Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?"
- A)lone: "Do you ever use alcohol/drugs while you are by yourself, ALONE?"
- F)orget: "Do you ever FORGET things you did while using alcohol or drugs?"
- F)riends: "Do your family or FRIENDS ever tell you that you should cut down on your drinking or drug use?"
- T)rouble: "Have you gotten into TROUBLE while you were using alcohol or drugs?"

Physical Exam (Px)

- Signs of Alcohol Abuse
  - Mild tremor
  - Odor of alcohol on breath
  - Enlarged, tender liver
  - "Aftershave/mouthwash" syndrome (to mask the odor of alcohol)
  - Labile blood pressure, tachycardia (suggestive of alcohol withdrawal)
  - Signs of Liver failure
    - Jaundice
    - Scleral icterus
    - Palmar erythema
    - Spider angioma
    - Caput medusa
    - Ascites
    - Easy bruising
    - Gynecomastia
    - Asterixis
    - Etc.

- Signs of concurrent substance abuse
  - Nasal irritation (suggestive of cocaine insufflation)
  - Conjunctival irritation (suggestive of exposure to marijuana smoke)
  - Odor of marijuana on clothing

Investigations

- Routine drug screening in the primary care office is not recommended, unless it is part of a comprehensive plan, generally working in conjunction with other substance use or mental health professionals
- Common investigations include:
  - Urine drug screening for marijuana use
  - CBC (anemia, thrombocytopenia)
  - GGT, MCV, carbohydrate-deficient transferrin for alcohol use
  - Liver indices for liver impairment
    - AST:ALT approaches two with alcoholism
    - INR (decreased clotting factor production by liver)
  - BUN/CR for renal impairment

Management

- Work with Families and Caregivers
  - Validate whatever support the family/caregiver has provided, e.g. Clinician: "I am so grateful that you have been a support for your (loved one). If not for your support, I suspect things would be even worse."
  - Encourage families and carers to be involved; the individual with alcohol use needs the support of other family members and carers, e.g. Clinician: "Your ongoing support will make a big difference for your family member."
• Ask about family’s need for support, e.g. “How can I support you, so that you can support your loved one?”
• Provide written and verbal information on alcohol misuse and its management, including how families and carers can support the service user.

Psychotherapy
• Approaches depending on the clinical situation may include motivational enhancement therapy, CBT, marital and family therapy

Office-based counseling using motivational interviewing techniques
• Relate patient’s presenting problem to the alcohol/substance use
  • E.g. Physician: “You have mentioned that you are having problems with low energy, and troubles at school and work. I wonder if this might have something to do with your alcohol use. What do you think?”

Medication Management of Alcohol Abuse

• Medications for withdrawal include
  • Diazepam (Valium) for alcohol withdrawal
    • Start at 5-20 mg po q 1-4 hr up to three times daily
    • If patient is delirious, then start 60 mg immediately
  • Chlordiazepoxide (Librium) for alcohol withdrawal
    • Start at 15-100 mg po daily, max 300 mg daily

• Medications for recovery include
  • Disulfiram (Antabuse), supervised oral disulfiram may be used to prevent relapse but patients must be informed that this is a treatment requiring complete abstinence and be clear about the dangers of taking alcohol with it.
    • After 72-hrs of being alcohol free, start at 125 mg po q AM, then increase to 250 mg daily, max 500 mg daily
    • Labs: Order hepatic profile at baseline, then q monthly x 2-months, then q 3-6 months
  • Naltrexone (ReVia)
    • Start at 25 mg po daily x 2-days, then if no withdrawal symptoms, increase to 50 mg daily
    • Labs: Urine opioid screen, CBC, hepatic profile (AST, ALT, GGT, bilirubin), periodic hepatitis screen
  • Acamprosate (Campral), recommended in newly detoxified dependent patients as an adjunct to psychosocial interventions
    • Target dosage 666 mg daily three times a day
  • Topiramate (Topamax)

• If Wernicke-Korsakoff syndrome
  • Thiamine 100 mg po (or IM) x 3-days (to be given before the patient resumes eating well)

• If depressive symptoms persist for more than two weeks following treatment for alcohol dependence, consider
  • Selective serotonin reuptake inhibitor (SSRI) for mood/anxiety problems
  • Bupropion SR (Zyban / Wellbutrin) for smoking cessation
    • Start at 150 mg daily x 2-4 days, then increase to 150 mg po bid, max 300-450 mg divided bid
    • Monitor after a few weeks

Reporting Obligations
For driving: In most jurisdictions, the law requires that physicians report patients who, in the opinion of the physician, may be unfit to drive for medical reasons.
For parenting: If a physician is concerned that alcohol/drug use may be affecting their ability to parent their child(ren), then the law requires that physicians report patients who, in the opinion of the physician, may be neglectful (or abusive) of their children.

**When to Refer**

- For moderate to severe problems, or problems with alcohol/substance dependence, refer to addictions services
  - Involve the patient in the process
  - Discuss various options
  - Make the appointment for the addiction service with the patient, during the office visit
- If there are alcohol use issues plus mental health symptoms such as depression that persist for more than two weeks following treatment for alcohol dependence, consider referring to addictions / mental health services

**Who to Refer to**

- Self-help groups
  - Alcoholics Anonymous: In general, groups are open to all ages, and depending on the location, there may also be specific youth groups available as well.
- Alcohol and substance abuse treatment centre

**References**

- Physician's Guide to Helping Patients with Alcohol Problems, NIMH

**About this Document**

Written by Dr's Michael Cheng, FRCP(C), Psychiatrist, University of Ottawa, and Dr. M. St-Jean, MD, CCFP, University of Ottawa.
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Authors

Written by the eMentalHealth Team and Partners. Information partners include members of the Division of Child Psychiatry as well as members of the Department of Family Medicine at the University of Ottawa.