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Alcohol intervention

What works?

Background
The majority of alcohol related problems in the community are managed in general practice. Screening and provision of brief interventions by general practitioners can impact on morbidity and mortality. General practitioners also play a central role in the management of alcohol dependence.

Objective
This article discusses risky drinking and the prevalence of alcohol problems. It describes evidence based approaches to alcohol related problems in primary care.

Discussion
Opportunistic screening and brief interventions in the general practice setting can have a sizeable impact on alcohol consumption rates among hazardous and harmful drinkers. They are low cost and easy and quick to implement. Patients with alcohol dependence will usually require a period of abstinence and more intensive treatment. They may benefit from alcohol pharmacotherapy, although the effects may be modest. Combining pharmacotherapy with referral to a psychologist for cognitive behavioural therapy may result in better outcomes than pharmacotherapy alone.

Case study
Sally, 32 years of age and a marketing manager, presents complaining of frequent headaches. She has a moderately elevated blood pressure of 150/90. Questioning reveals that she drank 8 glasses of wine the previous night and regularly drinks 6–8 glasses 3–4 nights per week. She admits to some stress at work and insomnia, and reports drinking to unwind. She is otherwise well and is a nonsmoker. Physical examination is unremarkable. She scores 16 on the AUDIT screening tool; the harmful drinking range.

You give Sally advice to help her reduce her alcohol intake, including alternating soft drinks with alcohol and drinking slowly. She is also given advice and a brochure about sleep hygiene and relaxation techniques and is asked to attend for review in 1 week.

At review, Sally still reports anxiety and poor sleep. She admits to being anxious since she was an adolescent and often has physical symptoms including palpitations and hyperventilation. Sally recognises that her alcohol consumption is worsening her insomnia and anxiety. The drinking has only recently increased from a previously safe pattern of consumption in response to work stress and a relationship breakdown.

Sally has been unable to cut down her alcohol intake, despite being concerned about the effect it is having on her psychological health. She also is worried because her father drank very heavily and died of liver problems.

Formulation: Sally is continuing to drink at concerning levels despite advice and her own insight into the problem. She may become dependent on alcohol if she continues this pattern and the family history of alcohol dependence in a first degree relative increases her risk. Labelling Sally as an 'alcoholic' is unhelpful but advice to consider abstinence may be warranted. Sally would benefit from a mental health care plan to address both alcohol consumption and chronic anxiety. A referral to a psychologist to consider cognitive behavioural therapy focusing on anxiety and alcohol would be beneficial in conjunction with regular review by her general practitioner. Cognitive behavioural therapy would be first line for anxiety but selective serotonin reuptake inhibitors could be considered as an adjunct to treatment if symptoms were severe.

The majority of alcohol related problems in the community are managed in general practice.[1] Fifteen to twenty percent of general practice presentations are related to alcohol.[2] There is good evidence that alcohol screening and brief interventions by general practitioners can reduce morbidity and mortality due to alcohol.[3] Alcohol dependent patients (*Table 1*) usually require intensive support and referral, however, GPs can play a central role in management.

What is risky drinking?

The National Health and Medical Research Council (NHMRC) recognises both short term (eg. injuries) and long term (eg. cirrhosis or cognitive impairment) harms from drinking (see *Resources*).[4]

Current guidelines

Low risk

Less than two standard drinks on average per day for women and four per day for men with two alcohol free days per week in the long term. No more than four drinks for women and six drinks for men on any one occasion, with consumption above long term low risk levels on no more than 3 days per week.

Hazardous

Three to four standard drinks for women and 5–6 for men per day in the long term. No more than 5–6 drinks per day for women and 7–10 for men on any one occasion.

Harmful

Five or more standard drinks for women and seven or more for men in the long term. More than seven for women and 11 for men on any one occasion. No level of alcohol consumption is safe in pregnant women or children.

It is important to note that alcohol intake is often underestimated. Individuals may drink in portions larger than standard drinks. A standard drink card may help accurate assessment of intake (see *Resources*).

Prevalence of alcohol problems

According to the NHMRC,[5] around 10% of the population drink at levels above those considered low risk for long term harm. This is increased to 20% among Indigenous Australians, although there is also a higher proportion of abstainers among indigenous people. Around one-third of the population drink above current NHMRC safe limits for short term harms. Groups with higher than average consumption include young people, males, people in rural and remote areas, and certain occupational groups such as miners and hospitality workers.

Morbidity and mortality due to risky drinking

Hazardous and harmful drinking has a greater burden of morbidity and mortality than alcohol dependence. They are more common and cause a wider range of problems including acute physical health effects, increased risk taking behaviour and increased risk of violence and accidents. Alcohol accounts for around 2000 deaths each year in Australia.[6]

Table 1. Diagnosis of alcohol dependence

Patients can meet the DSM-IV criteria for alcohol dependence if they have any three of seven features over a 12 month period including:

- tolerance
- withdrawal
- drinking more alcohol or for longer than intended
- unsuccessful attempts to cut down or control drinking
- spending a great deal of time getting or drinking alcohol
- neglecting social or work areas because of alcohol
- continuing use despite harm

Table 2. The 5 minute brief alcohol intervention

- Screening (eg. AUDIT)
- Personalised feedback based on the screening, including risk level and potential harms, and linked to patient's medical problem(s)
- Information about safe drinking and standard drinks and the provision of self help information
- Brief advice* presented in a nonjudgmental way about:
  - how to cut down, including behavioural control (eg. counting number of drinks, reducing intake of salty foods, drinking low alcohol drinks)
  - setting personal drinking limits
  - identifying high risk situations for heavy drinking
- Follow up
- A more comprehensive intervention will be required if the patient scores >15 on AUDIT or if they have physical or psychological comorbidities

Screening and brief intervention for hazardous and harmful drinking

There is extensive evidence that opportunistic screening and brief intervention (*Table 2*) for hazardous and harmful drinking is effective in reducing alcohol use.[7] Patients expect to be asked about alcohol intake during a medical consultation.[8] Most people visit a GP at least once a year and close to a quarter of these patients are likely to be drinking at risky levels.[9]

Without systematic screening, GPs are likely to miss up to 75% of risky drinking.[10] A useful approach is to screen all patients annually and infrequent attenders opportunistically. Patients should also be screened if they present with signs/symptoms that could be alcohol related, such as frequent absenteeism or high blood pressure.

Screening for alcohol problems

There are a number of useful options for screening, including one of the most valid and reliable, the World Health Organization's Alcohol Use Disorders Identification Test (AUDIT)[11] (see *Resources*).

AUDIT was designed for and validated in primary care settings and has excellent detection efficacy with 92% sensitivity and >90% specificity.[8] It can be self administered in 2–3 minutes, is simple to score and has clear cutoffs to identify hazardous, harmful and dependent drinkers. A shortened version of AUDIT using the first three questions is also effective; a full AUDIT can then be conducted on those who screen positive.[12]

Another simple technique, known as the quantity-frequency index, is to ask the patient how many occasions in the past 30 days they have consumed more than seven drinks (women) or 10 drinks (men). A more comprehensive assessment may then be required. A retrospective diary takes around 4 minutes and involves asking the patient to identify the number of standard drinks consumed over the past week.[10]

Other screening tools include CAGE,[13] the Michigan Alcoholism Screening Test (MAST),[14] TACE[15] and TWEAK.[16] These screens are less useful than AUDIT in the primary care setting for detecting less severe drinking problems.[10,12] Physical examination and laboratory testing are not useful for identifying hazardous and harmful drinking and may be normal in alcohol dependence.[8,12]

The 5 minute brief intervention

Even interventions as brief as 5 minutes can have a powerful impact on drinking behaviour (*Table 2*). Compared to those receiving no intervention, studies have routinely found those receiving a brief intervention show a 20–30% reduction in drinking[17] and are at least twice as likely to modify their drinking.[18] A recent Cochrane review showed that brief interventions of 1–4 sessions can impact on drinking behaviour.[19]

Time pressures, concerns about patient reaction to being asked about alcohol, lack of practice support, lack of remuneration, knowledge and skills deficit, lack of resources and a perception that interventions are not effective have been identified as barriers to brief intervention in primary care.[20] Many of these are overcome by skills training, involving practice nurses, including validated screening tools into general practice software, and establishing referral networks and well defined referral pathways for those with more severe problems.

Follow up

Follow up is useful to reinforce changes and to assess the need for further treatment such as motivational interviewing or referral to an alcohol or other drug (AOD) counsellor or psychologist if required (see *Resources*).

Some patients may find Alcoholics Anonymous (AA) helpful. However, a recent Cochrane review of the efficacy of AA and other 12 step programs did not find any conclusive evidence of improved outcomes compared to other standard treatments for alcoholism such as cognitive behavioural therapy.[20] Practitioners need to inform patients about the lack of evidence of effectiveness when discussing AA. Other options include the more recent Smart Recovery groups (see *Resources*) based on cognitive behavioural principles.

Motivational interviewing

Motivational interviewing (MI) is a brief nonconfrontational counselling technique that aims to increase motivation to change drinking behaviour. It motivates change by creating discrepancy between the patient's goals and current actions. An empathic nonargumentative approach is required. There is evidence that MI is effective in risky and dependent drinkers.[12] Motivational interviewing is also useful in general practice for other lifestyle counselling including weight loss, exercise and chronic disease management.[21]

Table 3. Anticraving medications – dosage and administration

Acamprosate

- patients >60 kg: 1998 mg/day (2 tablets 3 times per day) (some clinicians advocate acamprosate as 111 mg tablets twice per day to aid compliance)
- patients <60 kg: 1352 mg/day (4 tablets per day; may start at half this dosage and increase by 1 tablet per day)

Naltrexone

- 50 mg/day (1 tablet). Start at 25 mg for 1–2 days then increase to 50 mg/day

Dependence and withdrawal management

It is important that GPs know how to distinguish dependence from harmful drinking (*Table 1*) as alcohol dependent patients usually require more intensive support or referral. A period of abstinence (usually at least 3 months) or permanent abstinence is recommended for alcohol dependence.[10] Patients who are physically dependent will require either inpatient or outpatient withdrawal treatment (see *Resources*). It is important to be positive with patients as there is good evidence for the efficacy of treatments that can be provided in the primary care setting.[22] Primary care is often more acceptable than specialist AOD centres.[23]

Proven treatment strategies

Interventions that have proven efficacy in alcohol dependence include anticraving medications and psychological interventions. Acamprosate and naltrexone are available on the Pharmaceutical Benefits Scheme (PBS) as relapse prevention agents (*Table 3*). They are generally well tolerated and can be continued if the patient is drinking. They are modestly effective in reducing relapse, delaying return to drinking and reducing drinking days.[24]

Disulfiram (Antabuse) causes patients to become acutely unwell if they drink alcohol. Disulfiram can be effective in motivated patients when dosage is closely supervised.[12] However, this may be at least partly due to supervision and support.[25] Reactions can uncommonly be life threatening and it is not generally recommended as first line treatment. Doctors inexperienced in its use would be advised to obtain specialist advice before prescribing it.[12]

A Cochrane review of the efficacy of alcohol withdrawal was unable to draw any firm conclusions about the efficacy of anticonvulsants in alcohol withdrawal due to the heterogeneity of the trials and small sample sizes. There was a nonsignificant reduction in seizures with anticonvulsants compared to other drugs.[26] Dependent patients will require withdrawal before commencing medication.[10]

A systematic review has found that psychosocial interventions were effective when combined with anticraving medications.[24] Weekly follow up may increase the effectiveness of pharmacotherapy and may be undertaken by a practice nurse.[27]

Specialist interventions and referral

Once identified, a patient with hazardous, harmful or dependent drinking patterns may require further treatment beyond general practice. Referral can be made to an AOD agency or to private or public psychology services (see *Resources*). Alcohol dependence is included in the conditions allowed under the Mental Health Enhanced Primary Care Medicare items for referral to a psychologist.

Cognitive behavioural strategies are regarded as most effective for the treatment of alcohol use problems.[28] The most well known of these is relapse prevention, which teaches the patient to identify and deal effectively with triggers for relapse. Relapse prevention also teaches the patient to deal with 'lapses' (minor episodes of drinking) in a constructive way in which they learn from the experience rather than viewing themselves as failures.[12]

Summary of important points

- Screening and brief intervention in general practice can have a sizeable impact on alcohol consumption rates among hazardous and harmful drinkers.
- Proven treatment strategies for harmful drinking and alcohol dependence include CBT, relapse prevention and motivational interviewing.
- Patients with alcohol dependence will usually require a period of abstinence and intensive treatment (outpatient or inpatient).
- Individuals who are dependent on alcohol may benefit from alcohol pharmacotherapy and referral to a psychologist for CBT.

Resources

- NHMRC guidelines – www.nhmrc.gov.au/publications/subjects/substance.html*
- Standard drinks – www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/standard**

Patient information

- Useful patient information is available at www.alcohol.gov.au (including Drinking decisions: a guide for drinkers) and at www.aodgp.org.au
- Lifestyle prescription tools (Lifescripts) – www.health.gov.au/lifescripts

Alcohol screening tools

- www.therightmix.gov.au/pdfs/HealthProviderAUDIT.pdf
- Treating alcohol problems: guidelines for general practitioners – www.health.gov.au

Drug and alcohol counselling services

- Smart Recovery groups – www.smartrecoveryaustralia.com.au
- www.ADIN.com.au

Withdrawal services

- www.ADIN.com.au

* These guidelines are currently under review. A draft has been released for public comment that recommends low risk long term levels for both women and men should be two standard drinks.[4] This is based on reducing the risk of drinking to <1/100 in people who drink at or less than this level

** A standard drink in Australia is 10 g of alcohol. Examples of standard drinks: 100 mL (small glass) wine, 285 mL (pot/midi) regular strength beer, 30 mL (nip) fortified wines/spirits.[3]

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