

# How to Treat

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## How to minimise drug and alcohol-related harms — part 1

### Introduction

ALCOHOL, tobacco and illicit drugs are leading risks for the global burden of disease. Together, they account for 12.6% of global deaths and 9% of disability-adjusted life years.<sup>1</sup>

People have been using psychoactive substances to feel good or cure their symptoms since the earliest of records. Historically, both political elites and traders have found them reliable and lucrative products. Physicians and apothecaries have usually been involved in some way and have frequently introduced, supported or attempted to monopolise their use for financial or professional reasons.<sup>2</sup>

Alcohol, tobacco, cannabis, cocaine, caffeine and opium are natural products, and have long been used for therapeutic and hedonistic purposes. Many synthetic substances — such as amphetamines, hallucinogens, barbiturates and benzodiazepines — have similarly been used. Currently, subsidised pharmaceuticals — such as sildenafil, quetiapine, ketamine and gabapentin — are emerging as street drugs, valued for their aphrodisiac or hedonic functions.

Addiction is something most of us assume we can detect intuitively, just

as we can define common sense or even normality. However, these may be difficult to define, just like in a science-fiction movie, where the heroes have to differentiate the zombies from the humans. Such a binary division of the use of alcohol and other drugs (AOD) based on moral, ethical or legal grounds is without historical foundation.<sup>2</sup> Rather, unhealthy AOD use spans from that which may risk health consequences to totally destructive misuse.

GPs frequently fail to identify or treat patients with substance use disorders (SUDs). In a US community survey of 166,753 adults, only one in six adults overall, one in five current drinkers and one in four binge drinkers reported ever discussing alcohol use with any doctor.<sup>3</sup> A major barrier to patients receiving AOD care from GPs involves shame or stigma. A survey of 404 NSW GPs reported that stigmatising attitudes were the most prevalent barrier (72%) to the provision of treatment to the opioid dependent.<sup>4</sup>

In the UK, calls have been made to view the acting out of stigmatising attitudes as a form of professional misconduct, and the tackling of such attitudes has been nominated as a

core competency of UK specialist trainees.<sup>5,6</sup>

These discriminatory attitudes may have adverse consequences for the patient, the doctor and the community. Patients who perceive discrimination by health professionals have been found to be less likely to complete their treatment.<sup>7</sup> Some doctors behave as if the identification of a patient as a drug seeker completes any duty of care, putting both the doctor and the patient at risk. In a study of ED patients given this diagnosis, serious organic disease was subsequently identified as having been missed in 22%.<sup>8</sup>

The wider community is concerned about the cost of the 'war on drugs'. Such a prohibition-style response to drug problems has failed to prevent illicit drugs being easily accessible in the community or even in the jails. Calls have been made to deal with drugs as a health problem rather than a criminal justice problem.<sup>9</sup>

This is the first of a two-part series and examines the prevention of AOD-related harms. Primary or universal prevention aims to avoid the emergence of any clinical problems. Public health programs rely

on understanding individuals in the context of their communities and environments, just as GPs do.<sup>10</sup>

Observing the patient population struggling with the health and welfare systems, GPs may advance primary prevention — for example, by political advocacy to equitably fund opioid substitution therapy (OST).<sup>11</sup> Another way to drive policy and attract funding is the use of scientific data, but increased non-commercial funding of primary-care research is needed for this. A review of 2054 clinical drug trials found that only 9.5% were undertaken in general practice, with 96% funded by industry.<sup>12</sup>

This paper describes and examines the role GPs may play in the non-primary prevention of AOD morbidity and mortality. This may be secondary prevention, where regular or intermittent AOD use has not yet developed into problems, or tertiary, where problems are treated to restore function or to minimise harms. The 5As (often formulated as Ask, Assess, Advise, Assist and Arrange) is an internationally recommended way to implement 'screening, brief interventions and referral for treatment' (SBIRT).<sup>13</sup>

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### Glossary of acronyms and abbreviations

AOD	Alcohol and Other Drugs
BIs	Brief Interventions
OST	Opioid Substitution Therapy
DSM-IV	The fourth version of the Diagnostic and Statistical Manual of Mental Disorders
SUD	Substance Use Disorder
PNCP	Persistent Non-Cancer Pain
SBIRT	Screening, Brief Interventions and Referral for Treatment
MI	Motivational Interviewing

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## The 5As

### 1. Asking

AOD problems are very prevalent. A 2010 US survey estimated that 9.1% of those aged 12 and over required AOD treatment. However, of this group, 95% perceived no need for it, leaving only 1% who actually received treatment in a specialist facility.<sup>14</sup>

Over 100 signs of risky drinking have been described, although these signs do not appear early. This approach will only identify the self-presenting patients and will leave other cases unrecognised until serious complications develop. So, systematically screening all patients is better than using a non-systematic method based on clinical signs.<sup>15,16</sup>

Numerous AOD screening instruments have been proposed, some with more than 70 questions.<sup>17</sup>

In the US, a single-question alcohol-screening test has been validated for use in general practice.<sup>18</sup> With adjustment for current Australian guidelines, it reads, “How many times in the past year have you had over four drinks in a day?”<sup>19</sup>

There is less evidence for the efficacy of screening-instigated brief interventions (BIs) for other drugs, apart from alcohol and tobacco.<sup>18</sup>

However, a single-question screening test for drug use has been validated and recommended for use in general practice in the US.<sup>17,18</sup> “How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?” or “because of the experience or feeling it caused?”

However, much prescription drug misuse is consumed for the relief of symptoms, and this will be missed.<sup>20</sup>

### 2. Assessing

A screening test is not a diagnostic instrument and each positive screen requires a more detailed assessment covering each of the major psychoactive drug classes. Explore the narrative of relapse, remission and the social consequences of consumption with each patient to guide future interventions.<sup>21</sup> Enquire about any family history of psychiatric or substance problems, and routinely exclude child protection issues or suicidality.<sup>13</sup>

An AOD assessment is not about being insulting, about seeing if patients deserve shame or to allocate diagnoses, such as misuse, abuse, addiction or dependency. Diagnoses are used to aid management, and their nomenclature and definitional criteria are constantly evolving.

In the DSM-IV, the diagnosis of abuse relied on the meeting of at least one of four criteria and that of dependency required three out of seven within a 12-month period. In DSM-5, these 11 criteria were pooled, with one deleted (concerning substance-related legal problems) and one added (concerning the presence of cravings).<sup>13</sup>

Each specific substance is now addressed as a separate SUD, with severity related to the number of



criteria met: mild (2-3), moderate (4-5) and severe (6-11). The ICD-10 is an alternative set of diagnostic criteria and terminology. This medical classification list is under revision, with the ICD-11 launch expected in 2017.

Relying on pathology testing rather than self-reporting to identify SUDs may have a role to confirm the self-report but otherwise it is expensive and has the potential to undermine the therapeutic relationship.<sup>22</sup>

In a US health service for an urban disadvantaged population, screening of new patients led to 46% self-reporting illicit drug use; of these positive screens, 95.5% were for cannabis.<sup>23</sup> Of those who denied illicit or unprescribed drug use and consented to urine toxicological testing, 14.6% tested positive. In this group, cannabis only accounted for a minority (43%) of positive tests, indicating that more stigmatised drugs, such as heroin and cocaine, are less likely to be reported than cannabis.<sup>23</sup>

### 3. Advising

Advising is something GPs do regularly. This reflects the traditional model where the doctor is the authority, possesses the knowledge, delivers the education to the patient and tries to manoeuvre the patient to make healthy changes. These approaches are inconsistent with models of patient-centred medicine or motivational interviewing. These latter models look to increase patient autonomy and

enhance self-change.

However, it is important to link the symptoms, results or AOD use to the evidence-based guidelines.<sup>24</sup> If the patient would like further information, any advice should be followed by an invitation for feedback and commitment: “Now, when you think about it like that, where does this leave you?”

### 4. Assisting

Assisting change involves BIs: opportunistic conversations that are carried out by non-specialists among individuals who have not been seeking help for an SUD, but who have been identified by a positive screening test.

BIs focus on encouraging healthier AOD choices, as opposed to targeting total abstinence, and are cost-effective.<sup>25,26</sup> In the US, but not in Australia, BIs have received the support of specific reimbursement item codes.<sup>13,27</sup>

There is substantial evidence that screening-identified tobacco and alcohol problems benefit from BIs in primary care.<sup>15</sup> However, evidence of efficacy is limited or non-existent for SBIRT for other substances, specifically in primary-care settings.<sup>15</sup> One large US study across a variety of medical settings, however, found that screening-outcome-responsive BIs reduced illicit drug use by 68% and heavy alcohol use by 39% at six-month follow-up.<sup>27</sup>

The time required for various BIs ranges from under five minutes to up to one hour, and repeat

sessions are suggested up to five times.<sup>26</sup> In general, more time and intensity are recommended for more severe SUDs.

While BIs are important, it is unclear which BI is the ideal model.<sup>24</sup> One is the ‘brief negotiated intervention’, based on the principles of motivational interviewing and using the acronym FRAMES.<sup>25,27,28</sup>

FRAMES involves the following:

- Feedback regarding personal risk or impairment.
- Responsibility for change is placed on the client.
- Advice is given in a non-judgemental manner.
- Menus of self-directed change or treatment options are offered.
- Empathic counselling.
- Self-efficacy is encouraged.

Motivational interviewing is an evidence-based, non-judgemental, directive, client-centred communication style. It relies on techniques — such as active listening, summarising and reflection — while avoiding confrontation. It is designed to assist in exploring and resolving ambivalence in order to increase motivation towards a specific goal; the aim is to have the client talk themselves into change.

It may involve scaling questions concerning priorities or confidence to change, for example: “How important is it for you to stop smoking on a scale of 1-10.”

It involves identifying patient defensiveness and then using this to continue the dialogue (“rolling

with the resistance”) rather than arguing.

Another motivational interviewing strategy is to explore discrepancies or conflicts between the patient’s goals and behaviours, for example: “You say you think smoking at home is okay, but you don’t want your children to smoke. Why is that?”

Other useful strategies involve questions such as “What are the good things about your xyz use? What are the not-so-good things about your xyz use?” Here the phrase ‘not-so-good things’ is used instead of ‘bad things’ because it is less pejorative.<sup>29</sup>

### 5. Arranging

Arranging referral to a psychologist or an addiction service is the last step of the SBIRT model. Over the past 25 years, a large body of literature has been developed mainly from Europe and the US, where the private or tertiary addiction medicine sector may be more accessible.<sup>24,26</sup>

The MBS initiated services payments items for addiction specialists in the private sector in 2010. However, payments were so low that virtually no specialists accessed them, making referral problematic.<sup>30</sup>

For this reason, in Australia, ‘Arranging’ may involve GPs providing regular monitoring, repeated BIs and pharmacotherapy over many years because there is many a slip ‘twixt the cup and the lip’.

## Problem-based prevention

INFORMATION about the following specific alcohol and other drugs classes may assist in using brief interventions as preventive strategies for the more common milder substance use disorders.

### Nicotine

Australia has one of the lowest smoking rates in the world. Between 1991 and 2010, daily tobacco smoking rates declined from 24.3% to 15.1% of the population.<sup>31</sup> Total tobacco consumption is estimated with pack years: a pack year is 20 cigarettes smoked every day for one year. The presence of a more severe SUD is indicated if the first smoke is needed immediately on rising or if the person has to get up during the night for a smoke.

While most smokers get sick of being told smoking is bad for their health, many have surprisingly little idea of what this means to them personally. A study spanning 50 years showed that more than half of all smokers die from a tobacco-related disease, with half of these deaths occurring in middle age. On average, those still smoking at 60 die 10 years earlier, although the earlier a smoker stops smoking, the more years are won back.<sup>32</sup>

As with cannabis research, there is an emerging evidence-base of associations between nicotine and poorer mental health. For young people, commencing smoking is associated with increased anxiety, depression and suicide attempts.<sup>33</sup> A recent meta-analysis found significant associations between smoking and schizophrenia. Those having their first psychotic episode were more likely to have been smoking more heavily and for longer.<sup>34</sup> Quitting smoking has been found to be associated with the same improvement in mood as the initiation of an antidepressant.<sup>35</sup>

Smoking during pregnancy is associated with increased risk of miscarriage, stillbirth and premature delivery.<sup>13</sup> The majority of smokers who quit during pregnancy do so before receiving any antenatal care. Of the remainder, only an estimated 0-17% will report unassisted end-of-pregnancy abstinence rates.<sup>36</sup> Significantly, 20% of those who report quitting during pregnancy will test positive for cotinine, which is inconsistent with abstinence. This may contribute to why the majority of those who report quitting during pregnancy relapse in the post-partum period.<sup>36</sup>

Nicotine replacement therapy has been endorsed for use in pregnancy by British and Australian guidelines, but not in the US, and may modestly improve abstinence rates. While it is safer than smoking, fetal exposure to nicotine is associated with cognitive, affective and behavioural disorders in children.<sup>37</sup> Fetal nicotine exposure and nicotine exposure through breastfeeding have been associated with sleeping problems in infants.<sup>38</sup>

### E-cigarettes

E-cigarettes look like cigarettes, but are battery-powered products. Inhalation activates delivery of a fine, smokeless mist of liquid nicotine,



**For young people, commencing smoking is associated with increased anxiety, depression and suicide attempts.**



flavourings and various chemicals. Their health risks are currently unclear, but their particulate load is likely to cause lung damage. They contain carcinogens and toxins such as nitrosamines and diethylene glycol, respectively.

Their legal status varies between states and territories, and has been evolving rapidly. The tobacco industry has gradually increased control over this new market, and has developed hundreds of distinct brands and unique flavours. Advertising messages include the global branding of e-cigarettes as safer than their conventional counterparts, emphasising how their multiple flavours may complement every lifestyle. There is concern that e-cigarettes may promote nicotine addiction, especially in children, and also that they may renormalise and reinforce smoking behaviours.

Controversy abounds as to whether they will help smokers quit or be associated with dual use. In a longitudinal one-year UK survey, about one-third of all smokers had tried them.<sup>39</sup> Daily use of e-cigarettes was associated with increased attempts to quit or reduce smoking, but not with actual cessation. Non-daily use, however, lacked any associations with smoking cessation attempts, cessation or reduction.<sup>39</sup>

### Alcohol

This area was covered more completely in the How To Treat of 6 February 2015. An alcohol history should assess quantity, frequency and binge drinking. To assess quantity, inquire about each beverage group — for example, beer, wine or spirits — in terms of standard drink servings.

Be familiar with the Australian guidelines' recommendations for various demographic groups to decrease the risks of harms. These advise abstinence for those planning pregnancy, currently pregnant or breastfeeding, as well as for those under 18 years of age. Others are advised to keep to two standard

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drinks a day and never more than four.

Most patients believe they are quite familiar with responsible drinking guidelines; however, in a survey a US university general practice, only about one in 10 could accurately describe safe levels, with a third saying zero.<sup>40</sup> Encouragingly, of the 21% who screened positively for risky drinking, 23% said they would consider changing their drinking choices.<sup>40</sup>

There is some evidence that alcohol may have health benefits. However, these putative benefits are relatively trivial, only relating to ischaemic heart disease in those aged over 40 drinking fewer than two standard drinks. The most common causes of alcohol-related mortality are cancer, road trauma and cirrhosis.

While 80% of our community have consumed alcohol, drinking at levels associated with risk from short-term harm is common. Up to 35% of the community have done so at least once in the past 12 months.<sup>41</sup> Binge drinking has been strongly associated with numerous harms, such as non-fatal injury (a doubling of risk during the following six hours), drinking and driving, arguments and fights, criminal behaviour, morbidity and mortality.<sup>42</sup>

Young people experience more alcohol-related harm during or immediately after drinking, whereas older people suffer more cumulative alcohol-related harm. For Australian men aged 18-24, 93% of all alcohol consumed was considered potentially dangerous.<sup>43</sup> In those aged 15-34, alcohol is responsible for the majority of drug-related deaths, far exceeding those caused by illicit drugs.

Alcohol dependence is one form of related harm. Just under one in 20 Australians experience this.<sup>41</sup> While most people with drinking problems wish to be able to drink moderately, a long-term study showed that only 11% of alcoholics maintained non-dependent drinking over the 60-year duration of observation.<sup>44,45</sup> Furthermore, this study showed that alcoholics had an increased death rate of 2-3 times that of their peers.

Until recently, BIs were only considered appropriate for mild alcohol use disorders.<sup>46</sup> However, recent studies have indicated that GPs using pharmacotherapies, such as naltrexone, may outperform specialised care in more severe cases. Furthermore, few patients are actually referred to addiction services; even fewer attend, with no-show rates of 30-75% described for initial appointments and 15-50% for follow-up appointments.<sup>46</sup>

GPs need to be aware that alcohol withdrawal may occur in those regularly drinking as few as 8-10 standard drinks per day. Those with previous withdrawals or intercurrent illness are at higher risk. Early recommendation of oral or parenteral thiamine is recommended with monitoring of withdrawal features using scales such as the Clinical Institute Withdrawal Assessment of Alcohol scale, revised. (CIWA-Ar).

Many people have found engagement with Alcoholics Anonymous helpful.



Young man smoking cannabis. Source: rafael-castillo <http://bit.ly/1Py00G6>

The most common causes of alcohol-related mortality are cancer, road trauma and cirrhosis.

The highest proportion reporting daily cannabis use was those aged 40 and over.<sup>31</sup> Of all illicit drug arrests in Australia over 2012/13, the majority (61%) were for cannabis.<sup>48</sup>

Cannabis may be classified or function as a stimulant, a depressant or a hallucinogen. Acute effects of cannabis use may include anxiety, panic reactions and psychotic symptoms, a 2-3-fold increase of motor vehicle accidents, cognitive impairment (especially of attention and memory), and increased risk of low-birth-weight babies with subsequent behavioural problems.<sup>49</sup>

Despite the subjective effects of increased sensitivity and perception, cannabis use is associated with decreased empathy and interpersonal withdrawal. A recent study showed increased impulsivity on the day of use and the following day.<sup>50</sup> On the day of use, there were also increased hostile behaviours and tendencies to perceive hostility in others. Such tendencies have been associated with relational violence.<sup>50</sup>

Effects of chronic use include a dependence syndrome. It is estimated 4-8% adults have been affected by cannabis dependency in their lifetime. This includes one in six of those users who commenced use in adolescence and half of those who use daily.<sup>49</sup> However, few users identify their use as a problem.<sup>51</sup> A withdrawal syndrome — with symptoms including anxiety, insomnia, anger, anorexia and depression — may make it more difficult to achieve abstinence.<sup>49,51</sup>

Chronic cannabis use increases the risk of cardiovascular disease and chronic bronchitis, but other effects on respiratory function and respiratory cancer are difficult to identify because of the confounding effects of tobacco.<sup>49</sup>

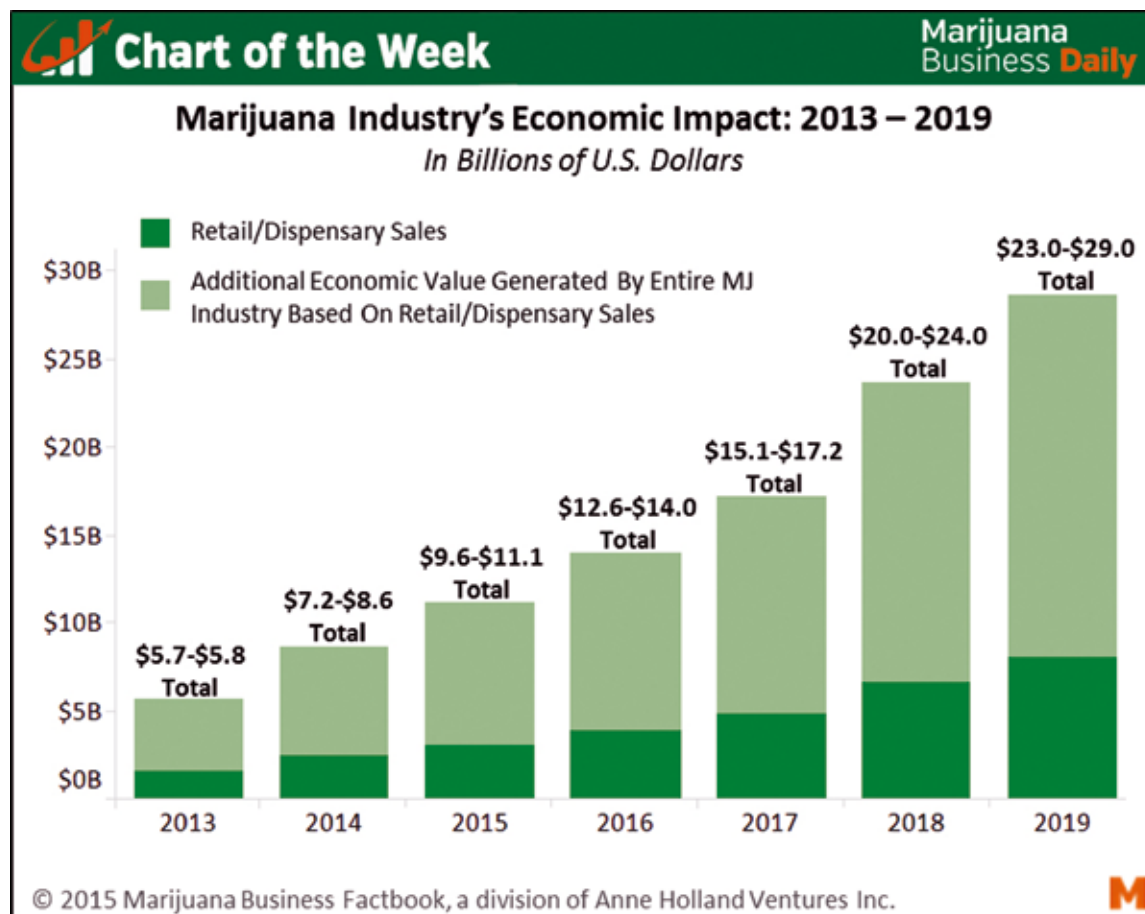
Cannabis use increases the risk of schizophrenia, especially if commenced before the age of 16 or if users have a personal or family history of psychotic disorders.<sup>49,51</sup> The incidence of psychosis is estimated to double from seven in 1000 non-users to 14 in 1000 regular cannabis users, and rates of depression, bipolar and suicidality are also increased.<sup>49</sup>

It may be difficult to assess the usage of cannabis because there is no Trade Practices Act regulating how it is sold. It may be purchased in ounces or grams (28g to 1oz) or in a 'stick' (about 1g), which can make eight 'cones' and costs about \$10-\$25. Cannabis can also be smoked using a conical receptacle ('cone') attached to a water-pipe/filtration device ('bong'). It can also be smoked in a joint, where it is rolled like a cigarette and is usually consumed mixed with tobacco ('spin'). Assess use by asking about daily spend or how many hours a day are spent intoxicated ('stoned').

BIs for cannabis dependence have usually been conducted using computerised or therapist-led CBT.<sup>49,52</sup> These indicate that, while only a minority of patients remain abstinent in the longer term, treatment reduces the frequency of use and severity of the harms.

Increasingly, patients report they are using cannabis for medicinal reasons, such as sleep, nausea or

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Source: 2015 Marijuana Business Factbook, a division of Anne Holland Ventures Inc.

**Cannabis**

This section does not cover varieties of cannabis known as 'hemp', which are used for fibre or foodstuffs but have no psychoactive use.

Cannabis may be referred to as 'pot', 'grass', 'dope', 'yarni' or 'ganga'. In the US, it is often referred to as 'marijuana', which is its Mexican name. This hails from the time of Prohibition when cannabis was highly stigmatised, being smuggled in by Mexicans and sold in 'speak-

easies' or saloons, where the mafia sold illegal alcohol and black musicians played great jazz.

There are about 500 chemical compounds in cannabis, including more than 80 classified as cannabinoids.<sup>47</sup> It is mainly sold in two forms. If it is grown outdoors, it is called 'bush'. Users prefer the flower or bud ('head') because the leaves or stalks contain less of the main intoxicant, tetrahydrocannabinol (THC). 'Hydro' is grown

indoors hydroponically and usually has higher levels of THC. Cannabis may also be sold as a resin ('hash') or the extremely potent hash oil. Black market cannabis increasingly has higher levels of THC and lower levels of cannabinoids in order to maximise the bang for the buck.

Around 35% of Australians report ever using cannabis.<sup>31</sup> The prevalence of cannabis use in the previous year declined between 1998 (17.9%) and 2010 (10.3%).

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spasms. Such use is frequently associated with abuse of other drugs. Consumers may be very passionate, arguing the medicinal merits of their cannabis of choice.

A meta-analysis identified a total of 79 trials of cannabis or pharmaceutically synthesised cannabinoids. Trials have examined nausea and vomiting due to chemotherapy, HIV/AIDS-related anorexia, chronic pain, spasticity from MS or paraplegia, depression, anxiety, sleep disorder, psychosis, glaucoma or Tourette syndrome.<sup>53</sup>

There was moderate-quality evidence to suggest that cannabis or cannabinoids may be beneficial for the treatment of chronic neuropathic or cancer pain, or for spasticity due to MS. The meta-analysis found that none of the studies looked past short-term effects and only four were deemed at low risk of bias.

Manufactured pharmaceutical cannabinoids have been found to be relatively expensive, less effective and less well tolerated than more conventional alternatives.<sup>54</sup> An example is a randomised controlled

trial of cannabis for treatment-refractory pain caused by diabetic peripheral neuropathy.<sup>47</sup> Over the trial duration, lasting three hours, dose-dependent reductions in both pain and cognitive function were found, with all subjects reporting either euphoria or somnolence as side effects.

The profession is ill prepared for the regulatory approval of medicinal cannabis. Neither the Royal Australasian College of Physicians nor the RACGP has published guidelines for its use. NSW has limited decriminalisation of medicinal cannabis use to patients with a terminal illness. Patients may nominate up to three carers to be given exemptions to administer or supply it. SA, the ACT and the NT have decriminalised cannabis for both medical and recreational use.

Federally, the Regulator of Medicinal Cannabis Bill 2014 proposes to completely bypass the usual TGA system of ensuring drug safety.

An editorial in the *Journal of the American Medical Association* highlights potential harms medicinal cannabis may cause to patients,

**There is little understanding of the mode of action of each cannabinoid, potential drug interactions or how quickly tolerance and withdrawal will develop.**

the community and doctors.<sup>55</sup> It notes that legislation relies on “low-quality scientific evidence, anecdotal reports, individual testimonials and public opinion”. There is no consistency among US states of permissible indications and means of access, reflecting the lack of guidance from evidence.

There is little understanding of the mode of action of each cannabinoid, potential drug interactions or how quickly tolerance and withdrawal will develop. Doctors are unsure how to prevent or monitor for the emergence of harms, such as psychotic symptoms or dependency. We have not identified explicit contraindications to its prescription, such as a minimum age, which is critical because cannabis causes serious harm to the developing mind.

The editorial questions whether doctors could be liable for adverse effects of the prescribed cannabis, such as psychosis or traffic accidents. Furthermore, it questions whether medical indemnity insurers will provide protection to doctors against any drug trafficking charges or malpractice actions.

## Synthetic cannabinoids

Synthetic cannabinoids have been synthesised in their hundreds. They lack any consistent structural relationship to cannabis, although some of their positive and negative effects overlap with those of cannabis.<sup>56</sup> Prior to sale, they are sprayed on a variety of plant materials. They are then mainly smoked or may be taken by vaporisation, orally or rectally. They may be marketed under brand names such as ‘Kronic’, ‘K2’ or ‘Spice’.

Unpredictable adverse effects are similar to stimulants or hallucinogenic drugs: cardiotoxicity, renal failure, excited delirium, seizures, psychosis, hallucinations, coma or death, with some users dying before reaching hospital.<sup>56-58</sup>

There is no specific clinical presentation that identifies someone intoxicated with synthetic cannabinoids if they are unable or unwilling to provide a history.<sup>58</sup> They are not detected by current urinary toxicology screening and there is no antidote.

Since 2011, they have been banned in some states.<sup>48</sup>

## Case studies

### Case study one

ANNE, a 51-year-old forester, has been recalled about her elevated cholesterol. A more detailed history finds Anne has smoked about 20 cigarettes a day since the age of 16, even more when anxious. Her father died at 62 of an MI, as did all his brothers.

You calculate that her five-year risk of cardiovascular disease is 9%. However, if she stops smoking and lowers her cholesterol, it will be 3%. She is doubtful she can quit and rates her confidence to quit as 4/10. She estimates she has stopped smoking 15 times. As she has not yet tried varenicline, you negotiate for her to give it a go.

### Case study two

Chris, aged 19, is an engineering student. He complains of cramping and loose stools since an episode of salmonella five months ago, requiring admission for IV fluids.

You prescribe oral metronidazole, with appropriate advice about not drinking. He returns in a week feeling much better. While explaining about triggers for diarrhoea, you ask him if he drinks. He states only rarely. Further questioning reveals he consumes half a dozen cans of full-strength beer once a week at parties.

You ask him if he is aware of safer drinking guidelines. He thinks he is, but is sure he does not have any problems from drinking. However, on questioning about bingeing, he reports he once got so drunk he blacked out, and his mates had to carry him home and clean off his vomit. He then vomited blood for the next two days. You point out that this binge drinking has been toxic to his brain and gut, and could have led to him aspirating or haemorrhaging. He assures you he will stick to safer drinking guideline levels in the future.

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### Online resources

**University of Sydney's drug and alcohol assessment presentation**  
bit.ly/1WLGAYN

**DSM-5**  
bit.ly/1N2ptlv

**WHO, Dependence syndrome**  
bit.ly/1EH5vYE

**WHO, Self-help strategies for cutting down or stopping substance use: A guide**  
bit.ly/1gW6L39

**Manual for the use of brief interventions in general practice**  
bit.ly/20LdDCx

**Alcohol guidelines: Reducing the health risks**  
bit.ly/1skgmN

**South Park video, S18E06, 'Drink Responsibly'**  
bit.ly/1M4Z1X5

**CIWA-Ar scale**  
bit.ly/1Y3h5pY

**NSW Government Terminal Illness Cannabis Scheme**  
www.nsw.gov.au/tics

**DSM-5 Opioid use disorder checklist**  
www.buppractice.com/node/5843

### References

Available on request from  
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## Case study three

Sue, aged 29, has been unwell for three years, with recurrent abdominal pain and vomiting. Multiple admissions and exten-

sive investigations have revealed nothing. She presents with four 'turns', occurring in her sleep over the past year. Her partner reports she starts shaking and froths at the mouth. She wakes with head-

aches and lethargy. Her CT brain and EEG are normal, and you commence an antiepileptic medication.

Further history reveals she was introduced to cannabis by her ex-husband and now smokes 10-15 cones a day. You discuss the role cannabis may play in regard to her seizures and abdominal problems. She and her partner decide to try to cut down by delaying their first cone progressively later each day.

## Case study four

One of your fly-in-fly-out miners is back home and presents with a chronic cough. You ask him about risk factors, including smoking. He states he has been using Kronic to cope with the boredom of driving the maxi trucks, and if he gets drug tested, Kronic does not get picked up. As he hates being breathless and was unaware of Kronic's potential toxic effects, he says he will cut back.

## Conclusion

GPs should not wait until a patient has developed an SUD, identified it as a problem, and decided to act and disclose it to their GP. If we do, we have missed the chance to prevent most consequential morbidity and costs. Implementing evidence-based prevention of SUD harms involves GPs employing universal screening, potentially triggering a comprehensive assessment and motivational interviewing-style discussion about behavioural options.



## How to Treat Quiz

How to minimise drug and alcohol-related harms — part 1 — 4 December 2015

### INSTRUCTIONS

Complete this quiz online and fill in the GP evaluation form to earn 2 CPD or PDP points. We no longer accept quizzes by post or fax.

The mark required to obtain points is 80%. Please note that some questions have more than one correct answer.

### GO ONLINE TO COMPLETE THE QUIZ

[www.australiandoctor.com.au/education/how-to-treat](http://www.australiandoctor.com.au/education/how-to-treat)

### 1. Which TWO statements regarding the background of drug-related harms are correct?

- a) Alcohol, tobacco and illicit drugs are leading risks for the global burden of disease.
- b) Alcohol, tobacco, cannabis, cocaine, caffeine and opium are all synthetic products and have long been used for both therapeutic and hedonistic purposes.
- c) Addiction is something most of us assume we can detect intuitively, despite it being difficult to define.
- d) Discriminatory attitudes shown by some practitioners towards patients with drug-related issues do not have adverse consequences for the patient, the doctor and the community.

### 2. Which TWO statements regarding 'Asking' patients about alcohol and other drug (AOD) problems are correct?

- a) GPs are experts in the identification of patients with alcohol and other drug problems.
- b) The most prevalent barrier to the provision of treatment to opioid-dependent patients is cost.
- c) Patients who perceive discrimination by health professionals have been found to be less likely to complete their treatment.
- d) In the US, a single-question alcohol screening test has been validated for use in general practice.

### 3. Which THREE statements regarding 'Assessing' patients with AOD problems are correct?

- a) An AOD assessment should cover each of the major psychoactive drug classes.

- b) It is important to routinely inquire about any family history of psychiatric or substance problems, and to exclude child protection issues or suicidality.

- c) The criteria for substance abuse are the same in DSM-IV and DSM-5.
- d) Assessing AOD with pathology testing rather than relying on self-reporting is expensive and may undermine the value of a trusted relationship.

### 4. Which TWO statements regarding 'Advising' patients with AOD problems are correct?

- a) Motivational interviewing involves the identification of the patient's defences and debating these effectively.
- b) Advising is something GPs do regularly and this reflects the traditional model where the doctor is the authority.
- c) Practising evidence-based medicine involves offering screening to those who appear to be substance misusers.
- d) It is important to link the symptoms, results or AOD use to the evidence-based guidelines.

### 5. Which TWO statements regarding 'Assisting' patients with AOD problems are correct?

- a) A brief intervention (BI) focuses on encouraging healthier AOD choices as opposed to targeting total abstinence.
- b) BIs range in duration from under five minutes to up to one hour, and repeat sessions are suggested up to five times.
- c) Motivational interviewing involves confronting patients about the dangers of their drug use to motivate them to stop

- using.
- d) The F in FRAMES stands for Finding out about the patient's AOD use.

### 6. Which THREE statements regarding 'Arranging' for patients with AOD problems are correct?

- a) Arranging referral to a psychologist or an addiction service is the last step of the model 'screening, brief interventions and referral for treatment'.
- b) Arranging follow-up includes monitoring for changes in substance consumption.
- c) The MBS item number for addiction specialists has been popular since its inception in 2010.
- d) 'Arranging' may involve GPs offering pharmacotherapy or allocating time in future consultations.

### 7. Which THREE statements regarding nicotine are correct?

- a) A pack year is 20 cigarettes smoked every day for one year.
- b) For young people, commencing smoking is associated with increased rates of anxiety, depression and suicide attempts.
- c) Smoking during pregnancy is associated with increased risk of miscarriage, stillbirth and premature delivery.
- d) Nicotine replacement therapy has been endorsed for use in pregnancy by British, Australian and US guidelines.

### 8. Which TWO statements regarding e-cigarettes are correct?

- a) To date, there are no identified health risks associated with e-cigarettes.
- b) E-cigarettes look like cigarettes, but are

- battery-powered products activated by inhalation.
- c) Non-daily use of e-cigarettes is associated with smoking cessation.
- d) Daily use of e-cigarettes is associated with increased attempts to quit or to reduce smoking, but not with cessation.

### 9. Which TWO statements regarding alcohol are correct?

- a) The Australian guidelines advise abstinence only for two groups: those currently pregnant or those currently breastfeeding.
- b) Older people experience more alcohol-related harm during or immediately after drinking, whereas younger people suffer more cumulative alcohol-related harm.
- c) Binge drinking has been strongly associated with numerous harms, such as non-fatal injury, drinking and driving, arguments and fights, criminal behaviour, morbidity and mortality.
- d) The most common causes of alcohol-related mortality are cancer, road trauma and cirrhosis.

### 10. Which THREE statements regarding cannabis are correct?

- a) The leaves or stalks of the cannabis plant contain far lower concentrations of the main intoxicant, tetrahydrocannabinol, than the flowers.
- b) Around 55% of Australians report ever using cannabis.
- c) Acute effects of cannabis use may include anxiety, panic reactions and psychotic symptoms.
- d) Effects of chronic use include a dependence syndrome.

### CPD QUIZ UPDATE

The RACGP requires that a brief GP evaluation form be completed with every quiz to obtain category 2 CPD or PDP points for the 2014-16 triennium. You can complete this online along with the quiz at [www.australiandoctor.com.au](http://www.australiandoctor.com.au). Because this is a requirement, we are no longer able to accept the quiz by post or fax. However, we have included the quiz questions here for those who like to prepare the answers before completing the quiz online.

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Next week's How to treat is Part Two of How to Minimise Drug and Alcohol-related harms. This article applies the principles of the 5As to amphetamines, cocaine, hallucinogens, benzodiazepines and Z drugs and opioids. The authors are Dr Simon Holliday, GP in private practice and staff specialist, drug and alcohol clinical services, Hunter New England Local Health District, Taree, NSW; and Dr Hester Wilson, GP in Sydney, and staff specialist in addiction medicine, South Eastern Sydney Local Health District, NSW.