Helping smokers with mental illness

Introduction

PEOPLE with mental illness have higher smoking rates, higher levels of nicotine dependence, lower cessation rates and a disproportionate health and financial burden from smoking compared with the general population.

This subgroup of smokers has poorer health and reduced life expectancy compared with those without mental illness, and much of the excess morbidity and mortality is due to smoking. They are far more likely to die from smoking-related disorders than from mental illness.

In spite of this, smokers with mental illness are less likely to be offered professional help to quit — in part because of the many myths and misconceptions about smoking in this population. For example, many health professionals mistakenly believe that people with mental illness are not interested or are unable to quit. On the contrary, smokers with mental illness are often highly motivated to quit and can quit successfully, albeit with lower success rates.

It is also commonly believed that smoking relieves stress and that quitting will worsen mental illness. In fact, research has consistently shown that the opposite is true. Patients are more relaxed and happier after they quit smoking (see ‘The stress paradox’).

Smoking cessation is an integral component of best-practice care for patients with mental illness, and GPs can play an important role in encouraging and assisting quit attempts in this vulnerable population. This How to Treat examines the close link between smoking and mental illness and provides practical advice to assist GPs in helping these smokers to quit.

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Assessment of nicotine dependence

SMOKERS with mental illness have higher levels of nicotine dependence than other smokers. The level of nicotine dependence is a predictor of withdrawal symptoms and the intensity of treatment required. Dependence can be assessed by asking patients the following question: "How many minutes after waking do you have your first cigarette of the day?" Smoking within 30 minutes of waking is a reliable indicator of nicotine dependence. Smoking within five minutes of waking indicates more severe dependence.

Cravings and withdrawal symptoms experienced in previous quit attempts are also a useful guide. The number of cigarettes smoked a day is less predictive; however, smoking more than 10 cigarettes a day is associated with a higher likelihood of dependence.

Prevalence

THIRTY-two per cent of Australians with a current mental illness smoke compared with 16% of those without mental illness. Although smoking rates in Australia have declined significantly in recent years, the prevalence of smoking in patients with mental illness remains high.

In general, the more severe the psychiatric illness, the higher the smoking rate (see figure 1). Smoking rates in Australia have declined significantly in recent years, the prevalence of smoking in patients with mental illness, especially anxiety and depression.

Mental illness and physical health

PEOPLE with all categories of mental illness have significantly poorer physical health than the rest of the population and a reduced life expectancy. Australian men with mental illness live 16 years less and women live 12 years less than the general population, and this difference continues to widen.

Much of the excess mortality is due to smoking-related illnesses — such as cardiovascular disease, respiratory disease and cancer — not suicide. People with alcohol and other substance use disorders are also more likely to die from a smoking-related disease than from their primary addiction. Nicotine-dependent smokers also have about twice the risk of suicide attempts compared with non-smokers. After quitting, the risk of suicide drops dramatically.

The benefits of quitting

Health professionals are often reluctant to encourage quitting because of concerns that it will exacerbate the underlying mental illness. However, there is good evidence that these fears are unfounded. Meta-analyses in schizophrenia, depression and severe stable mental illness have not found any deterioration. Furthermore, smoking cessation is associated with improved mental wellbeing. A recent meta-analysis of 26 studies found that after quitting, smokers had significant long-term improvements in depression, anxiety, stress, psychological quality of life and positive affect compared with continuing smokers. The improvement in mental health after quitting was as large as the effect of an antidepressant for a mood disorder.

Other studies have consistently found that smoking cessation is associated with substantial improvements in quality of life.

There are benefits in physical function, pain, general health perception, vitality, social function, emotional factors, self-control and mental health, which are maintained long term.

The stress paradox

Smokers often report that smoking helps them cope with stress. However, smoking actually increases stress levels overall, and former smokers often report feeling less anxious when they smoked.

Much of the apparent benefit from smoking is due to the temporary alleviation of nicotine withdrawal symptoms. Smokers experience frequent periods of nicotine withdrawal — including anxiety, restlessness and irritability — between cigarettes. These symptoms improve after the next cigarette, erroneously creating the impression that smoking is relaxing (the stress paradox). When smokers quit, they no longer experience these small, repeated episodes of withdrawal during the day.

Smoking also increases stress in other ways. Nicotine is a stimulant that releases hormones, such as noradrenaline and cortisol. Smokers are also stressed from often thinking about when and how they can smoke next, the financial stress of smoking, the social disapproval of their habit and the effect on their health.

While smoking does relieve the stress of nicotine withdrawal, it does not relieve anxiety or psychological stress. Studies have found that when smokers are stressed — for example, by a scary video — smoking does not relieve their discomfort.

GPs should advise smokers that smoking is not an effective strategy for coping with stress. Healthier strategies should be discussed.
Smoking and specific disorders

Anxiety disorders
ANXIETY disorders (generalised anxiety disorder, PTSD, panic disorder, agoraphobia, simple phobia and social phobia) comprise the largest mental health diagnostic group among smokers. People with anxiety disorders have about double the smoking rate of the general population.12 A meta-analysis of 42 trials found that smokers with a history of depression had a 19% lower rate of long-term abstinence compared with smokers without a history of depression.3 Quit rates were lower in those with recurrent depression than in those with a single episode.

Smokers with a history of depression experience more severe negative mood, cravings and withdrawal when quitting than those without depression and are more likely to relapse. However, there is no increase in the risk of major depression or suicide during or after cessation.5 On the contrary, many studies report an improvement in mood after treatment.

Schizophrenia
Seventy per cent of patients with schizophrenia smoke, and they smoke more intensely than other smokers, having more puffs per cigarette and a greater puff volume. Smoking improves the cognitive deficits in schizophrenia, such as attention and memory deficits, and may improve negative symptoms, including lack of motivation and energy. Smoking also offsets some of the side effects of antipsychotic medication, such as sedation and weight gain.

Smokers with schizophrenia are at least as motivated to quit as the general population. Importantly, smoking cessation does not generally cause deterioration in their mental health.6 Smokers with schizophrenia have additional barriers to quitting — such as higher nicotine dependence, diminished cognitive and coping skills, less social support and boredom — and have overall quit rates that are only about half those of the general population.

Bipolar disorder
Although 60% of patients with bipolar disorder smoke and most want to quit, there have been no randomised controlled trials (RCTs) of smoking cessation in these patients.

Substance use disorders
Substance users have very high smoking rates. They are as motivated to quit as the general population but have more difficulty quitting.

Tobacco use has often been regarded as a secondary concern for people with substance use disorders and has traditionally been neglected. However, substance users are more likely to die from tobacco-related causes than from their primary addictions.8 Smoking has also erroneously been considered a useful coping strategy for substance users, with the common concern that smoking will negatively affect treatment outcomes. However, research has found that the opposite is true. Quitting smoking does not compromise the treatment of other drugs and can actually improve recovery.9 Smoking cessation at the same time as treatment for alcohol and other drugs is now best practice. Compared with delayed treatment, concurrent treatment is associated with increased sobriety and abstinence from other substances by 25% at 12 months.10

Treatment

SMOKERS with mental illness are often excluded from clinical trials, so the evidence base for treatment is limited. However, guidelines advise the same evidence-based therapies as for the general population.11 As with other smokers, the best results occur when behavioural counselling and support are combined with pharmacotherapy. More intensive counselling and extended treatments and support may be required.

The underlying mental illness may need to be monitored more carefully during smoking cessation. It may be helpful to engage the patient’s mental health professional for extra support during the quitting attempt, particularly to help manage anxiety or depressed mood.

Intervention is based on the 5 As framework, as described in the Australian smoking cessation guidelines (see figure 2).12 The following are the key features:

- **Ask**: Regularly ask all patients if they smoke, and record the information in the medical record.
- **Advise**: Advise all smokers to quit in a clear, unambiguous way, such as, “The best thing you can do for your health is to stop smoking.”
- **Assess**: Assess smokers for their readiness to quit, barriers to quitting and the level of nicotine dependence.
- **Assist**: Offer advice, pharmacotherapy and support to smokers who are ready to quit.
- **Arrange**: Provide follow-up visits for additional advice and support. When time is short, smokers can be referred elsewhere for treatment — for example, to the practice nurse, Quitline or a tobacco treatment specialist (see figure 2).

Quitting is a chronic, relapsing journey for most smokers, and failed attempts are a normal part of the quitting process. Smokers should be re-engaged and encouraged to keep trying to quit at regular intervals.

Counselling and lifestyle changes
Key counselling strategies for smokers with mental illness include the following:

- Provide the patient with information about nicotine withdrawal symptoms and the relapsing nature of quitting. Review the reasons why the smoker wants to quit, and discuss the positive health benefits of quitting.
- Identify smoking triggers and plan strategies to cope with them. Common cues include a cup of coffee, drinking with friends, after meals or when feeling stressed. Effective strategies are distraction and avoidance. For example, instead of smoking after dinner, the patient could clean their teeth, clear the table, wash the dishes or go for a walk.
- Identify and discuss barriers to quitting. Smokers often have barriers that can undermine a quit attempt. Provide accurate information about these barriers, and help the smoker develop strategies to deal with them (see table 1).
- Recommend the “not-a-puff” strategy.
- Get support from family and friends.
- Set rewards — the money saved on smoking can be used to purchase well-deserved treats.
- Consider setting a quit day in the next couple of weeks.

Smokers with mental illness often have unhealthy lifestyle habits. Changing these behaviours can improve quit rates as well as general health:

- Exercise regularly: Exercise

Figure 2: Treatment and referral pathways for smoking cessation

<table>
<thead>
<tr>
<th>ASK</th>
<th>Ask all patients if they smoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVISE</td>
<td>Advise all smokers to quit in a clear, non-confrontational, personal way</td>
</tr>
<tr>
<td>ASSIST</td>
<td>Ready to quit Identify smoking triggers and plan coping strategies Discuss barriers to quitting Provide information about health effects, quitting and withdrawal Recommend a healthy lifestyle and regular exercise Encourage support from family and friends Pharmacotherapy if nicotine dependent Set a quit date</td>
</tr>
<tr>
<td>ARRANGE</td>
<td>Arrange follow up visits to Give praise and encouragement Review progress and problems Encourage continued use of pharmacotherapy</td>
</tr>
</tbody>
</table>

*Adapted from Supporting smoking cessation: A guide for health professionals11 and www.ncsct.co.uk*
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Table 1. Barriers to smoking cessation

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight gain</td>
<td>Many smokers with mental illness are overweight because of an unhealthy lifestyle and the effects of psychiatric medication; weight gain, on average, is 2-3 kg five years after quitting compared with continuing smokers; intensive dietary advice is not recommended; advise patients to eat sensibly and exercise regularly; focus on stopping smoking in the short term, and deal with any weight gain later.</td>
</tr>
<tr>
<td>Coping with stress</td>
<td>Explain to smokers that smoking actually increases stress and that they will be more relaxed after quitting and enjoy improved mental health; suggest other healthier and more effective ways to relax.</td>
</tr>
<tr>
<td>Withdrawal from nicotine</td>
<td>Smokers with mental illness are more nicotine dependent and are likely to have more severe cravings and nicotine withdrawal; nicotine withdrawal symptoms are at their worst in the first week and typically last 2-4 weeks; they can usually be controlled with stop-smoking medications and behavioural strategies, such as distraction techniques and avoiding smoking triggers.</td>
</tr>
<tr>
<td>Fear of failure</td>
<td>Explain that failed attempts are a normal part of the quitting journey; smokers learn from these efforts, and they increase the chance of success next time; furthermore, with the right professional counselling, support and medication, the odds of success are much higher.</td>
</tr>
</tbody>
</table>

Table 2. Approved drugs for treating nicotine dependence

<table>
<thead>
<tr>
<th>Drug</th>
<th>Course of treatment</th>
<th>Rx</th>
<th>Common adverse effects</th>
<th>Directions of use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine lozenges 2mg, 4mg</td>
<td>12 weeks</td>
<td>OTC</td>
<td>Nausea, headaches, fatigue</td>
<td>Use 1-2 sprays every 30-60 minutes for fast craving relief. Use under tongue or inside of cheek.</td>
</tr>
<tr>
<td>Nicotine mini lozenges 1.5mg, 4mg</td>
<td>12 weeks</td>
<td>OTC</td>
<td>Nausea, headaches, fatigue</td>
<td>Fast-acting craving relief for less dependent smokers (TTFD ≤30 min); place on tongue and allow to dissolve; dissolve in 2-3 mins.</td>
</tr>
<tr>
<td>Nicotine inhalator 15mg per cartridge</td>
<td>12 weeks</td>
<td>OTC</td>
<td>Hiccups, nausea, joint pain, fatigue</td>
<td>Fast-acting craving relief for less dependent smokers (TTFD ≤30 min); place on tongue and allow to disolve; dissolve in 2-3 mins.</td>
</tr>
</tbody>
</table>

NRT. Treatment is usually started with a daily nicotine patch, and oral NRT products are added on as needed or on a regular basis, for example, hourly.

In general, patients often use too little nicotine; the dose should be increased until cravings and withdrawal symptoms are relieved. Patients also tend to stop NRT too soon and should be encouraged to take a full course of at least 8-12 weeks.

Starting the patch two weeks before quit day increases quit rates by a further 35% compared with starting on quit day.1 Adding a second patch may be required for more dependent smokers and provides a modest additional increase in quit rates.

Adherence to NRT is often poor, partly because of misguided concerns about safety and addictive- ness.19,20 Some have found that if smokers are given accurate information about NRT, they are much more likely to use it. Patients should be advised that nicotine causes relatively few significant health effects, except in pregnancy, and NRT is always safer than smoking. It delivers nicotine more slowly than smoking and in lower doses, and the risk of addiction is lower.

It is also vital to instruct patients on the correct use of the oral forms of NRT as they are often used incorrectly, resulting in lower effectiveness and more side effects (see table 2). Patients should be advised not to drink or eat immediately before and while using any form of oral NRT.

Varenicline

Varenicline is the most effective monotherapy for smoking cessation.21 As well as reducing cravings and nicotine withdrawal symptoms, it lessens the reward or enjoyment of smoking.

Use of varenicline in smokers with depression and schizophrenia has found it to be safe and effective. Varenicline may be especially useful for smokers who at cont’d page 24
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heavy drinkers because it reduces alcohol cravings and intake — inde-
pendently of smoking cessation.

The starting dose of varenicline is 0.5mg daily for three days, then 0.5mg twice daily for four days and then 1mg twice daily. About 30% of patients get nausea from varenicline; however, it is usually mild to moder-
ate and generally settles within a few days. Nausea can be minimised by a slow up-titration and by taking the tablets with a full meal.

The patient can quit any time between days 8 and 35, either with a predetermined quit date or when the smoker feels ready. A minimum course of 12 weeks is recommended. An additional 12-week course can help prevent relapse and increase quit rates further.

Since November 2014, a second six-month course of varenicline can be prescribed in a 12-month period on the PBS if the smoker has relapsed. Retreatment has the same success rates as the initial course. As varenicline does not undergo liver metabolism, it has no clinically significant drug interactions and can be used in combination with psy-
chotropic medications.

After varenicline was initially marketed, there were widespread reports of depressed mood, agita-
tion, changes in behaviour, suicide ideation and suicide in patients taking the drug. Subsequently, large population studies, RCTs and meta-analyses have not found an increased risk or causal link with varenicline. RCTs in patients with depression and schizophrenia have also not found any increased risk of neuropsychiatric adverse events.

Varenicline can be confidently prescribed for smokers with stable mental illness. The current guide-
lines recommend advising patients of the reported side effects and to watch for any changes in mood or behaviour. Patients should stop the drug at the first sign of unex-
plained symptoms and contact their doctor.

**Bupropion**

Bupropion is an antidepressant that has similar efficacy to a single NRT agent for smoking cessation. Although it can relieve depressive symptoms, there is no evidence that it is more effective in smokers with current or past depression than in those without. There is also good evidence for the effectiveness of bupropion in schizophrenia, with a Cochrane review finding it is well tolerated and triples quit rates com-
pared with placebo at six months.

Bupropion is commenced one week prior to smoking cessation. Treatment is started with a 150mg tablet daily for three days, followed by one tablet twice daily for a nine-
week course. The main concern with the use of bupropion is a small risk of seizure (about one in 1000). The drug is contraindicated in patients with a history of seizures, eating disorders, head trauma and alcohol dependence.

Bupropion has a wide range of potential drug interactions. It should be used with caution with other antidepressants and other psychotropics because co-administration can lower the seizure threshold. It is contraindicated in patients with monoamine oxidase inhibitors. Bupropion also induces the metabolism of seroto-
nin re-uptake inhibitors, tricyclic antidepressants, mirtazapine and antipsychotics, resulting in increased plasma levels of these drugs.

**Harm reduction**

Many smokers with mental ill-
ness are not able or willing to quit but are prepared to reduce their cigarette intake. Harm reduction involves providing the nicotine that smokers need in a safer form with-
out the toxins that cause most of the adverse health effects of smoking. Long-term use of nicotine is thought to be generally safe, except in preg-
nancy.

The use of a nicotine patch while smoking is safe and roughly dou-
bles the chance of quitting over time. NRT also reduces the intens-
ity of smoking and the intake of toxins; however, it is not known if this translates into improved health outcomes.

Another promising alternative is the electronic cigarette (e-cigarette).

E-cigarettes are battery-powered devices that simulate smoking by delivering nicotine and addressing the behavioural, sensory and social aspects of smoking. As there is no combustion, there is no tar or car-
bon monoxide in the inhaled aeros-
ol, and e-cigarettes are thought to be at least 95% safer than smok-
ing.

Smokers with mental illness can reduce their cigarette intake using e-cigarettes, and they find them more acceptable than NRT.

A study of smokers with schizo-
phrenia found that e-cigarettes substantially decreased cigarette consumption and appeared to be a safe harm-reduction strategy in this challenging population. Patients who quit smoking altogether and replace it with long-term e-cigarette use could expect substantial health gains.

Table 3: Clinically relevant psychotropic drug interactions with smoking

<table>
<thead>
<tr>
<th>Class</th>
<th>Medication</th>
<th>Clinical importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotics</td>
<td>Clozapine, olanzapine</td>
<td>+++</td>
</tr>
<tr>
<td></td>
<td>Haloperidol, chlorpromazine, fluphenazine</td>
<td>+</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>Fluoxetine, mirtazapine, imipramine</td>
<td>++</td>
</tr>
<tr>
<td>Others</td>
<td>Benztropines, beta blockers</td>
<td>+</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>Alcohol, caffeine</td>
<td>+++</td>
</tr>
</tbody>
</table>

**Online resources**


RACGP
Supporting smoking cessation: A guide for health professionals
bit.ly/1JwPXOZ
Smoking cessation pharmacotherapy treatment algorithm
bit.ly/1ThEyM

Royal Australasian College of Physicians
Smoking cessation training module
login required
steaming.raco.edu.au
(go to the tab ‘Addiction Medicine’)

Quitnow
Quitnow mental health specific information, go to the tab ‘I want info on’ and then ‘Mental Illness and quitting’ (information sheets for health professionals and patients)
www.quitnow.gov.au

NPS Medicinewise
Stop smoking — what works for your patients?
bit.ly/1hFe1b

Australian Association of Smoking Cessation Professionals
aascp.org.au

SANE
Go to the tab ‘Information’ and select ‘FactSheets + Podcasts’. Under ‘Mind + Body’ select ‘Smoking and mental illness’ (patient information sheet)
www.sane.org

National Centre for Smoking Cessation and Training
www.ncscct.co.uk

References
Available on request from howtotreat@cirrusmedia.com.au

Declaration of interest
The author is a member of Pfizer Australia’s Advisory Board and has received payment for consultations, lectures, travel and meeting expenses unrelated to this work from Pfizer, GlaxoSmithKline and Johnson & Johnson Pacific.

TORRACO smoke reduces the blood levels of a number of psy-
chotropic drugs by inducing the cytokthyme P450 enzyme CYPIA2 (see table 3). The plasma levels of these drugs can rise significantly within days of quitting or reducing cigarette consumption to fewer than seven cigarettes a day. This effect is largely due to the polyyclic aro-
matic hydrocarbons in smoke, not nicotine. NRT does not affect medi-
cation levels.

Drugs with a narrow therapeu-
tic range, such as clozapine and olanzapine, may require early dose reduction after quitting. Patients need monitoring for increased seda-
tion or other side effects, as well as more regular testing of clozapine levels. However, many quit attempts will not be successful, and medica-
tion doses may need to be increased promptly if smoking is resumed.

Reductions in caffeine intake may also be necessary. After quitting, ris-
ing caffeine levels can cause caffeine toxicity, which can mimic nicotine withdrawal or an exacerbation of mental illness.

Interactions between smoking and psychotropic drugs

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Case study

KATE is a 43-year-old office worker who lives with her non-smoking husband and two teenage children. She has a history of recurrent major depression but is currently stable on sertraline 50mg daily.

She smokes 16 cigarettes a day and has drinks after work (‘with the girls’ once or twice a week). She goes for a walk with her husband on Sunday mornings but does no other exercise. She drinks five cups of coffee and has a 600mL bottle of diet cola each day.

Kate uses smoking to relax when feeling stressed. She also smokes with coffee and when drinking alcohol.

Kate has tried to quit several times in the past using nicotine patches or gum. She is reluctant to try again because she is not sure she can succeed and is concerned about gaining weight.

You explain to Kate that failed attempts are a normal part of the quitting journey and encourage her to keep trying. You tell her that smoking is not an effective strategy for stress and that her mental health and depression will likely improve after quitting. Kate agrees to try again.

You tell her that the average weight gain is only 2-3kg after quitting, but this can be reduced with regular exercise and sensible eating.

While the weight gain is important to her, you encourage her to focus on stopping smoking for now and deal with the weight gain later. Kate agrees to start regular exercise, which will also help her depression.

You discuss her smoking triggers and develop some coping strategies. For example, she agrees to forget drinks with the girls for 2-3 weeks to avoid the temptation to smoke. She should also reduce her caffeine intake by half to avoid caffeine toxicity after quitting.

Kate wants to try a different medication this time — so you suggest varenicline. You advise her to take the tablets with meals to reduce the risk of nausea. She should quit smoking when she feels ready over the next few weeks and should continue the tablets for at least 12 weeks.

You explain that there have been reports of anxiety, depression, changes in behaviour and suicide in people taking the drug but that there is no scientific evidence that varenicline has caused these problems. You advise Kate and her husband to watch for any unexplained symptoms and to contact you if they are concerned at any time.

Kate is excited that she may be able to do it this time, and she will ask her husband to support her. You arrange an appointment for a follow-up visit in one week.

How to Treat Quiz

Helping smokers with mental illness — 2 October 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


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.australiandocotor.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.

1. Which THREE statements regarding people with mental illness are correct?
   a) People with mental illness have higher smoking rates compared with the general population.
   b) People with mental illness have higher levels of nicotine dependence compared with the general population.
   c) People with mental illness are more likely to die from this condition than from smoking-related disorders.
   d) People with mental illness have lower smoking cessation rates compared with the general population.

2. Which TWO statements regarding the prevalence of smoking and mental health are true?
   a) Although smoking rates in Australia have declined significantly in recent years, the prevalence of smoking in patients with mental illness remains high.
   b) In general, the more severe the psychiatric illness, the lower the smoking rate.
   c) Cigarette smoke reduces the metabolism of many psychotropic drugs, raising drug levels in the blood.
   d) Smokers with mental illness smoke more heavily than other smokers.

3. Which THREE statements are correct?
   a) People with all categories of mental illness have significantly poorer physical health than the rest of the population.
   b) Much of the excess mortality in those with mental illness who smoke is related to suicide.
   c) Smoking cessation is associated with improved mental wellbeing.
   d) Smoking cessation is associated with improvements in quality of life.

4. Which TWO statements regarding the stress paradox are correct?
   a) Smokers often report that smoking helps them cope with stress.
   b) Smoking relieves stress.
   c) Nicotine is a stimulant that releases noradrenaline and cortisol.
   d) Smokers often have lower levels of stress.

5. Which THREE statements regarding nicotine dependence are correct?
   a) The level of nicotine dependence is a predictor of withdrawal symptoms and the intensity of treatment required.
   b) Dependence can be assessed by asking patients the following question: “How many minutes after waking do you have your first cigarette of the day?”
   c) Smokers with mental illness have lower levels of nicotine dependence than other smokers.
   d) Smoking within 30 minutes of waking is a reliable indicator of nicotine dependence.

6. Which THREE statements regarding smoking and specific disorders are correct?
   a) Depressive disorders comprise the largest mental health diagnostic group among smokers.
   b) People with anxiety disorders have a double the smoking rate of the general population.
   c) Patients with depression are highly motivated to quit, but quit rates are lower in those with recurrent depression than in those with a single episode.
   d) There is no increase in the risk of major depression or suicide during or after cessation.

7. Which TWO statements regarding smoking and specific disorders are correct?
   a) Smoking improves the cognitive deficits in schizophrenia and may improve negative symptoms.
   b) Patients with schizophrenia often deteriorate when they quit smoking.
   c) Substance users have very high smoking rates.
   d) When treating patients who smoke for substance abuse, wean off all the other substances first and deal with the smoking last.

8. Which THREE statements regarding treatment are correct?
   a) The best results occur when behavioural counselling and support are combined with pharmacotherapy.
   b) Effective strategies for coping with smoking triggers are distraction and avoidance.
   c) In those with mental illness, it is often best to stop trying to get them to quit after the second failed attempt.
   d) You should identify and discuss barriers to quitting.

9. Which THREE statements regarding treatment are correct?
   a) Australian guidelines recommend pharmacotherapy for all nicotine-dependent smokers who wish to quit.
   b) Varenicline and bupropion are available over the counter.
   c) All-step smoking medications work by reducing cravings and relieving nicotine withdrawal symptoms.
   d) Combining the nicotine patch with an oral form of nicotine replacement therapy is significantly more effective than the patch alone.

10. Which THREE statements regarding treatment are correct?
    a) Varenicline is the most effective pharmacotherapy for smoking cessation.
    b) Bupropion is contraindicated in schizophrenia.
    c) Bupropion is an antidepressant that has similar efficacy to a single nicotine replacement therapy agent for smoking cessation.
    d) Bupropion has a wide range of potential drug interactions.

Summary

One in three people with mental illness smoke.

Smokers with mental illness are far more likely to die from smoking-related disease than from mental illness.

Smoking actually increases stress levels, and smokers are more relaxed and less depressed after quitting.

Smokers with mental illness are as motivated to quit as other smokers and can quit successfully, albeit with lower success rates.

Quitting does not generally lead to an exacerbation of mental illness; on the contrary, mental health often improves.

The same evidence-based therapies are used as are used for the general population; however, more intensive and prolonged support may be needed.

Harm-reduction strategies should be considered for those not willing or able to quit.

Doses of some psychotropic medications may need to be reduced after quitting.

NEXT week’s How to Treat discusses the management of two common injuries in the ‘weekend warrior’: acute Achilles tendon rupture, and the ankle sprain that doesn’t progress.