Managing problem drinking of alcohol – screening and brief intervention

Abstract

It is important to identify and manage problem drinking as it causes a significant burden of disease. There are simple screening procedures and management techniques which are effective in outpatient settings. All doctors should educate themselves and master these skills.

Introduction

According to the WHO there are over 2 billion people who use alcoholic beverages and 76.3 million people with diagnosable alcohol problems. There is a causal relationship between alcohol consumption and more than 60 types of disease and injury. The disease burden is not equally distributed. Alcohol consumption is the leading risk factor for disease burden in low mortality developing countries and the third largest risk factor in developed countries [1]. An epidemiological survey in Sri Lanka of a sample of 7643 people reveals a surprisingly high incidence of alcohol dependence among males over the age of 25 years (29 per 1000) [2]. According to the Ministry of Health, the number of cases of those hospitalised for alcohol psychosis, alcohol dependence and alcohol withdrawal increased by 4436 cases from 1998 to 1999. All Sri Lankan medical practitioners regardless of speciality or seniority need to be familiar with the management of problem drinking.

Screening

Screening identifies apparently asymptomatic people at risk for current alcohol problems. AUDIT is a simple screening for excessive drinking developed by the WHO to assist in brief intervention [3]. The AUDIT has 10 questions each scored from 0 to 4. The total indicates the risk zone which determines the intervention. (Annexure).

Panel 1. AUDIT score and appropriate intervention

| Risk Zone | Intervention                                      | Audit Score |
|-----------|--------------------------------------------------|-------------|
| Zone I    | Alcohol education                                | 0-7         |
| Zone II   | Simple advice                                    | 8-15        |
| Zone III  | Simple advice plus brief counselling and continued monitoring | 16-19 |
| Zone IV   | Referral to specialist for diagnostic evaluation and treatment | 20-40 |

A cutoff of 5 on this test has a sensitivity of 84%, a specificity of 90% and a likelihood ratio for a positive result of 8.4. The briefer CAGE questionnaire is probably less sensitive but more specific, a score of 3 or more being almost 100% specific [4].

Panel 2. The CAGE Questionnaire

Have you ever felt you should cut down on your drinking?

Have people annoyed you by criticizing your drinking?

Have you ever felt bad or guilty about your drinking?

Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?

This is best used in a clinical setting as part of a general clinical history taking. Questions about alcohol intake should not precede the CAGE. Open-ended introduction dramatically enhances its sensitivity [5]. A total score of 2 or greater is clinically significant (sensitivity of 93% and a specificity of 76%) and identifies problem drinking [6].

Some laboratory tests are useful in the assessment of the problem drinker. The blood alcohol concentration is the most direct measure. It does not differentiate between one heavy episode of drinking and chronic use. Breathalysers are not available in Sri Lankan hospitals. Gamma-glutamyl transpeptidases (GGT) are elevated in 80% of problem drinkers. The mean corpuscular volume (MCV) is raised in 60%. If other causes can be excluded an increased GGT or MCV strongly suggests harmful drinking. The GGT values return to normal in 1 to 3 weeks and the MCV later after the last bout of heavy drinking. Carbohydrate-deficient transferrin (CDT) is another useful measure. It is more accurate in men as a marker of alcohol problems and has a lower false positive rate than either GGT or MCV.

Interventions

Alcohol education

A person who scores less than 8 in the AUDIT is in Risk Zone 1 and indicates low risk drinking. Even in these individuals alcohol education is appropriate. It increases general awareness in the community, helps people who have not revealed the true extent of their drinking on the questionnaire and reminds those who have reduced their drinking about the hazards of returning to harmful drinking. Alcohol education counters alcohol and media stories on
the health benefits of alcohol, informs about the risks of drinking, about a standard drink and recommended allowances. Praise current low risk practices [7].

**Simple advice**

There is a misconception that alcohol problems do not respond to intervention in a primary care setting. This may be due to confusing all forms of excessive drinking with alcohol dependence. Alcohol dependence constitutes only a small proportion (3-5%) of the population. Hazardous and harmful use affects a much larger proportion (15-40%) of the population. A person with an AUDIT score of 8-15 is in Risk Zone II indicating hazardous drinking. Though these people are not currently suffering or causing harm they are at risk of chronic health problems due to alcohol excess, or at risk of social, legal and work related problems due to episodes of intoxication. Such individuals would benefit from simple advice.

In giving simple advice, feedback on the score in the AUDIT and introduce the person to the Drinkers’ Pyramid, a diagram indicating that the drinking falls into the high risk category.

![The Drinker's Pyramid](image)

**Audit score**

- **5%** Probable Alcohol Dependence
- **20%** High Risk Drinkers
- **35%** Low Risk Drinkers
- **40%** Abstainers

**Figure 1. The Drinker’s Pyramid**

Then provide information about the effects on the body of harmful drinking. Encourage them to establish a goal. They can choose between total abstinence and low risk drinking. Encourage those with a previous history of alcohol or drug dependence or liver damage, with prior or current serious mental illness, who are pregnant, with medical conditions or individuals on medications where any alcohol is likely to be harmful, to choose abstinence. Give advice on low risk drinking limits to people who choose a low risk drinking goal (not more than two standard drinks a day, two drink free days a week). It is better to manage with brief counselling individuals who are not willing to choose a goal.

**Brief counselling**

People who score 16-19 on the AUDIT score are in Risk Zone III. They are likely to be harmful drinkers who are already experiencing physical and mental health problems as a result of alcohol use or having injuries, legal, social and work related problems due to frequent intoxication. They are likely to benefit from brief counselling.

Brief counselling differs from simple advice in that it is more focused on immediate implementation of change and aims to teach patients strategies to handle a variety of risk situations. There are 4 elements in brief counselling. The first is brief advice the same as described under simple advice. The second assesses the stage of change of the person and the appropriate advice is given. Prochaska and DiClemente described the stages of change model. It illustrates how people think about and maintain a new pattern of health behaviour [8].

**Panel 3. The stages of change as applied to alcohol drinking**

| Stage                | Description                                           |
|----------------------|-------------------------------------------------------|
| Precontemplation     | The person is not aware of the problem                 |
| Contemplation        | The person is aware of the consequences of drinking alcohol but is not ready to change |
| Preparation          | The person has taken a decision to change              |
| Action               | The person has started the changes but they are not established as routine behaviours |
| Maintenance          | The person has achieved changes such as abstinence or moderate drinking on a permanent basis |

In precontemplation give feedback on the results of the screening and educate on the hazards of drinking. In contemplation emphasize the benefits of change and the risks of delay. Encourage those in the preparation stage to choose a goal. Encourage those in the action and maintenance stages to persist in their behaviour change.

The third element in brief counselling provides skills training. The provision of a self help booklet such as the one published by the WHO is useful [7]. Several tasks follow: listing the benefits to be expected if drinking is reduced, listing high risk situations that lead to excessive
drinking, writing a set of coping strategies to resist high risk situations and generating ideas to cope with loneliness and boredom.

The final element in brief counselling is follow up. The doctor continues to provide support, feedback and assistance in achieving realistic goals.

**Specialised care**

People who score 20 or more on the AUDIT are in Risk Zone IV. They require further diagnosis and specialised care. The AUDIT is not a diagnostic instrument for alcohol dependence. Such a diagnosis could be made on ICD 10 criteria [9].

Panel 4. **ICD 10 criteria for alcohol dependence**

A diagnosis of dependence should be made if 3 or more of the following have been experienced or exhibited at some time in the previous 12 months.

A strong desire or sense of compulsion to drink. 
Difficulties in controlling drinking in terms of onset, termination or levels of use. 
A physiological withdrawal state when alcohol use has ceased or reduced, or use of alcohol to relieve or avoid withdrawal symptoms. 
Evidence of tolerance, such that increased doses of alcohol are required to achieve effects originally produced by lower doses.

Such individuals if seen at the primary care level are not suitable for brief intervention and should be referred for speciality care. The goal of such referral should be to ensure that they do seek specialist care. A modified form of simple advice using feedback, advice, responsibility, information, encouragement and follow up is useful. Initially inform the person that the level of drinking far exceeds the safe limits, that specific problems related to drinking are present and that there is alcohol dependence. Then advise that this is a serious health problem and a specialist should be consulted for further treatment. Urge the person to take responsibility for treatment. Provide further information to those who have not sought therapy for alcohol problems before. Give them reassurance and encouragement. Follow up after treatment is essential as alcohol dependence is a chronic recurring condition.

**Further Reading**

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Annexure

The Alcohol Use Disorders Identification Test: Interview Version

Read questions as written. Record answers carefully. Begin the AUDIT by saying “Now I am going to ask you some questions about your use of alcoholic beverages during this past year”. Explain what is meant by “alcoholic beverages” by using local examples. Code answers in terms of “standard drinks”. Place the correct answer number in the box at the right.

1. How often do you have a drink containing alcohol?
   (0) Never [Skip to Qs 9-10]
   (1) Monthly or less
   (2) 2 to 4 times a month
   (3) 2 to 3 times a week
   (4) 4 or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?
   (0) 1 or 2
   (1) 3 or 4
   (2) 5 or 6
   (3) 7, 8, or 9
   (4) 10 or more

3. How often do you have six or more drinks on one occasion?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

   Skip to questions 9 and 10 if total score for questions 2 and 3 = 0

4. How often during the last year have you found that you were not able to stop drinking once you have started?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

8. How often during the last year have you been unable to remember what happened the night before because you have been drinking?
   (0) Never
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?
   (0) No
   (1) Less than monthly
   (2) Monthly
   (3) Weekly
   (4) Daily or almost daily

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?
    (0) No
    (1) Less than monthly
    (2) Monthly
    (3) Weekly
    (4) Daily or almost daily

Record total of specific items here

*If total is greater than recommended cut-off, consult User's Manual.*