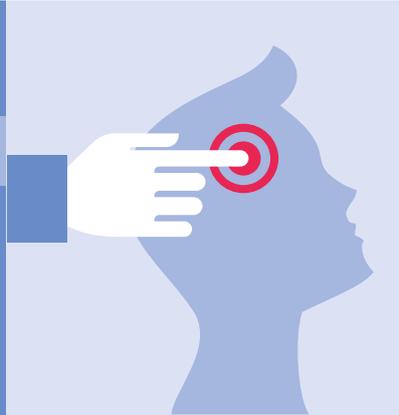
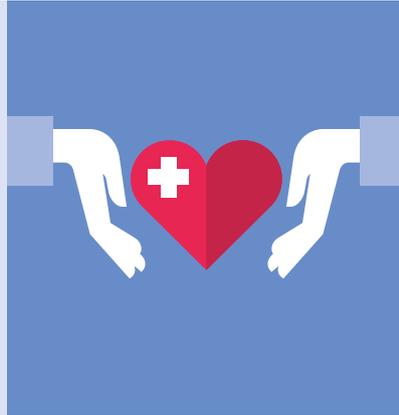


check

Independent learning program for GPs



Unit 522 November 2015

Addictions

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check

Independent learning program for GPs



Addictions

Unit 522 November 2015

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The five domains of general practice

-  Communication skills and the patient–doctor relationship
-  Applied professional knowledge and skills
-  Population health and the context of general practice
-  Professional and ethical role
-  Organisational and legal dimensions



RACGP

Addiction to substances such as cannabis, alcohol, nicotine and prescription drugs poses serious health risks and can interfere with an individual's daily activities and relationships. A key finding from the 2013 National Drug Strategy Household Survey was that mis-use of pharmaceuticals (analgesics, steroids, opioids, tranquilisers and sedatives) had increased.^{1,2} The Coroner's Court of Victoria has reported that 77% of all drug-related deaths are associated with use of prescription drugs, and almost half of these involved benzodiazepine use.³ About seven million benzodiazepine prescriptions are currently recorded each year,⁴ and 1.4% of Australians use them for non-medical purposes.¹ Tobacco smoking remains a major health concern, accounting for 20–30% of all cancer cases,¹ and alcohol use has been estimated to cause 2.7% of the total burden of disease and injury.¹ Cannabis is the most widely used illicit drug in Australia and 35.4% of the Australian population aged 14 years or older have reported using cannabis at least once in their lifetime, with 10.3% reporting recent use.⁵ This edition of *check* considers the management and treatment of addiction in general practice.

LEARNING OUTCOMES

At the end of this activity, participants will be able to:

- summarise the approach to management of patients with alcohol addiction
- outline the assessment, management and follow-up of patients with cannabis use disorder
- discuss the approach to treatment of benzodiazepine dependence
- outline options for the management of opioid dependence
- describe strategies for smoking cessation.

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ACRONYMS

6CIT 6 Cognitive Impairment Test
AUDIT Alcohol Use Disorders Identification Test
CBT cognitive behavioural therapy
DASS Depression Anxiety Stress Scales
DSM-5 *Diagnostic and statistical manual of mental disorders*, 5th edition

ICD-10 *International classification of diseases*, 10th edition
MDMA ecstasy
NCPIIC National Cannabis Prevention and Information Centre
NDSHS National Drug Strategy Household Survey
PADT Pain Assessment and Documentation Tool
PBS Pharmaceutical Benefits Scheme

CASE 1

GLENDA HAS A DRINKING PROBLEM

Glenda is a new patient, 56 years of age, who has come to see you on the recommendation of her sister, Sally. She has brought Sally along as her support person. Glenda starts the consultation with 'I need help. Sally told me to see a doctor about my drinking problem.'

QUESTION 1  

What questions would you ask Glenda about her alcohol use?

QUESTION 2  

What other aspects of Glenda's history would you explore with her?

QUESTION 3 

What aspects of physical examination would you focus on when considering problematic alcohol use in a patient?

FURTHER INFORMATION

Glenda's history reveals that she recently separated from her abusive husband and moved in with her sister, Sally, Sally's husband and two pre-school children. In the two weeks since she has been living with Sally's family, Glenda admits she has been 'drinking heavily' and embarrassed herself in front of the children by vomiting at dinner time, walking into a wall and often slurring her words, which the children found frightening.

Sally and Glenda deny any direct risk to the children. On further questioning, Glenda admits to secretly drinking heavily for a number of months 'to feel numb' in the context of her husband's verbal abuse. She has recently been drinking two bottles of red wine per day and has lost contact with her friends. Glenda lost her job as a clerk three months ago after frequent periods of absenteeism. She has not encountered any legal issues related to her drinking, although she admits to drink driving a few times in the past month.

Physical examination findings include:

- hypertension (Glenda's blood pressure is 159/92 mmHg)
- a tender, non-enlarged liver
- bruised knees (apparently from falling over)
- an anxious affect.

Glenda's breath smells of alcohol and she admits to drinking each morning after experiencing strong cravings and anxiety when she awakes.

QUESTION 4 

Against what criteria would you assess whether Glenda is alcohol dependent?

FURTHER INFORMATION

Your clinical assessment confirms that Glenda fulfils the criteria of alcohol dependence (three or more features from either criteria in Table 1). On discussing this further with Glenda, she explains 'I desperately want to stop the secrecy and regain the trust of my sister and her family ... I need to sort my life out'. She also explains that she knew that alcohol was taking a big toll on her life but, until now, never had the courage to admit this to herself or others. As she is expressing a strong desire for change and appears ready to make this change, you conclude that Glenda is strongly motivated to address her alcohol use. Glenda states that she would like to stop drinking altogether and has Sally supporting her decision.

QUESTION 5 

What are some of the clinical features of alcohol withdrawal that Glenda is likely to experience?

FURTHER INFORMATION

You assess that Glenda is at low risk for alcohol withdrawal complications and is suitable for outpatient withdrawal. Sally agrees to help support Glenda and bring her to the clinic for daily review.

QUESTION 6 

What are some of the factors that should be considered when determining whether an outpatient setting is appropriate for a patient?

QUESTION 7 

Outline the features of an alcohol withdrawal treatment program.

FURTHER INFORMATION

Glenda, with Sally's at-home support, finds that her first week of withdrawal was not as bad as she imagined, with what was eventually a five-day course of diazepam. She attends your practice, justifiably nervous about 'whether I can keep this [abstinence] up'.

QUESTION 8  

Relapsing to problem drinking is common after alcohol withdrawal. Outline your approach to helping Glenda minimise her chance of relapse in the initial few months after her withdrawal program.

QUESTION 9 

Alcohol dependence is commonly a chronic relapsing condition.² Outline your longer term follow-up plan for Glenda.

CASE 1 ANSWERS

ANSWER 1

Although you could proceed straight into taking a formal alcohol history, you are more likely to obtain an honest and accurate picture of Glenda if you spend a little time developing rapport with her. An open question such as 'Please tell me more about yourself?' is likely to help Glenda convey her agenda within her personal context. Patients with substance use problems, including alcohol, often feel a sense of shame and embarrassment when asked to discuss their consumption. Providing permission (eg 'It's okay to tell me how this is affecting you') and keeping the line of questioning open ('Please tell me more about your drinking and why you feel it's a problem') can assist in breaking down this stigma in patients with substance use problems such as alcohol.

After you develop some rapport with Glenda, it is important to explore specific aspects of her drinking, if she has not already disclosed this information to you. The quantity, frequency, duration and pattern of drinking, as well as the type of alcoholic beverages consumed, are all important initial aspects to ask her about. Further questioning should look at the context of her drinking (eg when, where and why), any problems Glenda has encountered as a result of her drinking (physical, psychological and/or social), and features of tolerance or withdrawal she may have experienced. You may wish to use the Alcohol Use Disorders Identification Test (AUDIT),¹ which identifies dependent and at-risk drinkers in primary care settings,² as part of your assessment.

ANSWER 2

Other aspects of Glenda's history to consider that are essential in patients who have difficulties with alcohol use include inquiring about:²

- other substance use – illicit and licit substances, which may include prescription drugs
- any history of mental health comorbidities – depression, anxiety, psychosis, suicide risk
- social circumstances – relationships, violence, housing, financial, legal, occupational aspects.

Additionally, assessing Glenda's motivation – both her motivation for presenting to you and her motivation for change – is vital. As with all behavioural change interventions, an assessment of a patient's motivation to make any suggested changes is important. Understanding Glenda's motivational state will permit more targeted and effective treatment planning.^{2,3}

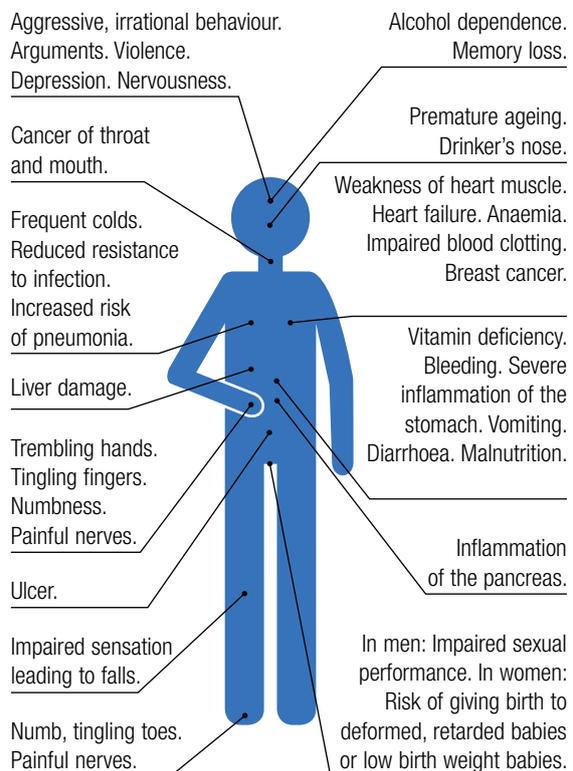
ANSWER 3

While alcohol can potentially affect almost every body system,⁴ and practitioners need to be systematic in physically assessing patients such as Glenda, specific attention should focus on:

- nutrition assessment
- neurological function
- endocrine system
- gastrointestinal system
- cardiovascular system
- mental state.

These areas are commonly affected by, or have serious consequences of complications from, alcohol (Figure 1).^{2,4}

Figure 1. Effects of high-risk drinking⁴



High-risk drinking may lead to social, legal, medical, domestic, job and financial problems. It may also cut your lifespan and lead to accidents and death from drunken driving.

Reproduced with permission from Babor T, Higgins-Biddle JC, Saunders J, Monteiro, MG. The Alcohol Use Disorders Identification Test (AUDIT): Guidelines for use in primary care. 2nd edn. Geneva: World Health Organization – Department of Mental Health and Substance Dependence, 2001.

ANSWER 4

Alcohol dependence creates a cluster of physiological, behavioural and cognitive phenomena in which alcohol use takes on a much higher priority for a given individual than other behaviours that once had greater value.⁵ The *International classification of diseases*, 10th edition (ICD-10) and *Diagnostic and statistical manual of mental disorders*, 5th edition (DSM-5) have similar criteria for assessing alcohol dependence. Either set of criteria would be appropriate to assess dependence in Glenda (Table 1).

ANSWER 5

Symptoms of alcohol withdrawal usually commence 24 hours after the last drink; the type and severity of symptoms varies between patients and with their history of alcohol intake.² Symptoms can range from mild (eg anxiety, agitation, tremor, nausea, tachycardia, hypertension, disturbed sleep, raised temperature) to more severe (eg extreme agitation, dehydration and electrolyte disturbances, disorientation, confusion, paranoia, hallucinations, delirium tremens, seizures).²

The history of current drinking patterns, past withdrawal experience(s), concomitant substance use, and medical or psychiatric comorbidities increase the risk of more severe withdrawal syndromes.²

As Glenda wishes to cease alcohol altogether, she should be advised to undergo a detoxification program to minimise the severity of any potential alcohol withdrawal syndrome. She is at higher risk of a more severe withdrawal due to her history of morning cravings and anxiety, which are relieved by drinking.² Withdrawal programs can occur in outpatient, community residential or inpatient hospital settings.

ANSWER 6

An outpatient alcohol withdrawal setting would be appropriate for a patient who:²

- drinks <30 units of alcohol a day³
- has no past history of severe withdrawal complications (eg seizures, delirium, hallucinations) or significant medical or psychiatric comorbidities (Glenda does not have any of this significant past history)
- has a safe, alcohol-free environment (eg Sally's house, if all the family members agree to this)
- has reliable 'lay people' who can regularly monitor (at least daily during the first three or four days) and support the patient (Sally agrees to fulfil this role, with your advice and help)
- has regular monitoring by a suitably skilled health professional (eg a general practitioner [GP], alcohol and drug worker, nurse), who is available for daily review (face-to-face, telephone) for first three or four days. Depending on the location of the general practice, the GP may have allied health support, or may be in a position to provide this monitoring themselves
- has close supervision of medication (eg daily supplies) – benzodiazepines, if used to assist with cessation, can be withheld if the patient resumes alcohol use

- access to 24-hour telephone 'crisis' support. All states and territories in Australia have such services (refer to Resources for patients).

ANSWER 7

Alcohol withdrawal treatment should include:²

- supportive counselling (eg withdrawal education, dealing with cravings, sleep advice) – patients are often very anxious about entering a detox program, and supportive education can help them and their carers to know what to expect and how to deal with common concerns
- assessment and management of diet, nutrition and hydration – alcohol-dependent patients have often neglected their diet, and addressing this is a vital component of medical care during detox. In addition, some patients can encounter more severe electrolyte disturbances, which can lead to further complications
- thiamine supplementation – used to reduce the risk of Wernicke-Korsakoff syndrome. The suggested dosing is 300 mg daily for several weeks, with the initial few days via parental route⁶
- diazepam – used for symptomatic treatment of withdrawal symptoms and to minimise the risk of withdrawal complications. A suggested regime is 20 mg of diazepam orally, two-hourly until symptoms subside.⁶ A cumulative dose of 60 mg daily is usually adequate
- a post-withdrawal rehabilitation plan.

ANSWER 8

Post-withdrawal interventions include both pharmacological and non-pharmacological (psychosocial) approaches.

Pharmacological approaches

There is good evidence of improved treatment outcomes (maintaining abstinence and reduced rates of relapse) with oral naltrexone and/or acamprosate medications.⁷ Both of these medications are on the Pharmaceutical Benefits Scheme (PBS) for the treatment of alcohol dependence.

Naltrexone is appropriate provided Glenda is not on opioids (as naltrexone is an opioid receptor antagonist) or have severe liver disease, as it is metabolised by the liver. Naltrexone should be taken as a 50 mg daily dose.⁷

Acamprosate is excreted through the kidneys and would not be suitable if Glenda had renal impairment. The dosing is 666 mg orally, three times daily for patients ≥60 kg, or 666 mg orally, in the morning, 333 mg at midday and 333 mg at night for patients <60 kg, and should be commenced one week after abstinence, if it is achieved.⁷

There is little evidence of sustained benefit for the use of the older medication, disulfiram, which acts as a deterrent to drinking because of the unpleasant effects when co-administered with alcohol. It has poor patient adherence and potentially harmful, life-threatening effects,⁸ and is therefore not recommended as the first-line relapse prevention treatment.^{2,7} Other agents have shown promise for the prevention of post-withdrawal relapse but are not yet recommended in the primary care setting until further research has been undertaken.^{2,7}

Non-pharmacological approaches

Psychosocial interventions and support are vital in post-withdrawal treatment planning.² Patients such as Glenda often have a number of predisposing factors that lead to their drinking. These factors need to be addressed to maximise the chance of sustained abstinence. GPs should discuss potential referrals to services such as drug and alcohol counselling, self-help peer groups and psychologists, depending on the patient’s needs and preferences.

Glenda’s family should also be offered support. GPs are ideally placed to identify the family’s needs and coordinate assistance through counselling services, peer support groups or organisations such as Family Drug Help (<http://sharc.org.au/program/family-drug-help>) and Family Drug Support Australia (www.fds.org.au).

ANSWER 9

The chronic nature of alcohol dependence necessitates a long-term approach. GPs are ideally placed to coordinate and deliver this care. In developing a relationship with Glenda through her initial alcohol

management, you are well placed and ideally situated to help Glenda begin addressing her overall health needs. Her hypertension, potential liver disease and mental health are obvious places to start clinically assessing and managing. This may involve referral, depending on the problems found and the resources you have available to you. Social issues (eg her relationship with her sister’s family, housing, relationship issues and employment) are also areas where her GP can provide guidance and help or referral to appropriate services.

Finally, if Glenda relapses to problematic alcohol consumption, it is important not to despair or give up. There are a number of areas where GPs can make a big difference to persistent or relapsing drinkers:²

- continuing to provide encouragement to stop drinking and providing feedback on the ongoing problems caused by alcohol
- harm minimisation approaches, which can include reviewing interactions of prescribed medications with alcohol, ensuring adequate nutritional support, and focusing upon falls and accident prevention
- continuing to address other medical issues or barriers to maintaining abstinence (eg persisting or new psychiatric, medical, social problems)

Table 1. ICD-10 and DSM-5 criteria

| ICD-10 – Dependence syndrome criteria ⁵ | DSM-V – Alcohol use disorder criteria ¹¹ |
|---|---|
| A definite diagnosis of dependence should usually be made only if three or more of the following have been present together at some time during the previous year: | Patient must display two of the following 11 symptoms within 12 months. The severity of the alcohol use disorder is defined as: <ul style="list-style-type: none"> • Mild – Two to three symptoms • Moderate – Four to five symptoms • Severe – Six or more symptoms Note. Moderate or severe ≡ ICD-10 ‘dependence’ |
| <ol style="list-style-type: none"> 1. A strong desire or sense of compulsion to take the substance 2. Difficulties in controlling substance-taking behaviour in terms of its onset, termination or levels of use 3. A physiological withdrawal state when substance use has ceased or has been reduced as evidenced by: the characteristic withdrawal syndrome for the substance, or use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms 4. Evidence of tolerance, such that increased doses of the psychoactive substance are required in order to achieve effects originally produced by lower doses (clear examples of this are found in alcohol- and opiate-dependent individuals who may take daily doses sufficient to incapacitate or kill nontolerant users) 5. Progressive neglect of alternative pleasures or interests because of psychoactive substance use, increased amount of time necessary to obtain or take the substance or to recover from its effects 6. Persisting with substance use despite clear evidence of overtly harmful consequences, such as harm to the liver through excessive drinking, depressive mood states consequent to periods of heavy substance use, or drug-related impairment of cognitive functioning. Efforts should be made to determine that the user was actually, or could be expected to be, aware of the nature and extent of the harm | <ol style="list-style-type: none"> 1. Alcohol taken in larger amounts or over a longer period than was intended 2. Persistent desire or unsuccessful efforts to cut down or control alcohol use 3. A great deal of time 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 failure to fulfil major role obligations at work, school or home 6. Continuing to drink, even when it causes problems in relationships 7. Giving up important social, occupational or recreational activities because of alcohol use 8. Recurrent use of alcohol in which it is physically hazardous 9. Continuing use, despite knowledge of having an alcohol-related physical or psychological problem 10. Tolerance: <ol style="list-style-type: none"> a) increased amounts to achieve intoxication or desired effect b) diminished effect with continued use of the same amount 11. Withdrawal, as manifested by either of the following: <ol style="list-style-type: none"> a) characteristic withdrawal syndrome b) Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms |

- enlisting family or friends to help, and supporting them throughout this process
- ensuring we also meet our medico-legal ethical obligations (eg fitness to drive, potential children safety issues, safety within the workplace etc).

CONCLUSION

Alcohol contributes to a large burden of disease in Australia. Alcohol is the most widely used drug in Australia, with over 85% of Australians aged 14 years and over reporting consuming alcohol one or more times in their lives, and over a third consuming alcohol on a weekly basis.⁹ Alcohol dependence is a common problem (estimated to affect 2–6% of the population)¹⁰ and all doctors should be prepared to assess and arrange treatment for the serious complications of alcohol use. Patients such as Glenda can do well with appropriate support, but dependence is a chronic, relapsing condition and she will need long-term follow-up and support.

RESOURCES FOR PATIENTS

- The DrugInfo website has excellent information about alcohol (and other drugs), www.druginfo.adf.org.au/drug-facts/alcohol
- The Australia Alcohol Guidelines, www.alcohol.gov.au
- Self-help peer groups for patients include Alcoholics Anonymous, www.aa.org.au and SMART Recovery, <http://smartrecoveryaustralia.com.au>
- Peer group support for families dealing with the effects of living with someone whose drinking is a problem include Al-Anon for families of recovering alcoholics, www.al-anon.org/australia, and Alateen, similar to Al-anon but specifically for teenagers, www.al-anon.org/australia/alateen
- The Centre for Education and Information on Drugs and Alcohol has a useful alcohol guide for patients and families, www.ceida.net.au/alcohol

RESOURCES FOR DOCTORS

- Each region in Australia has a clinical advisory service for doctors to call to obtain advice and information related to alcohol (and other drugs; Table 2)
- The Federal Government’s Guidelines for the treatment of alcohol problems, www.alcohol.gov.au/internet/alcohol/publishing.nsf/Content/guidelines-treat-alc-09
- The RACGP Victoria Faculty’s Drug and Alcohol Committee produced a webinar on alcohol and other drugs in 2015, www.racgp.org.au/yourracgp/faculties/victoria/daupdate (video and slides at bottom of the page)

- ATODS, Alcohol, Tobacco and Other Drugs Service; DACAS, Drug and Alcohol Clinical Advisory Service; CAS, Clinical Advisory Service

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| | |
|------------------------------|--|
| Australian Capital Territory | DACAS – Australian Capital Territory 03 9418 1082 |
| New South Wales | DASAS – New South Wales 02 9361 8006 (Sydney) and 1800 023 687 (rural) |
| Northern Territory | DACAS – Northern Territory 1800 111 092 |
| Queensland | GPs can phone ADIS 1800 177 833 to be put through to ATODS for clinical advice |
| South Australia | DACAS – South Australia 08 8363 8633 |
| Tasmania | DACAS – Tasmania 1800 630 093 |
| Victoria | DACAS – Victoria 1800 812 804 |
| Western Australia | CAS – 08 9442 5042 |

CASE 2

JAMES IS FORGETFUL AND IRRITABLE

James is 19 years of age and is halfway through his first year of an undergraduate liberal arts degree and comes to the first consultation with his mother. James did well in high school, although his attendance was poor during his final year. He lives with his mother and younger sister. He has a girlfriend, friends and a part-time job. He sees you because he is having increasing difficulty concentrating during lectures. He has been forgetful recently, and often has angry outbursts when irritated, but worries about what others think of him. Increasingly, he has considered skipping classes, although he is anxious about the deadlines for assessments and presentations. He has difficulty at times unwinding and getting to sleep. He generally keeps up his social activities but has dropped a few regular hobbies he once enjoyed such as sailing and touch football.

QUESTION 1 

What are the possible reasons for James's concentration difficulties?

QUESTION 2 

How would you assess James?

FURTHER INFORMATION

James reveals that he sometimes feels a bit down and bored, and somewhat isolated from his peers, many of whom are now in full-time work. James still spends a lot of time with his friends from school, many of whom are now undertaking trades apprenticeships. James visits these friends a couple of times during the week and at the weekend, when they chat, play online games, smoke cannabis and occasionally (at parties at the weekend) take MDMA (ecstasy). Through questioning and history taking you feel that depression and anxiety do not seem to be an issue at this stage; however, you decide to review this at the next visit.

James's mother notes that he is very irritable in the morning and does not seem motivated to start the day. She also says that he is often out until late at his friends' places socialising and playing computer games. James does not report any history of head injury or headache. There are no indications of significant sleep problems pre-dating his cannabis use. Furthermore, questioning reveals there were no immediate signs of a physical disorder.

QUESTION 3 

How would you assess James for a possible substance use disorder?

QUESTION 4 

What is your working diagnosis at this stage?

QUESTION 5 

What are your next steps?

QUESTION 6 

How would you treat James's cannabis use disorder? What treatments may be indicated, if any?

QUESTION 7 

If James's cannabis use disorder is comorbid with depression/anxiety, are antidepressants recommended?

CASE 2 ANSWERS

ANSWER 1

There are many possible causes of concentration and motivation difficulties, some of which may coexist. These include:

- mental health concerns such as depression, post-traumatic stress disorder, attention deficit hyperactivity disorder¹⁻³
- sleep problems (sleep-onset problems and/or sleep maintenance problems) and disorders that fragment sleep (eg insomnia, sleep apnoea, periodic limb movements and nightmares)⁴
- physical neurological disorders such as tumour, head injury, dementia⁵
- substance misuse problems such as alcohol, cannabis, sedative use and/or amphetamine-type stimulant use^{6,7}
- prescribed medications (eg some antidepressants).

ANSWER 2

Initially, you could assess James for anxiety and/or depression.

Anxiety and depression are often comorbid with a range of cognitive impairments^{8,9} and it is important to identify and understand all the potential contributors to the presenting symptoms.

The suggestion of mental health/mood problems should **not** stop you from seeking further information about a possible substance use disorder. Treating substance use disorders can prevent the later onset of clinical depression and anxiety disorders in young people.

If there is evidence of significant clinical depression or anxiety, these should be treated at the same time as a substance use disorder. Depression and anxiety can often co-exist with substance use disorder, particularly in young people.^{10,11}

You could also assess James for neurological disorders, although he has not reported any head injury or physical symptoms that might indicate this. You could use a mini mental status exam and the 6 Cognitive Impairment Test (6CIT)¹² to clarify the nature of his current difficulties.

ANSWER 3

It was clear from the initial conversation that James has become a regular cannabis smoker, smoking at least three times per week, and uses MDMA occasionally.

The assessment of a possible substance use disorder involves taking a detailed history and performing a thorough examination to identify any co-existing medical or psychiatric illness, as well as other possible contributors (eg psychosocial, physical and environmental stressors, poor sleep practices, medication use, trauma). Evaluation may also include interviews with a family member, partner or caregiver.

A good starting point is to ask James to describe his concentration and motivation difficulties, and key activities over a 24-hour period, commencing with his waking-up time, meals during the day and general routine. Do this for his lecture days and his non-lecture days, going back at least one week. Establish James's relaxation and stress relief routines, as well as his peer-group activities.

The next step is to discuss the nature of James's cannabis use with him and his mother, having gained James's consent to do this. Explain the possibility that he might have a cannabis use disorder, but that more careful examination of his behaviour over the past three months will help clarify this. Ask James to track back and estimate the amount of cannabis he has been using on a daily basis for the past three months. The timeline follow-back can be downloaded from the NCPIC website (see Resources).

Ask James about his age at first use and the time course of his cannabis use. Typically, people begin using small amounts of cannabis irregularly and then either stabilise at occasional use or progress to more regular use over time. It is important to convey a non-judgemental attitude when discussing James's cannabis use and exploring the nature of it. Once a broad pattern of use has been identified with particular focus on the previous three months, questioning can move to a more general inquiry as to what James considers to be the good and not so good aspects of his cannabis use.

ANSWER 4

A working hypothesis could be that James has cannabis use disorder, which is a substance use disorder described in the *Diagnostic and statistical manual of mental disorders*, 5th edition (DSM-5).¹³ It occurs in 20% of Australians who have ever tried cannabis (approximately 33% of the population).¹⁴

According to the DSM-5, for a diagnosis of cannabis use disorder, two of the following criteria must be met:¹³

- continuing to use cannabis despite negative personal consequences
- repeatedly unable to carry out major obligations at work, school, or home due to cannabis use
- recurrent use of cannabis in physically hazardous situations
- continued use despite persistent or recurring social or interpersonal problems caused or made worse by cannabis use
- tolerance as defined by either a need for markedly increased amounts to achieve intoxication or desired effect or markedly diminished effect with continued use of the same amount
- withdrawal manifesting as characteristic syndrome, or using the substance to avoid withdrawal
- using greater amounts or using over a longer time period than intended
- persistent desire or unsuccessful efforts to cut down or control cannabis use
- spending a lot of time obtaining, using, or recovering from using cannabis
- stopping or reducing important social, occupational, or recreational activities due to cannabis use
- consistent use of cannabis despite acknowledgment of persistent or recurrent physical or psychological difficulties from using cannabis
- craving or a strong desire to use cannabis (note this is a new criterion added since the DSM-IV-TR).

A patient who meets two to three of the criteria is considered to have mild substance use disorder, four to five criteria indicates moderate, and six to seven indicates severe substance use.¹³

From the information provided above, James may meet the criteria for mild substance abuse, as he has dropped some hobbies and is tempted to skip classes. He may also be experiencing anxiety, anger and demotivation as symptoms of withdrawal, although at this stage it would be a provisional diagnosis.

ANSWER 5

The next step would be to assess James's level of insight into the potential links between his cannabis use and his current difficulties, and his level of motivation to address this issue. A 'stages of change model' can be very helpful here.¹⁵

People generally use substances for the positive rewards they perceive to arise from use. These can include pleasurable feelings, relaxation/stress relief, expanded consciousness, avoidance of unpleasant thoughts and feelings, and social acceptance. When used in moderation, these positive effects usually outweigh the negative effects. As use continues and increases over time, the negative effects begin to outweigh the positive effects. Some of the personal drawbacks of regular cannabis use include greater spending on cannabis, less euphoria, demotivation, concentration difficulties, angry outbursts, sleep and eating dysregulation.¹¹ Negative effects can also spill over into social and work responsibilities as people struggle to fulfil and maintain their commitments.¹⁶

Often, it is difficult for users to recognise the gradual shift in the balance between rewards and drawbacks. A motivational interviewing approach is the most proven effective technique for facilitating this realisation in clients.¹⁶ Because users often receive negative feedback about their substance use from others, they can become defensive and this defensiveness creates a barrier to their ability to recognise the shift in reinforcers from positive to negative. An acknowledgement of the pros and cons of drug use frees up the patient psychologically, enabling them to step out of their defensiveness and examine the reality of what is happening to them as a result of their drug use.¹⁵

Often, patients present for treatment wanting to find a way to eliminate the negative aspects of their drug use, but not wanting to stop using the drug. This is a pre-contemplative (ie not wanting to change their behaviour) or contemplative (ie thinking about changing but highly ambivalent) stage of change. It is important to provide them with feedback from their recounting as a way of holding a mirror to them. In this way you can initiate a process whereby the patients begin to consider their drug use in a more balanced way.¹⁵

It is important to not rush in with strategies to help them cut down or stop using cannabis if they are not already in the planning or action stages of change as this will push them back into a defensive position from which it will be difficult for them to emerge.¹⁵

There is still a widespread belief within the community that cannabis is a 'soft' drug that is not associated with dependence. It is important to provide educational materials to patients that help challenge this belief and provide a more balanced perspective on the potential harms and benefits of cannabis use. The emergence of synthetic cannabis has complicated the treatment milieu and it is important to check on this with James; however, his symptoms are not consistent with a problem of synthetic cannabis use.

ANSWER 6

If you find that James has not considered the potential link between his cannabis use and his concentration difficulties, motivation and mood issues, and have assessed him as being at the pre-contemplation or contemplation stage of change, providing feedback about his use (frequency, quantity, amount spent, positives and negatives) and information about cannabis effects is appropriate (refer to Resources). You could ask James if he would agree to see you again for follow-up in two to four weeks, to check how he is faring. If he agrees, you can ask him to keep a record of his cannabis use between visits to explore more fully what is happening.

If James returns, you will need to assess again his readiness to change. If you find that he has moved into a stage of considering the impact of his cannabis use on his difficulties, you could suggest a referral to a clinical psychologist experienced in treating substance use disorders. James is potentially in the early stages of cannabis dependence and this is an ideal time to address these issues if he is motivated to do so. Substance use issues can be an area of great sensitivity in young people and require very delicate handling. A good experience early on, with a GP and clinical psychologist working together, can completely change the course of a person's substance use before it becomes a much bigger problem.

If James identifies that he has been thinking about changing his cannabis use for some time but has not known where to start, you could suggest a referral to a clinical psychologist straight away.

A clinical psychologist trained in the management of substance use disorder provides individual or group therapy over 6–10 sessions based on a cognitive behavioural and relapse prevention approach. Cannabis use disorder, similarly to other substance use disorders, tends to be a chronic relapsing condition that may require several treatment sessions over a prolonged period of time before full abstinence is achieved. A reduction of use is rarely possible or effective once the condition becomes a diagnosable disorder. Abstinence is the appropriate approach; however, it may take many attempts at cutting down for the patient to realise this.¹⁷

Online resources are also available as part of a 'stepped-care' approach. A Medicare rebate is available under the Chronic Disease Management or Better Access to Mental Health Care Schemes.

Pharmacotherapy approaches have been tested mainly during the withdrawal phase of treatment as relapse often occurs during this acute phase. A number of treatments have been tested but all are still in the clinical trial stage and none have as yet been approved for clinical use in the general population in Australia.¹⁶

Longer term maintenance therapies are also currently being investigated.¹⁶

ANSWER 7

Antidepressant use in the case of patients suffering from cannabis use disorder has not been widely investigated. It is therefore prudent to address the cannabis use disorder first. Treatment for cannabis use disorder by a clinical psychologist would address the mood and anxiety aspects of the patient's presentation, and this is the preferred treatment approach.

RESOURCES FOR PATIENTS

- National Cannabis Information and Prevention Centre (NCPIC) provides information about cannabis and how to express concerns about cannabis use, <https://ncpic.org.au/shop/all-resources>

RESOURCES FOR DOCTORS

- The Severity Of Dependence Scale and other resources are readily available online, <https://ncpic.org.au/shop/clinicians>

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CASE 3

JIMMY'S OXYCODONE USE

Jimmy, an unemployed labourer aged 35 years, has been treated with opioids for chronic pain following a shoulder injury at work two years ago. You have been seeing Jimmy since his regular GP left your practice six months ago. There is little documented about Jimmy's history, and no current plan around managing his opioid medication or pain. His current prescription is for oxycodone CR (controlled release) 80 mg twice daily, in addition to alprazolam 2 mg (one tablet, three times a day prn) for anxiety. Today Jimmy is requesting an increased dose of oxycodone. He has run out of oxycodone early because of unauthorised dose increase and reports taking three to four tablets daily. He says that the oxycodone is the only thing that helps his pain and that no other medications or treatment approaches are any good. You have a note from the local pharmacy stating that when Jimmy last attended, he asked for extra medication. His speech was slurred and he became aggressive when the pharmacist was unable to supply medication without a prescription. You look back through his notes and realise that he has presented early for prescriptions on a number of occasions in the past. There are also multiple reports of prescription or medication loss and theft.

QUESTION 1 

What aspects of this presentation are concerning?

QUESTION 2 

What are the five As? What aberrant behaviours is Jimmy exhibiting?

FURTHER INFORMATION

When Jimmy presents in your clinic he is initially demanding. He reports that he does not know what he would do if he could not access his oxycodone. His pain no longer seems to be the focus of his appointments. You are concerned with his current appearance and the report from the community pharmacist that Jimmy appears to be at high risk of an overdose. You suspect that he may be seeing other doctors to obtain extra medication. You ring the prescription shopper program¹ but he is not identified by this service. You decide to request a consent for release of information as a third party,² and ask him to sign this form. You realise, however, that there may be a delay in receiving this information and so you try to develop an interim plan. After explaining the release form to Jimmy, he discloses that he has accessed diazepam and paracetamol + codeine from other doctors. He gives you permission to ring two other doctors and they report that they were unaware that Jimmy was under your care and agree not to prescribe medications without first communicating with you.

QUESTION 3 

You suspect that Jimmy is opioid-dependent. How would you assess opioid dependence?

QUESTION 4 

What strategies could you put in place immediately to reduce risks of inappropriate medication use?

FURTHER INFORMATION

You arrange with the local pharmacy for Jimmy to be provided with his medications daily using the staged-supply option. You also establish a patient agreement for opioid prescribing with Jimmy, outlining the conditions for his continued supply of oxycodone. Conditions may include only seeing one prescriber (you) and one pharmacy, providing urine drug screens when requested, not requesting medications early or missing appointments (see sample contracts in Resources for doctors).

This arrangement works well for a few weeks until Jimmy presents to the pharmacy to ask for a supply of his medications for the next few days as he plans to go out of town. The pharmacist contacts you and is concerned that Jimmy is being demanding. The pharmacy has indicated that they are no longer willing to have Jimmy as a customer as the staff feel threatened by his behaviour.

You no longer feel comfortable prescribing oxycodone for Jimmy, as you do not think that the benefits of oxycodone outweigh the harms. Jimmy's functioning seems to be deteriorating as his need for opioids increases.

QUESTION 5 

What options are there for managing Jimmy if you think he is opioid dependent and that his oxycodone is not appropriate to manage his dependence?

FURTHER INFORMATION

One of the GPs at your clinic has a number of patients on buprenorphine-naloxone. You talk to Jimmy about buprenorphine treatment and he takes some information home and considers his options. He is quite reluctant to enter a 'drug treatment' program, particularly with the requirements to attend a pharmacy daily, but admits that things have been spiralling out of control with the medication and that his friends and family have been very concerned. He agrees to a trial of buprenorphine + naloxone. Your colleague, an experienced buprenorphine prescriber, commences Jimmy on the buprenorphine and naloxone combination product (suboxone). During the initial months, while Jimmy is stabilised on buprenorphine + naloxone, you decide to complete the buprenorphine + naloxone training program, so you can take over as Jimmy's prescriber, with your colleague as a mentor. After being stabilised on the treatment, Jimmy reports that he feels much more in control these days.

QUESTION 6 

How would you monitor Jimmy's progress once you take over his prescribing? What are the regulatory requirements for monitoring?

CASE 3 ANSWERS

ANSWER 1

Jimmy is on a high-opioid dose (up to 240 mg of oxycodone, equivalent to 360 mg of oral morphine). He is also taking a benzodiazepine (alprazolam), which may increase his risk of opioid overdose. His recent behaviour is concerning and also places him at risk. There is no record of a risk assessment being done before he commenced opioid treatment, or current strategies to manage risk. As his current prescriber, you may be reluctant to continue his treatment, as is the pharmacist. Jimmy does not appear to have had a detailed assessment regarding his pain condition, and the indication for long-term opioid treatment is not clear. His focus on medications and unwillingness to consider non-opioid pain management strategies should be considered a warning sign.

ANSWER 2

Initially pain experts (eg Passik et al) recommended the four As; affect has now been suggested as the fifth 'A' that should be monitored.³ These domains can be assessed using tools such as the Pain Assessment and Documentation Tool (PADT).³ The five As is a framework that is useful for monitoring the outcomes of opioid therapy. They involve monitoring:

- **activity** or how well the patient is functioning
- **analgesia** to determine how much relief the patient is getting from their pain medication
- **adverse events** such as sedation and constipation
- **aberrant behaviours** to see signs of problematic medication use
- **affect to** assess changes in the patient's mood.³

Aberrant behaviours are any behaviours that depart from the prescribed plan of care. They may include unsanctioned dose increases, lost prescriptions, early repeats, drug and alcohol use, non-medical use, misuse or abuse. Some aberrant behaviours

may serve more as yellow flags that require additional monitoring (eg single incident of dose escalation), whereas others indicate potentially more serious concerns (eg injecting medication intended for oral use; Table 1).⁴

Jimmy seems to be exhibiting a number of aberrant behaviours, including unauthorised dose escalation and lost medications, which suggest closer monitoring and assessment is required.

ANSWER 3

As per international diagnostic guidelines (ICD-10)⁵ to confirm a diagnosis of opioid dependence, three or more of the symptoms listed below would have had to be present together at some point during the previous year:

Physical symptoms:

- tolerance (taking a larger dose for the same effect)
- opioid withdrawal symptoms (eg yawning, gooseflesh, sweating, runny nose, tearing, agitation, restlessness, tremor, joint and bone aches, dilated pupils, anxiety and gastrointestinal symptoms such as nausea, vomiting, abdominal cramps or diarrhoea).

Loss of control over medication:

- a strong desire or sense of compulsion to take the substance
- difficulties in controlling substance-taking behaviour
- progressive neglect of alternative pleasures or interests
- persisting with substance use despite harms.

In summary, look for:

- withdrawal symptoms
- tolerance
- craving
- continuing use despite harm
- unsuccessful attempts to cut down or stop
- use of the medication interfering with the patient's daily living.

There are 24-hour help lines for clinicians seeking advice from drug and alcohol specialists (contact numbers are provided in Resources for doctors) if additional guidance is required.

Table 1. Aberrant drug behaviours⁴

| Less suggestive of addiction (yellow flags) | More suggestive of addiction (red flags) |
|--|---|
| One or two unsanctioned dose escalations | Many unsanctioned dose escalations |
| Occasionally openly acquiring from other doctors | Often acquiring from multiple doctors |
| Aggressive complaining about need for higher dose or specific drug | Recurrent prescription loss |
| Drug hoarding during periods of reduced symptoms | Obtaining prescription drugs from non-medical sources |
| Unapproved use of drug to treat other symptoms (eg sleep, mood) | Concurrent substance abuse (alcohol, other drugs) |
| Reporting psychic effects not intended by clinician | Injecting oral formulations |
| Resistance to changes in treatment | Selling prescription drugs |
| | Prescription forgery |

Adapted from Passik SD, Kirsh KL, Whitcomb L, et al. A new tool to assess and document pain outcomes in chronic pain patients receiving opioid therapy. Clin Ther 2004;26:552-61.

ANSWER 4

With the concerns around dose escalation, you decide Jimmy would benefit from more frequent collection of his medication in smaller amounts to manage the risks while you seek additional advice. If a patient is having trouble with medication management, including medication overuse, or if there is a risk of misuse or abuse, a doctor may initiate a staged-supply agreement or supervised dosing with a community pharmacy.⁶ The pharmacy may charge your patient for this, so you should contact the pharmacy to set this up and ask about costs. Using the staged-supply model, the pharmacist may be remunerated for issuing medication at daily, second daily, weekly or as otherwise arranged. There is no legal barrier to prescribing opioid analgesics, such as oxycodone, if the prescriber feels they are the most appropriate treatment for a pain indication, even if opioid dependence also exists. Depending on jurisdictional regulations, and if it is believed that the patient is drug-dependent, a permit may be required. Risks of overdose with medication combinations should be considered, and an assessment of benefits in terms of analgesia and improved functioning should be assessed and balanced against these risks.

ANSWER 5

An option that may be appropriate for managing Jimmy's opioid dependence is medication-assisted treatment for opioid dependence (eg methadone or buprenorphine + naloxone). These medications are increasingly being used in response to emerging problems with opioid dependence.⁷ Buprenorphine has an excellent safety profile and lower abuse liability, compared with other potent opioids, and emerging evidence suggests there is considerable potential for its use as a pain medication.⁸

Current guidelines⁷ should be followed when starting patients on methadone or buprenorphine due to the risks of opioid toxicity (with all opioids). There is also the potential for a 'precipitated withdrawal' with buprenorphine, where commencing buprenorphine too soon after the last dose of opioid analgesic may result in the patient experiencing some opioid withdrawal symptoms. Depending on the jurisdiction you are in, patients may be required to commence methadone or buprenorphine at a specialist service, or they may be commenced in the community by an accredited prescriber.⁷

ANSWER 6

Ongoing progress and concordance with medication-assisted treatment can be determined in a number of ways including:

- review of progress against treatment goals
- ongoing monitoring of general health and wellbeing (including assessing pain and functionality for patients with concurrent pain conditions)
- concordance with treatment plan around buprenorphine naloxone (eg attendance at the pharmacy, intoxicated presentations, attendance at any psychosocial treatments)
- urine drug screens to monitor for use of other substances (and to corroborate self-report). Medicare will pay for this if the patient is on treatment for opioid dependence, and this should be stated on the pathology form.

More detail on clinical review and monitoring is provided in the *National guidelines for medication-assisted treatment of opioid dependence*.⁷

Requirements for training and regulatory requirements to prescribe methadone and buprenorphine + naloxone vary from state to state, but most states require some training that is provided at no cost. State health departments (listed below) will have up-to-date information on requirements to prescribe.

CONCLUSION

Increasing use of opioids for chronic pain has been associated with increased treatment-seeking for opioid dependence and increased mortality. GPs play a critical role in identifying at-risk patients, and in implementing strategies to help patients manage their medication or referring patients for medication-assisted treatment for opioid dependence.

RESOURCES FOR DOCTORS

- *National guidelines for medication-assisted treatment of opioid dependence*, www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/ng-mat-op-dep
- Opioid dependence: Management in general practice, www.racgp.org.au/atp/2010/august/opioid-dependence-%E2%80%93management-in-general-practice
- The RACGP's Clinical guidelines for prescribing drugs of dependence in general practice, www.racgp.org.au/your-practice/guidelines/drugs-landing/#invalid
- Sample contracts – RACGP drugs of dependence therapy agreement, www.racgp.org.au/your-practice/guidelines/drugs-of-dependence-a/appendix-d-example-practice-policies/D5-Practice-policy---Drugs-of-dependence-therapy-agreement
- Opioid therapy monitoring, www.aci.health.nsw.gov.au/__data/assets/pdf_file/0019/212761/5_As_of_Analgesia.pdf

New South Wales

- Alcohol and Drug Information Service, 02 9361 8000 (Metro); 1800 422 599 (Rural)
- Methadone Advice and Conciliation Service (MACS), 1800 642 428
- Authorisation of prescribing and dispensing NSW: Pharmaceutical Services Branch, NSW Health, 02 9859 5165; pharmserv@doh.health.nsw.gov.au; www.health.nsw.gov.au/pharmaceutical/pages/default.aspx

Victoria

- Directline, 1800 888 236 (metro); 1800 858 584 (rural)
- Drugs & Poisons Controls in Victoria, including links to Victorian policy on maintenance pharmacotherapy for opioid dependence and training programs for prescribers and dispensers, www.health.vic.gov.au/dpcs/pharm.htm
- Drug and Alcohol Clinical Advisory Service, 1800 812 804; www.dacas.org.au

Queensland

- Alcohol and Drug Information Service, 07 3236 2414 (Brisbane); 1800 177 833 (statewide)
- Drugs of Dependence Unit, 07 3328 9890; www.health.qld.gov.au/persistentpain/docs/ddu_opioid_analgesics.pdf

Western Australia

- Alcohol and Drug Information Service, 08 9442 5000 (metro); 1800 198 024 (rural)
- Parent Drug Information Service, 08 9442 5050 (metropolitan); 1800 653 203 (rural)

- Clinical Advisory Service, 08 9442 5042 (metro); 1800 688 847 (rural)
- Drug and Alcohol Office, www.dao.health.wa.gov.au

South Australia

- Alcohol and Drug Information Service, 08 8363 8618 (metro); 1300 131 340 (statewide)
- Information on prescribing drugs of dependence, www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topics/medicines+and+drugs/prescribing+medicines+regulations+and+requirements/prescribing+drugs+of+dependence
- Drugs of Dependence Unit, 1300 652 584; drugsofdependenceunit@health.sa.gov.au
- Drug and Alcohol Services South Australia, www.dassa.sa.gov.au (Note: Website is in the process of being migrated to www.sahealth.sa.gov.au)
- Clinical Advisory Service, 08 8363 8633

Tasmania

- Alcohol and Drug Information Service, 03 6233 6722 (metro); 1800 811 994 (statewide)
- Department of Health and Human Services, Pharmaceutical Branch, Licence Application Forms, 03 6233 2064; www.dhhs.tas.gov.au/psbtas/licence_application_forms

Northern Territory

- Alcohol and Drug Information Service, 08 8922 8399 (Darwin); 08 8951 7580 (Alice Springs); 1800 131 350 (Statewide)

Australian Capital Territory

- Alcohol and Drug Information Service, 02 6207 9977
- Authorisation of prescribing and dispensing, 02 6205 0998; <http://health.act.gov.au/health-services/population-health/health-protection-service/pharmaceutical-services/controlled-medicines>

National services

- beyondblue, 1300 224 636; www.beyondblue.org.au
- CounsellingOnline, 1800 888 236; www.counsellingonline.org.au
- DrugInfo, 1300 858 584; www.druginfo.adf.org.au
- Family Drug Helpline, 9.00 am – 9.00 pm, Monday to Friday, 1300 660 068; www.familydrughelp.org.au
- Lifeline, 131 114; www.lifeline.org.au
- Narcotics Anonymous, 1300 652 820; www.na.org.au
- SMART Recovery Australia, 02 9373 5100; www.smartrecoveryaustralia.com.au

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CASE 4

MARY ATTENDS FOR REPEAT PRESCRIPTIONS

Mary, aged 76 years, attends for repeat prescriptions for temazepam 10 mg and diazepam 5 mg. She is a new patient to you. Previously, she was managed by another doctor at your practice, but he has now retired. You see from her file that she has been attending every three weeks for these medicines for several years. There is little other information in the file. She says, 'Dr X gives me all my medications but he liked to see me every three weeks for these ones, as he liked to keep an eye on me. He was a wonderful doctor'.

QUESTION 1

What further information do you need from Mary? How would you assess Mary?

Blank lines for writing the answer to Question 1.

QUESTION 2

What are the challenges when seeing a patient who has had a longstanding therapeutic relationship with another doctor?

Blank lines for writing the answer to Question 2.

QUESTION 3

Are there any important questions you need to ask Mary about her lifestyle?

Blank lines for writing the answer to Question 3.

FURTHER INFORMATION

Mary is a little surprised that you want to ask her further questions about her medicines, as her previous doctor never did. However, you explain that you need to ensure you are making the best treatment plan possible and that to do this, you need to ask about her history. Mary is happy to proceed.

Mary has been on diazepam for 25 years, since her son's death by suicide. She says she was so distressed that she could not sleep so her doctor started her on diazepam at that time, and she has been on it ever since for her 'nerves'.

Mary was diagnosed with depression 15 years ago, after her marriage broke down, and commenced treatment with amitriptyline 25 mg at night. About five years ago, her doctor added temazepam after she complained that she was having difficulty getting to sleep. She says that she cannot sleep without the temazepam. In the past year, she has sometimes needed to take two tablets to get to sleep and as a result was running out before her next appointment. She has increasingly found that her sleep is poor despite the medication. She notices that if she misses her diazepam she feels irritable so she always carries medication with her. Six weeks ago, she was unable to get a repeat script from her doctor as he was ill and she missed her diazepam and temazepam for five days. She attended another doctor's practice to get a prescription as she felt very unwell, shaky, worried, irritable, and found her eyes were sensitive to light. She also felt her skin was 'crawling' and she could not sleep. The doctor she saw expressed concern at her medication regime and only provided one week's supply.

Mary lives alone in her own flat and has no family nearby. She reports that she had a fall in the street two months ago. She grazed her knees and was very shaken by the fall but not badly hurt. She thinks she might have taken an extra diazepam that day, as she was feeling more anxious than usual. She has

noticed that she has been a bit less steady on her feet recently and is worried about falling again. Her father had to be placed in a nursing home after falling at home and she believes that this hastened his death.

Mary and her neighbour, a close friend, go shopping together and often share a meal. She plays bowls and is very involved in the running of the club. She is a smoker, smoking 10 cigarettes a day and drinks one to two glasses of beer (three to four standard drinks) with her neighbour two to three times a week.

She was diagnosed with hypertension and osteoarthritis in her 60s. Her blood pressure is 130/85 mmHg and body mass index is 24 kg/m²

Her mother died after a cerebrovascular accident in her 80s. Her father was diagnosed with hypertension and diabetes in his 60s and died of pneumonia at age 90 years.

She rates her physical health as 7/10, psychological health 4/10 and quality of life 8/10. Her scores in the Depression Anxiety Stress Scales (DASS 21)¹ are 5/10/16. There is no suicidal ideation. She feels that her anxiety gets the better of her at times. She has never seen a counsellor or psychologist for help to manage her anxiety. She says she was never particularly anxious as a young woman and identifies her son's death as the trigger for her symptoms. She feels responsible for his death, misses him deeply and wonders how she might have prevented it.

Her current medications are:

- diazepam 5 mg twice daily
- temazepam 10 mg one to two at night
- amitriptyline 25 mg at night
- ramipril 5 mg daily
- paracetamol as needed
- fish oil tablet one per day.

QUESTION 4 

What are the risks of long-term benzodiazepine use?

QUESTION 5 

What specific issue needs to be addressed in Mary's case?

QUESTION 6 

How would you discuss the risks and benefits of long-term benzodiazepine use with Mary?

QUESTION 7 

How would you assist Mary to cease benzodiazepines?

CASE 4 ANSWERS

ANSWER 1

It is unclear why Mary has been on diazepam and temazepam long term.

There is no evidence of history or assessment in the consultation notes and, as a result, it is difficult to know what the treatment plan was and why her medicines are being prescribed long term. A full history and assessment, including cognitive and mental health assessment and diagnosis, is needed; from this information, a management plan can be developed.

Assessment must include a reappraisal of the indications for all Mary's medications, assessment of side effects, interactions and possible risk of harm, and whether the risk of treatment outweighs benefit.

Consider scheduling an over 75 health assessment (items 703, 705, 707) for Mary.²

ANSWER 2

Mary has been seeing your former colleague for several years. It would seem that she valued his opinion. As a new practitioner, it is important you build a therapeutic relationship to assist you to manage her care. There are challenges in taking over the care of patients previously managed by another practitioner, and the patient may be very comfortable with current management. However, as her prescriber, you are responsible for all the medications you prescribe. It is not defensible to continue inappropriate prescribing practices commenced by others. Inappropriate prescribing, where the benefit of prescribing is outweighed by the risk of harm, is an important and complex issue. Inappropriate prescribing includes adverse drug reactions, drug interactions, and incorrect dosing, frequency and duration, as well as under-use of appropriate medicines.³ It is a particular issue in the elderly, who are at increased risk of harm due to changed pharmacodynamics, pharmacokinetics and, potentially, social and cognitive issues leading to increased risk of adverse drug reactions, drug interactions, hospitalisation, institutionalisation, resource wastage and mortality.⁴

Developing a therapeutic alliance will assist you to introduce the idea of reassessing Mary's medication needs and best management, given her individual circumstances.⁵ This does not mean just continuing to prescribe a medicine without a clear diagnosis or treatment plan. Be aware that you may assess an unacceptable level of risk with the current medications, which may lead you to be unwilling to prescribe them for her. If this is the case, you need to be willing to discuss your reasoning and plan to assist her. For some patients, this may mean refusing the requested prescriptions while at the same time expressing your concern for their wellbeing and your willingness to help them to better manage their health issues. It may be appropriate to continue prescribing while you reassess their status. Consider prescribing smaller amounts, changing to only one benzodiazepine, undertaking staged supply⁶ or supervised dosing at the pharmacy to assist you to do this. Assess the complexity of the presentation and ask for specialist assistance if needed.

ANSWER 3

It is important to assess every aspect of Mary's lifestyle, from social circumstance, to exercise, diet, non-prescribed medicines, complementary medicines, supplements, and recreational drug and alcohol use. As Mary is on benzodiazepines, it is important to consider the use of any other prescribed or non-prescribed sedatives (ie antidepressants, antipsychotics, alcohol, cannabis), which could increase her risk of overdose.

ANSWER 4

There is little evidence to support the long-term use of benzodiazepines and increasing evidence of risk of harm.^{7–13} These harms include:

- falls, fractures, confusion, overdose, death, cognitive impairment, escalating insomnia and anxiety on use^{14,15} or withdrawal¹⁶
- dependence, tolerance and very troubling withdrawal symptoms on attempts to decrease or cease the medication^{17,18}
- possible increased risk of cognitive decline and dementia,^{14,19} although there has been some conflicting evidence about these effects.²⁰

Despite lack of evidence of effectiveness, and clear evidence regarding the risk of harm with long-term benzodiazepine use,^{14–19} 25% of patients prescribed benzodiazepines were prescribed long term in the US.²¹ In Australia, about seven million prescriptions for benzodiazepines are written each year.²² Of patients aged 65 years or older, 15% were prescribed at least one benzodiazepine. Of these, 45% were prescribed more than once and 15% of these for longer than six months.²³

Mary is at increased risk of side effects. She is on two benzodiazepines, including diazepam, which has a rapid onset and active metabolites that increase its risk of addiction, overdose and delirium. The addition of amitriptyline and alcohol add to this risk. She lives alone, has had a recent fall, is feeling unsteady on her feet and is noticing that the medications are becoming less effective and, as a result, she is increasing her use, escalating the dose, running out early and experiencing withdrawal symptoms on decreasing or ceasing her dose.

Interestingly, she still has an abnormal score on the DASS, which indicates that her current medication regime is ineffective.

ANSWER 5

Mary is dependent on benzodiazepines. Dependence is a common side effect of benzodiazepines and studies report rates of 40% or more in the general practice setting, increasing with long-term use.²⁴ Mary has experienced withdrawal symptoms, some escalation in dose and decreased effectiveness of the medication. It is possible that the only benefit she is getting from long-term use of benzodiazepines is the management of her withdrawal symptoms. There is a wide range of benzodiazepine withdrawal symptoms including, and not limited to, abdominal pain, constipation and diarrhoea, shortness of breath, blurred vision, photophobia, anxiety, depression, insomnia, lethargy, changes in perception, feelings of unreality, irritability, restlessness, headache, poor concentration, impaired memory and menstrual changes.^{25,26} Seizures are uncommon, but can occur in high-dose users, and are unlikely if the dose is tapered.²⁷

Withdrawal symptoms may be very troubling and difficult to manage.^{28,29} A small number of patients experience long-term withdrawal symptoms even after entirely ceasing use.²⁸

There appears to be no evidence in Mary's history of significant addictive behaviours (ie use of very high doses, binge use, doctor shopping, stealing, forging or selling medicines); however, it is worth ringing the prescription shopping hotline³⁰ and considering asking Mary to sign the form for PBS and Medicare release of information to a third party³¹ to ensure that you have a clear picture of the patient's use. Always ask patients if they are seeing any other doctors for prescriptions and let them know that you will ring their other doctor(s) to discuss the management plan. Consider the possibility that your patient may not be taking their medication as prescribed and may be giving or selling them to others.

ANSWER 6

There is little evidence that long-term benzodiazepine use is effective for the management of insomnia, anxiety or depression, and other modalities have better effectiveness and safety. There is evidence that cognitive function, insomnia and anxiety may improve with cessation,^{32–35} and Mary's risk of falls will decrease.^{36,37} It is important, therefore, to begin discussing issues with her ongoing use and recommend cessation.

Mary should be given information about the risks and benefits of long-term use. Help her to understand what her personal risk might be from continued use of these medications and involve her in a shared decision-making process to begin tapering her dose.

Let Mary know that you are acting in her best interest to ensure she is safe and will not be harmed. Importantly, assure Mary that you are prepared to assist her to manage the process over time and see her regularly to offer support and care.

ANSWER 7

Often, practitioners believe that their patients do not want to cease medications. However, this may not be the case. A recent small study in Wollongong suggests that patients over the age of 65 years are willing to cease benzodiazepines, and some continue to take these medicines only because they think their doctor wants them to.³⁸

To assist Mary to successfully taper and cease benzodiazepine use requires a long-term view. Changing to one long-acting benzodiazepine may be useful as this can ameliorate withdrawal symptoms;³⁹ however, diazepam use can be an issue in the elderly because of its long half-life and active metabolites. While some people can manage to reduce their dose quite quickly (ie by 10% weekly), others find this results in symptoms that they find very difficult to manage, so it may be useful to taper her dose over weeks to months, dropping by 10% each two to four weeks. The rate of decrease will depend on any withdrawal symptoms experienced. See Mary each week to offer support.²⁹ Relapse to use is common after cessation.^{40,41}

Mary's need for amitriptyline needs to be re-evaluated. In the longer term, it is likely that she will be better without any psychoactive drugs. She may need to be reconsidered for an antidepressant if it becomes clear that she has ongoing depressive symptoms; however, antidepressants are not useful in the management of benzodiazepine withdrawal.⁸

Mary has not had the benefit of any psychological support and would benefit from learning cognitive behavioural therapy (CBT) skills to

manage her insomnia⁴² and anxiety. The evidence shows that CBT is more effective than pharmacological options⁴⁰ as well as helping her with unresolved grief over the death of her son.

Mary should also be counselled on her use of alcohol and tobacco.

RESOURCES FOR PATIENTS AND DOCTORS

- Sleep Health Foundation provides fact sheets and information about sleep hygiene (good sleep habits for patients), www.sleephealthfoundation.org.au/fact-sheets-a-z/187-good-sleep-habits.html
- South Australia Health provides an insomnia management toolkit for GPs, including sleep diary, www.sahealth.sa.gov.au/wps/wcm/connect/Public+Content/SA+Health+Internet/Clinical+resources/Clinical+topics/Substance+misuse+and+dependence/Sleep+problems+-+Insomnia+Management+Kit
- The Australian Psychological Society provides information about CBT and a 'Find a psychologist service', www.psychology.org.au/Default.aspx
- Black Dog Institute, www.blackdoginstitute.org.au
- DASS is available at www.aci.health.nsw.gov.au/__data/assets/pdf_file/0019/212905/DASS_21_with_scoring_BB.pdf and www2.psy.unsw.edu.au/groups/dass
- The *Ashton Manual* written by UK psychiatrist Katherine Ashton has some good information, www.benzo.org.uk/manual
- Reconnexion is a small NGO in Victoria with useful website and monograph 'Beyond Benzodiazepines', www.reconnexion.org.au
- Prescription Shopping Programme, www.humanservices.gov.au/health-professionals/services/prescription-shopping-information-service
- Each state has a 24/7 phone line providing information on addiction and a drug dependency unit that can provide support

New South Wales

- Alcohol and Drug Information Service, 02 9361 8000 (metro); 1800 422 599 (rural)
- Pharmaceutical Services Branch, NSW Health, 02 9859 5165; pharmserv@doh.health.nsw.gov.au; www.health.nsw.gov.au/Pages/default.aspx

Victoria

- Direct line, 1800 888 236 (metro); 1800 858 584 (rural)
- For health practitioners, 1300 364 545
- Drug and Alcohol Clinical Advisory Service, 1800 812 804; www.dacas.org.au

Queensland

- Alcohol and Drug Information Service, 07 3236 2414 (Brisbane); 1800 177 833 (statewide)
- Drugs of Dependence Unit, 07 3328 9890; www.health.qld.gov.au/atod/ddu.asp

Western Australia

- Alcohol and Drug Information Service, 08 9442 5000 (metro); 1800 198 024 (Rural)

South Australia

- Alcohol and Drug Information Service, 08 8363 8618 (metro); 1300 131 340 (statewide)
- Clinical Advisory Service, 08 8363 8633

Tasmania

- Alcohol and Drug Information Service, 03 6233 6722 (metro); 1800 811 994 (statewide)

- Department of Health and Human Services, Pharmaceutical Branch

Northern Territory

- Alcohol and Drug Information Service, 08 8922 8399 (Darwin); 08 8951 7580 (Alice Springs); 1800 131 350 (statewide)

Australian Capital Territory

- Alcohol and Drug Information Service, 02 6207 9977
- Pharmaceutical-services/controlled-medicines, 02 6205 0998

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CASE 5

MARNIE HAS A COUGH

Marnie, 56 years of age, presents with a cough. She is otherwise well. Simple spirometry shows mild airways obstruction. Marnie reveals that she has been a heavy smoker for many years.

QUESTION 1 

How will you assess Marnie's level of nicotine dependence?

FURTHER INFORMATION

Marnie tells you that she has her first cigarette for the day within five minutes of waking. She has a cup of coffee and reads the newspapers while smoking her first few cigarettes. She smokes 30 cigarettes per day. She smokes in the house and in the car (when the grandchildren are not there). She usually rolls her own cigarettes from cheap tobacco. Marnie believes it is healthier to roll her own cigarettes. She abstained from smoking when she was pregnant with her two children, but resumed immediately postpartum. She has tried nicotine patches but continued to smoke while wearing a 21 mg 24-hour patch. She adds that she didn't smoke as many cigarettes while wearing the patches, but had expected that she would not want to smoke at all with them on and was worried that she might overdose while doing both. She has also tried nicotine gums, but did not like the taste, and she felt no effects from the nicotine inhalators. She does not think these therapies work.

QUESTION 2 

What information can you give Marnie about her smoking history?
What information can you give her about roll-your-own cigarettes?

QUESTION 3 

What additional information can you give Marnie?

FURTHER INFORMATION

Marnie is reluctant to use pharmacotherapy as she is worried about side effects. She reveals that one of her friends tried varenicline and became nauseous, agitated and depressed. Marnie has also heard some people become 'mentally deranged', especially if they are also taking antidepressants. She suggests that she will try to cut down on her smoking instead.

QUESTION 4 

What is the concern about cutting down on her smoking? What can you tell Marnie about the side effects of pharmacotherapy?

QUESTION 5 

What recommendations can you give about behavioural change?

FURTHER INFORMATION

On review, Marnie volunteers that she has smoked considerably less since wearing the nicotine patch, and that she no longer smokes first thing in the morning. Marnie says she feels that without the pressure to 'quit' or stop immediately she is a great deal more relaxed and she has a positive attitude to the future of her attempt.

She still has her morning coffee. She loves her coffee and drinks about five cups a day, as well as a few cans of cola (diet, she adds).

She has been able to change her patterns of smoking and now smokes outside. Smokers who visit her home also smoke outside. She adds that there are still moments when she smokes, especially after meals, and that she finds this hard to resist. You advise Marnie to add 4 mg nicotine gum or lozenges when she experiences 'breakout' urges to smoke and

that this additional NRT is safe.¹ She asks whether she is likely to become addicted to these products.

QUESTION 6 

Is Marnie likely to become addicted to the nicotine replacement therapy (NRT) products?

FURTHER INFORMATION

On review, Marnie has now stopped smoking and is using patches and lozenges simultaneously. She has been able to quell her urges to smoke but has a problem with insomnia and feels that this is due to the patch. She also claims that her cough has become somewhat worse since she quit.

QUESTION 7 

What might be the cause of Marnie's insomnia and cough? What advice can you give her?

FURTHER INFORMATION

At her next follow-up visit, Marnie states that her cough has greatly diminished.

QUESTION 8 

What further recommendations should you give for follow-up?

CASE 5 ANSWERS

ANSWER 1

You should take a smoking history. Questions to ask include:²⁻⁴

- How long after waking do you have your first cigarette?
- At what time of the day do you smoke your first cigarette?
- How many cigarettes do you smoke per day?
- What types of cigarettes do you smoke?
- Where do you usually smoke?
- Are there any other activities you do while you smoke?
- Have you ever tried to quit? If so, what was your longest period of abstinence? Did you have any cravings or experience any symptoms when you tried to quit?
- Have you ever used drugs to help with quitting?

ANSWER 2

Marnie’s need to have a cigarette within the first five minutes of waking, smoking more than 10 cigarettes per day and a history of withdrawal symptoms or cravings indicates high nicotine-dependence.² As roll-your-own cigarettes are usually thin,⁵ Marnie must make up for less nicotine by rolling many and inhaling deeper for compensation.⁶

Marnie must be disabused of the notion that smoking roll-your-own cigarettes is somehow environmentally friendly and less harmful, that these cigarettes do not contain the same chemicals as conventional tailor-made cigarettes.⁷ Roll your own cigarettes are at least as harmful,⁸ potentially more so than tailor-made cigarettes as they may allow for more combustion and thus the inhalation of more carbon

monoxide.⁹ This increases the risk of carboxyhaemoglobin and thus the risk of clotting.

ANSWER 3

Marnie should be informed that the best methods for quitting are a combination of pharmacotherapy and behavioural changes² and that you will support and follow up her attempt for the next few months.

The current options for pharmacotherapy in Australia are NRT, varenicline and bupropion.²

NRT would be a first-line option for Marnie. However, many individuals who are highly dependent on nicotine do not do well on one form of NRT.¹ You could suggest that she might revisit the patches, as they had some effect previously, and recommend that she add an oral form of NRT, such as the lozenge, oral strip, inhalator or mist, which will deliver a quick dose of nicotine for ‘breakout’ episodes. Reassure Marnie that it is safe to use multiple forms of NRT, and that combined therapy is often more effective than only using a single form of NRT.^{2,3,10} Also, reassure Marnie that it is safe to smoke while using NRT¹¹⁻¹⁵ and that it simply indicates that the single dose of NRT may not be adequate. Prior to prescribing any pharmacotherapy, see MIMs for any potential contraindications.

ANSWER 4

Cutting down may lead to compensatory smoking, inhaling deeper and consuming more of the cigarette.

About 40% of smokers on varenicline experience nausea as the main side effect.¹⁶ However, if taken with food and water, the nausea can be greatly relieved. Many smokers do not eat breakfast, but must do so to avoid nausea.

Side effects of nicotine withdrawal are often mistakenly attributed to varenicline. Common symptoms of nicotine withdrawal are agitation, depression and anxiety.¹⁷ These symptoms can be relieved by adding NRT to the varenicline regimen. There are no drug interactions between varenicline and antidepressants or antipsychotics. See MIMs for details.

ANSWER 5

Recommendations for behavioural changes could include the following:

Marnie and any smokers who visit her home should always smoke outside.

Marnie should separate smoking from other activities, such as drinking coffee or reading the newspapers (ie smoke outside but drink coffee, read the newspapers inside). The separation of these stimuli is relatively easy to accomplish.

ANSWER 6

Marnie will need to remain on NRT for at least the next few weeks and may need to continue this therapy for two to three months as

she adapts to life without smoking.¹ NRT will help her and reduce urges to smoke in situations that are likely to provoke urges to smoke. There is no evidence of dependence on nicotine patches and only a small risk of dependence on the fast-acting oral NRTs.¹⁸

ANSWER 7

The effects of caffeine can be directly weakened by smoking.¹⁹ Smokers traditionally drink more than twice as many caffeinated drinks as non-smokers, and because of this Marnie's caffeine levels are likely to be higher as she no longer smokes and this may be interfering with her sleep.¹⁹ She should consider reducing her caffeine intake. She should not quit caffeine altogether as this may precipitate caffeine withdrawals.

It is not uncommon for a smoker's cough to become worse when they stop smoking. The cough reflex is dampened by nicotine and on cessation the cough reflex returns; therefore, the cough can be a significant positive sign of lung clearance post-cessation.²⁰

ANSWER 8

Marnie should remain on the NRT and continue to see you once a month. She should gradually reduce the additional oral NRT and can be weaned off the patches after three to four months.¹ Recommend that she retain some oral NRT in case of urges and risks of relapse. Encourage her to be attentive to her lung function and advise her that she may note a reduction in her cough²⁰ and improvement in her breathing as her oxygen-carrying capacity increases.²¹

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ACTIVITY ID: 34617

ADDICTIONS

This unit of *check* is approved for 6 Category 2 points in the RACGP QI&CPD program. The expected time to complete this activity is three hours and consists of:

- reading and completing the questions for each case study
- you can do this on hard copy or by logging on to the *gplearning* website, <http://gplearning.racgp.org.au>
- answering the following multiple choice questions (MCQs) by logging on to the *gplearning* website, <http://gplearning.racgp.org.au>
- you must score $\geq 80\%$ before you can mark the activity as 'Complete'
- completing the online evaluation form.

You can only qualify for QI&CPD points by completing the MCQs online; we cannot process hard copy answers.

If you have any technical issues accessing this activity online, please contact the *gplearning* helpdesk on 1800 284 789.

If you are not an RACGP member and would like to access the *check* program, please contact the *gplearning* helpdesk on 1800 284 789 to purchase access to the program.

QUESTION 1

An outpatient alcohol withdrawal setting would be appropriate for a patient who:

- drinks >30 units of alcohol per day
- has a history of withdrawal complications such as seizures
- has a fear of hospitals
- has close supervision of medication.

QUESTION 2

Features of an alcohol withdrawal treatment program include:

- thiamine supplementation at a dose of 30 mg per week for four weeks
- thiamine supplementation at a dose of 300 mg daily for several weeks
- naltrexone 50 mg daily
- acamprosate at a dose adjusted to the patient's weight.

QUESTION 3

What is the best approach to managing a patient with cannabis use disorder in the pre-contemplative stage of change?

- Discuss strategies for stopping use of cannabis.
- Discuss the health risks of continuing to use cannabis.
- Provide feedback about their cannabis use as a way of initiating a process whereby they begin to consider their substance use in a more balanced way.
- None of the above.

QUESTION 4

Which of the following is the best approach to treating a patient with cannabis use disorder comorbid with depression/anxiety?

- Tricyclic antidepressants
- Selective serotonin reuptake inhibitors
- Referral to a clinical psychologist experienced in treating substance abuse
- All of the above

QUESTION 5

According to the five As framework, which of the following is included when monitoring the outcomes of opioid therapy?

- Adaptation
- Assessment
- Analgesia
- Alertness

QUESTION 6

Which of the following is strongly indicative of aberrant behaviour and is a red flag suggestive of addiction?

- One or two unsanctioned dose escalations
- Aggressive complaining about the need for higher dose or specific drug
- Often acquiring from multiple doctors
- Resistance to changes in treatment

QUESTION 7

For which of the following conditions can a long-acting benzodiazepine be used as first-line treatment?

- Alcohol withdrawal
- Anxiety
- Depression
- Insomnia

QUESTION 8

Which of the following would best assist a patient who is dependent on benzodiazepines to cease use of these agents?

- Taper the dose by about 10% per week.
- Taper the dose at a rate determined by withdrawal symptoms and provide psychological support.

- C. Taper the dose at a rate determined by withdrawal symptoms and add an antidepressant to treat withdrawal symptoms.
- D. Taper the dose on a case-by-case basis in a collaborative framework with your patient, consider staged supply and supervised dosing at a community pharmacy, and provide ongoing psychological support.

QUESTION 9

Which of the following is a current first-line pharmacotherapy option in Australia for smoking cessation?

- A. Buprenorphine
- B. Bupropion
- C. Nortriptyline
- D. Clonidine

QUESTION 10

Which of the following is considered the most reliable indicator of nicotine dependence?

- A. Time to smoking the first cigarette after waking
- B. The number of cigarettes smoked per day
- C. The number of pack years
- D. Unwillingness to consider quitting

check

Independent learning program for GPs