

# Identifying and treating patients with alcohol-related problems

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## Abstract

PROBLEM DRINKING IS A SERIOUS HEALTH ISSUE, but often patients whose alcohol consumption places them at risk are not diagnosed by physicians. Case finding is an essential component of "best practice." In many cases if given the appropriate advice, counselling and behavioural interventions, problem drinkers can be helped to reduce their use of alcohol and improve functioning in other areas of their lives. Some patients may benefit from more comprehensive therapy including the prescription of disulfiram, calcium carbimide or naltrexone. For those with serious problems with alcohol, referral to specialized addiction treatment programs and other community resource centres may also be appropriate.

Approximately 78% of Canadians consult a physician each year. Of these 6% are heavily dependent on alcohol, and up to 25% have or are at risk for alcohol-related health problems.<sup>1</sup> About 10% of premature death in Canada is caused by hazardous drinking, and more than 50% of fatal traffic accidents involve alcohol.<sup>2</sup> The health, social and economic costs of alcohol abuse may be as high as \$8.6 billion, of which \$1.3 billion is spent on direct health care costs.<sup>3</sup>

Left untreated, problem drinking (i.e., alcohol dependence and abuse and all levels or patterns of drinking that contribute to health and other problems) can lead to major medical complications, including pancreatitis and cirrhosis, and contribute to hypertension, diabetes mellitus, gastrointestinal illness, psychiatric problems and fetal damage. Problem drinking is also associated with family violence, depression and physical health problems among family members and behavioural problems among children of "problem drinkers."<sup>4</sup>

Physicians often fail to identify or are reluctant to intervene in cases of problem drinking, perhaps because of a lack of awareness, uncertainty about how best to intervene or doubts about the effectiveness of intervention.<sup>4,5</sup> There is, however, evidence that efforts to identify and treat problem drinkers can be cost effective<sup>6</sup> and that even brief low-cost behavioural interventions suitable for use in general health care settings are often helpful.<sup>7-9</sup> Although relapses are common following abstinence-oriented treatments many studies have shown that treatment can substantially reduce alcohol use and improve functioning in other areas of life as well.<sup>10,11</sup>

## Case finding

Patients who are obviously intoxicated when they arrive at a medical appointment and who exhibit any of the symptoms presented in Box 1 may require medical assistance for detoxification, either in a hospital or a medical detoxification centre. Detoxification should otherwise be considered on an outpatient basis. Guidelines for detoxification are beyond the scope of this article but are presented in various chapters in *The Principles of Addiction Medicine*.<sup>12</sup>

The simplest way to identify patients whose drinking may place them at risk is to ask straightforward questions in a nonthreatening way. The following so-called CAGE questions are useful for screening in general practice:<sup>13</sup>

- Have you ever felt the need to Cut down on your drinking?
- Have you been Annoyed by other people's criticism of your drinking?
- Have you felt Guilty about your drinking?
- Do you drink in the morning for an Eye-opener?

## Review

## Synthèse

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### Box 1: Indications for medically assisted withdrawal from alcohol

- Associated medical conditions requiring treatment
- Hallucinations, tachycardia (> 110 beats/min), severe tremor, extreme agitation, history of severe withdrawal symptoms
- Ataxia, nystagmus or ophthalmoplegia
- Confusion or delirium
- Seizures
- Recent history of head injury with loss of consciousness
- Physical dependence on other drugs

An affirmative response to any of these questions may indicate a problem and the need for further assessment.

Routine screening for physical (Box 2) or psychiatric symptoms common among problem drinkers can also reveal at-risk patients who might otherwise go undetected. One study<sup>14</sup> of adult patients who consulted their family physician for routine medical problems reported that 17% of those who responded to a 5-item questionnaire and a 12-item symptom checklist showed definite or probable evi-

### Box 2: Signs and symptoms that may be associated with problem drinking

- Recurrent physical trauma
- Hand tremor
- Dyspepsia
- Recurrent diarrhea
- Hepatomegaly
- Impotence
- Hypertension
- Scars unrelated to surgery
- Alcohol fetor (odour) during the day
- Morning nausea and vomiting
- Pancreatitis
- Polyuria
- Palpitations
- Insomnia or nightmares

dence of alcoholism. Most of the patients identified by this method were not previously recognized as problem drinkers and, in most cases, their medical charts did not indicate alcohol use as a significant health risk factor.

To determine if alcohol abuse might be a problem, urine can be tested for levels of alcohol, gamma-glutamyl-transferase, serum uric acid and high-density lipoproteins and for mean corpuscular volume.<sup>1,15</sup>

When simple screening questions or clinical signs indicate cause for concern it is important to encourage patients to talk more about their levels and patterns of drinking. Frequent heavy drinking (i.e., 4 or more drinks per day for men and 3 or more drinks per day for women) should give further cause for concern, as should weekly consumption of more than 12 drinks for men or 9 drinks for women.<sup>16</sup>

## Interventions

Patients with alcohol-related or other medical problems should, of course, receive treatment. Once a problem has been identified, further assessment will help the physician formulate an appropriate treatment plan for each patient. Some of the domains that should be considered in treatment planning are indicated in Box 3; guidelines and instruments for assessing patients within these domains are readily available.<sup>1,17</sup>

Intervention should be consistent with the characteristics and motivations of the patient. A patient's motivation for change is crucial to the success of any intervention, and

**Table 1: Stages, motivations and interventions for changing addictive behaviours<sup>18,19</sup>**

Stage	Associated thoughts and actions	Possible intervention
Precontemplation	No thoughts about changing habits, contrary to professional opinion	Provide objective feedback based on assessment and discuss risks associated with current drinking level or pattern
Contemplation	Thoughts about the need to change, but no action taken yet	Explore positive and negative aspects of drinking and encourage the belief that change is possible Explore options for taking action Recommend cutting back on drinking or complete abstinence Consider referral to mutual aid group or an addiction specialist
Action	Attempts made to change drinking habits	Encourage commitment to action plan and foster confidence in the ability to change Consider 'brief intervention,' perhaps with disulfiram or naltrexone Consider referral to mutual aid group or an addiction specialist
Maintenance	Drinking habits have been changed, and the person is adjusting to the changes	Help develop plan to prevent relapse and continue to foster confidence in the ability to sustain changes Continue with disulfiram or naltrexone if indicated Consider referral to mutual aid group
Relapse	Changes have been or are in the process of being reversed	Encourage the belief that all is not lost and explore reasons the relapse occurred Help find other ways to cope with relapse-provoking situations Consider alternative treatments

### Box 3: Domains to consider when planning treatment

- Medical and other risks during withdrawal
- Level and pattern of drinking
- Severity of alcohol dependence
- Medical and psychiatric status
- Social support and functioning
- Motivation and readiness for change

there is evidence that motivation can be increased with specific interviewing, feedback and counselling techniques<sup>18,19</sup> (see Table 1). Although aggressive confrontation is a widely used intervention strategy, there is little evidence that it is effective; it may, in fact, be harmful.<sup>7</sup> Less-forceful feedback can, however, help motivate patients to change their drinking habits.

A brief intervention based on behavioural principles should be considered for those who are contemplating changing their level or pattern of drinking,<sup>7-9</sup> especially for those who are motivated, socially stable and not severely dependent on alcohol and who do not have serious psychological problems. The most successful behavioural interventions suitable for use in general health care settings are:

- **Behavioural self-control training:** the aim is to teach methods clients can use to modify their use of alcohol, usually with a moderate drinking goal. Among other things, strategies for dealing with high-risk situations are taught. This approach, which may involve self-help manuals, is sometimes referred to as self-management training.
- **Behavioural marital therapy:** this strategy includes the patient's partner in treatment and focuses on problem solving and general relationship skills.
- **Relaxation and stress management:** the aim is to improve a person's ability to relax and cope with stress; progressive relaxation training, biofeedback, meditation, and systematic desensitization are among the many techniques that may be used to achieve this goal.

These behavioural interventions can be guided by addiction specialists or by other health professionals who have had the appropriate training. Many kits and self-study manuals have been developed for training purposes; these include a manual for those working with mild-to-moderate problems drinkers,<sup>20</sup> a manual and video on structured relapse prevention for those working with patients with more serious alcohol problems<sup>21</sup> and a manual for those working with elderly substance abusers.<sup>22</sup>

There is good evidence that oral disulfiram or naltrexone can be helpful as adjuncts to comprehensive therapy with problem drinkers who are socially stable and motivated to maintain complete abstinence.<sup>23,24</sup>

Disulfiram (250 mg/day) is prescribed on the assump-

tion that patients will be deterred from drinking if they are aware of the unpleasant reaction they will have if they consume alcohol. Disulfiram inhibits the metabolism of alcohol at the acetaldehyde level, and the accumulation of acetaldehyde in the blood produces a complex of highly unpleasant symptoms including flushing, choking, chest oppressions, nausea or vomiting, tachycardia and hypotension. The reaction is proportional to the dose of drug and the amount of alcohol consumed and can last from 30 minutes to several hours. Reactions can occur for 1–2 weeks after the last dose of disulfiram has been taken. Contraindications include diabetes mellitus, hypothyroidism, epilepsy, cerebral damage, chronic and acute nephritis and hepatic cirrhosis or insufficiency.

The acute negative side effects sometimes experienced with disulfiram, such as drowsiness and hepatotoxicity, do not occur with calcium carbimide, a similar shorter-acting drug. Calcium carbimide can be prescribed to patients who cannot tolerate disulfiram and to those seeking short-term protection during high-risk situations.<sup>25</sup>

Naltrexone is an opiate agonist used to treat narcotic dependence, but it also appears to reduce both the craving for alcohol and the pleasurable effects of drinking. However, its exact mechanisms of action are not known. Naltrexone does not cause unpleasant or dangerous reactions when combined with alcohol. People who benefit most from naltrexone treatment are likely to be highly motivated to stop drinking, in the early stages of recovery, in a treatment program that includes counselling and taking the medication daily (50 mg) as prescribed. Naltrexone is not recommended for people who are using heroin or narcotic pain killers, those with active hepatitis or liver failure or those with kidney damage. The most common side effect of naltrexone is nausea, but there have also been reports of sleeping difficulties, anxiety, nervousness, abdominal pain and cramps, vomiting, low energy, joint and muscle pain and headache. Most of these side effects are mild, however, and disappear with time.<sup>24</sup>

### Box 4: Strategies to encourage patients to accept referrals for treatment

- Where possible provide a range of options and involve the patient in the selection process
- Offer to make an appointment for the patient at the end of the interview
- When appropriate indicate that help can also be provided for family members
- When appropriate indicate that employers often have employee assistance programs
- Explain what will happen in treatment and address any concerns the patient may have
- If needed, help the patient locate a service that provides child care

## Referrals

A referral to a substance abuse treatment agency is appropriate for patients with chronic or severe problems with alcohol and for those whose problems are compounded by other difficulties. Agencies that use research-based treatments and can provide help for problems that may underlie or confound problem drinking and impede recovery (e.g., lack of education, social isolation, mental health problems, unemployment) should be recommended. In general, patients with more serious drinking problems, those with mental health problems, poor social skills and few social supports do not do as well as others.<sup>26</sup> However, treatment outcomes for these and “multi-problem” clients are improved when the appropriate services are provided,<sup>27</sup> and there is evidence that treatment outcomes are more positive when therapists have strong empathic and interpersonal skills.<sup>28</sup>

A referral to Alcoholics Anonymous or another mutual aid group should always be considered and perhaps facilitated by linking patients with established group members.<sup>29</sup> However, these groups do not appeal to everyone with a drinking problem,<sup>30</sup> and it would be inappropriate to insist that patients attend these groups against their will or to assume that an unwillingness to attend signifies a lack of motivation for change. Strategies to encourage patients to accept treatment referrals and follow through on recommendations are listed in Box 4.

## Opportunities and challenges

Physicians are well placed to identify problem drinkers; provide advice, counselling and brief interventions; prescribe medications; and link patients with appropriate resources in the community. In many cases these actions will help patients reduce their consumption of alcohol and make improvements in other areas of life as well. However, problem drinking can be a complex, chronic and relapsing condition that requires skilled and sensitive management over a long period.

The identification and effective management of patients whose drinking places them at risk is an important topic, often neglected, that should be included in physicians' continuing medical education programs. Membership in the Canadian Society of Addiction Medicine (PO Box 1873, Kingston ON K7L 5J7; <http://csam.kingston.net>) is recommended for physicians seeking professional development and mentoring opportunities related to the treatment of patients with alcohol or drug abuse problems.

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