medical observer

UPDATE
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Smoking cessation

THIS Update will focus on practical, evidence-based strategies that GPs can use to help their patients stop smoking. A very brief intervention is described for busy GPs, as well as a more detailed strategy for when more time is available.

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Introduction

Helping a smoker to quit is one of the most clinically effective and cost-effective interventions in general practice. Even brief interventions of 2—3 minutes by the general practitioner can significantly enhance success rates. 1

Studies have consistently shown that addressing smoking improves patient satisfaction with the consultation.

Most smokers want to quit smoking and approximately 40% try to do so at least once each year. However, nicotine dependence is a powerful substance use disorder and only 3—5% of unaided quit attempts are successful 6—12 months later. 2

Quitting smoking is an urgent health priority. After about 35 years of age, six hours of life expectancy is permanently lost on average for each day of continued smoking. 3

Smokers live 10 years less than non-smokers, and one in two long-term smokers will die prematurely from a smoking-related disease. 3 However, the good news for smokers is that the benefits of quitting are substantial and rapid.

Eighteen per cent of adult Australians currently smoke. Smoking rates are especially high in disadvantaged populations, such as Indigenous people, patients with mental illness, lower socioeconomic groups and people with other substance use disorders.

GP intervention

GPs should systematically ask all patients if they smoke and record the smoking status in the medical record. 4 Smokers need to be reassessed and reengaged at every opportunity.

The most effective way to quit smoking is with a combination of professional counselling and pharmacotherapy. Counselling addresses the behavioural (habit) aspects of smoking and pharmacotherapy assists with the nicotine dependence.

Pharmacotherapy is recommended for all nicotine-dependent smokers who are ready to quit. Smoking within 30 minutes of waking is a reliable sign of nicotine dependence. Cravings and withdrawal symptoms experienced in previous quit attempts are also a useful guide.

Very brief advice

An effective, evidence-based intervention can be delivered in as little as 30 seconds to all smokers irrespective of their current readiness to quit, using the Ask-Advise-Refer protocol: 5

- Ask all patients if they smoke.
- Advise that the best way of quitting is with a combination of behavioural support and medication.
- Refer patients to a specialist provider for assistance.
- Smokers can be referred to a variety of providers.

These include:

- The practice nurse. Nurses can provide counselling and support in collaboration with the GP, who can prescribe medication.
- Quitline (137 848). Free telephone counselling is available Australia wide. GPs can refer patients by faxing a Quitline referral sheet to the local Quitline service in their state.
- A tobacco treatment specialist. To find an accredited tobacco treatment specialist in your area, go to the website of the Australian Association of Smoking Cessation Professionals (www.aascp.org.au) and enter a location in the search box.

More intensive interventions

Spending more time counselling the patient and providing follow-up visits increases quit rates further. 1 More intensive interventions for smokers who are ready to quit are based on the 5As framework recommended by the Australian Smoking Cessation Guidelines. 6 (Table 1)

Educate and motivate

Discuss the journey of quitting and describe what the patient can expect. 7 (Table 2)

Plan coping strategies

Identify the situations, people or moods that trigger the desire for a cigarette, and plan coping strategies for dealing with them, such as:

- The smell of smoke. It is best to avoid places where people smoke, especially in the first 2—3 weeks. Patients could spend more time with non-smoking friends and ask others to smoke outside.
- Boredom. Advise patients to keep busy, for example taking up a hobby or sport, or doing some volunteer work.
- Stress. Strategies include regular exercise, learning a relaxation technique (such as deep breathing or meditation) or getting professional counselling.

Discuss barriers to quitting

Smokers often have barriers to quitting. Provide accurate information about these barriers and help the smoker develop strategies to deal with them. (Table 3)

Table 1

5As approach

Ask: Regularly ask all patients if they smoke and record the information in the medical record. Assess: Assess the smoker's interest in quitting ('How do you feel about your smoking?') and the level of nicotine dependence ('Do you smoke within 30 minutes of waking?') Advise: Advise all smokers to quit in a clear, non-confrontational way ('The best thing you can do for your health is to quit smoking'). Assist: Provide counselling and pharmacotherapy to help the smoker quit. Arrange: Organise follow-up visits to increase the chance of success.
Ref. (6)

Table 2

Nicotine withdrawal symptoms (DSM-5)

1. Irritability, frustration, or anger. 2. Anxiety. 3. Difficulty concentrating. 4. Increased appetite. 5. Restlessness. 6. Depressed mood. 7. Insomnia.
Reference (7)

Table 3

Barriers to quitting smoking

Barrier	Discussion
Weight gain	Weight gain on average after quitting is 4-5kg after 12 months. The health benefits of quitting almost always are greater than the health effect of the extra weight. Intensive dietary advice is not recommended. Advise the patient to eat sensibly and exercise regularly. Focus on stopping smoking in the short term and deal with any weight gain later. About 1 in 5 quitters do not gain weight.
Coping with stress	Explain to smokers that smoking actually increases stress and that they will be more relaxed after quitting. Smokers experience repeated episodes of anxiety and restlessness during the day due to nicotine withdrawal between cigarettes. When a cigarette relieves these symptoms they naturally assume that the cigarette is relaxing them. Suggest other healthier and more effective ways to relax.
Withdrawal from nicotine	Cravings only last 2-3 minutes, although that may feel like forever! Cravings get weaker and less frequent over time but can persist for many years. 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.
Fear of failure	Explain that most ex-smokers made a number of quitting attempts before finally being successful. Unsuccessful quit attempts can be reframed as learning experiences and can increase the chance of success next time. Furthermore, with the right professional counselling, support and medication, the odds of success are much higher.
Peer or social pressure	It may be best to avoid smoking friends for the first few weeks. Suggest asking friends not to offer cigarettes and if possible not to smoke around your patient. If necessary, leave the room while they smoke. Discuss how to respond if offered a cigarette. If the partner smokes, ask him or her to smoke outside.

Lifestyle changes

Suggest new interests to occupy the extra time available after quitting, as they can be useful distractions when the urge to smoke strikes. Physical activity is recommended for smokers trying to quit, as it reduces craving, eases stress and reduces weight gain.

Reduce alcohol and caffeine

Alcohol is strongly associated with smoking. Avoid it in the first 2—3 weeks and reduce intake thereafter. Advise smokers to reduce caffeine by half, as caffeine blood levels rise after quitting.

Social support

Advise smokers to tell family and friends they are quitting and ask for support.

Set a quit date

Set a date in the next couple of weeks and emphasise the 'not-

a-puff' rule after quitting.

Follow-up visits

See the patient for support and advice after quitting, especially in the first few weeks when the risk of relapse is greatest. At follow-up visits, provide praise and encouragement, review any slips and ensure the correct, adequate use of medication.

Key points

- Most smokers want to quit smoking and approximately 40% try to do so at least once each year.
- The most effective way to quit smoking is with a combination of professional counselling and pharmacotherapy.

Pharmacotherapy

First-line treatments available are nicotine replacement therapy, varenicline and bupropion. 6 Nicotine patches, varenicline and bupropion are subsidised by the Pharmaceutical Benefits Scheme (PBS). All medications increase quit rates by up to three times compared with placebo by relieving cravings and reducing nicotine withdrawal symptoms. 8 There is no evidence that weaning medication is more effective than abrupt cessation.

The choice for each patient is based on past experience, side effects, efficacy, contraindications, drug interactions, patient preferences and cost.

Nicotine replacement therapy (NRT)

Two forms of NRT are available:

- Long-acting form: The nicotine patch provides a steady background level of nicotine throughout the day.
- Quick-acting oral forms: Nicotine gum, lozenge, inhalator and mouth spray deliver intermittent doses and relieve acute cravings.

There is considerable misinformation about the safety, effectiveness, addictiveness and correct use of therapeutic nicotine, which results in it being used sub optimally or not at all. 9

Research has found that if smokers are given accurate information, they are much more likely to use NRT. General practitioners should proactively discuss these issues with their patients, particularly concerns about safety.

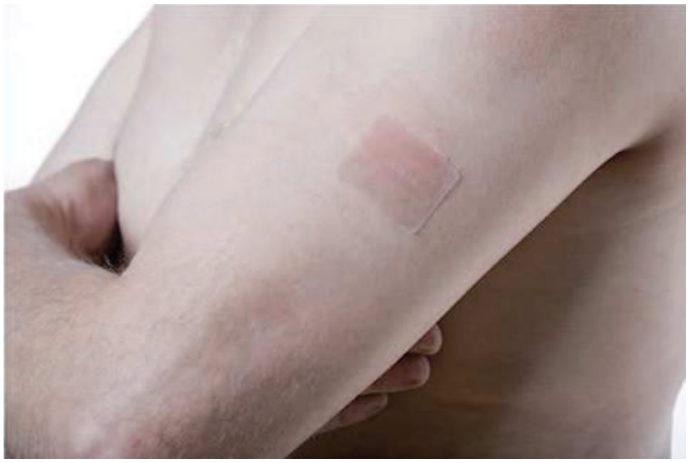
Nicotine is not the major toxic ingredient in tobacco, and NRT has a strong safety record. Nicotine does not cause cancer or respiratory disease and has only a minor role in cardiovascular disease. Using NRT is always safer than smoking. 4

All forms of NRT deliver nicotine much more slowly than cigarettes, and NRT has low or no abuse potential. In any case, the adverse effects of long-term NRT are negligible compared with smoking.

Ensure correct use of NRT

The quick-acting forms of NRT are often used incorrectly, resulting in reduced effectiveness and increased side effects. It is therefore important to give patients detailed instructions on correct use and to review their technique at every opportunity. Patients should be advised not to drink or eat immediately before and while using any form of oral NRT.

Recommend an adequate dose



In general, patients using NRT receive too little nicotine, partly due to misguided concerns about safety. 9 Those who smoke 10 or more cigarettes per day should start with a full strength patch (21mg/24 hours or 25 mg/16 hours). The stronger 4mg gum or lozenges are advised for more addicted smokers, such as those who smoke within 30 minutes of waking.

Blood nicotine levels from the recommended doses of NRT are about half those of regular smoking, so the initial dose can be safely titrated upwards. In general, the dose needs to be sufficient to relieve cravings and withdrawal symptoms.

Higher doses of the nicotine products have been shown to be safe and significantly increase quit rates.

Use a full course

Patients often stop NRT too soon. Emphasise the importance of using a full course of 8—12 weeks of treatment to allow time to break the smoking habit, even if the patient is feeling confident.

Encourage combination therapy

Combining the nicotine patch with an oral form of NRT increases quit rates by an additional one third, compared to using the patch alone. 10

Combining the nicotine patch with an oral form of NRT increases quit rates by a third.

Combination NRT is as effective as varenicline and is well tolerated.8

Many experts now recommend combination therapy for all dependent smokers using NRT, rather than monotherapy (a single product). 4

Recommend pre-quit patch use

Starting a nicotine patch two weeks before quit day increases success rates by 35% over and above the tr aditional quit day application. 10

Smoking while using NRT is safe and is not associated with any additional adverse reactions.

Patients need to be reassured about this.

Use oral NRT for smoking triggers

Oral forms of NRT, such as the nicotine mouth spray, significantly reduce the intensity of cravings caused by smoking triggers and help to prevent relapse. Advise patients to carry a quick-acting nicotine product such as the mouth spray during

treatment and after quitting to help them cope with smoking triggers.

Varenicline

Varenicline is the most effective monotherapy for smoking cessation. Smokers using varenicline are advised to quit in the second week. However, quitting can be delayed for several weeks if the patient is not ready. A full 12-week course is recommended.

A second 12-week course increases quit rates further.

About 30% of patients get nausea from varenicline. However, it is usually mild to moderate and generally settles within a few days. Nausea can be minimised by a slow upwards titration and by taking the tablets with a full meal. Other side effects include headache, insomnia, disturbed dreams and drowsiness.

After the launch of varenicline, there were spontaneous reports of depression, suicidal thoughts, agitation or changes in behaviour. However, scientific evidence has been recently accumulating supporting the safety of varenicline. The current view is that there is no evidence of a causal link between varenicline and neuropsychiatric adverse events. 11

The Australian guidelines advise that doctors inform patients of possible adverse effects from varenicline and monitor them for mood or behaviour changes, especially those with mental illness. 6

Bupropion

Bupropion is also an effective aid to quitting and is generally well tolerated. The main risk from bupropion is a one in 1000 incidence of seizures and it is contraindicated in patients with increased seizure risk. A course of treatment is eight weeks.

What's new in smoking cessation?

Should I recommend e-cigarettes?

Electronic cigarettes (e-cigarettes) are battery operated devices that deliver a nicotine vapour and mimic the look and feel of conventional cigarettes. When puffed, a fine mist is inhaled without carbon monoxide or the other toxic ingredients in tobacco smoke.

E-cigarettes are mainly used as an aid to quitting or to help reduce the number of cigarettes smoked. A small number of scientific trials have shown some promise for e-cigarettes; however there is not yet sufficient evidence to conclude that they are effective.

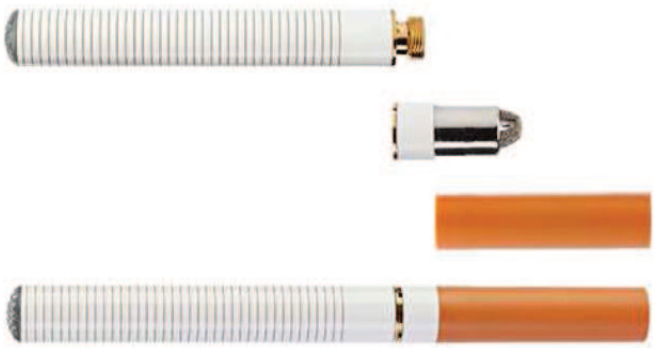
There is not yet sufficient evidence to conclude that e-cigarettes are an effective quitting aid.

E-cigarettes are likely to be much safer than smoking, however there are no long-term studies and further research on safety is needed. Small amounts of toxic compounds have been found in the vapour from some e-cigarette brands. However, the levels are substantially less than those in cigarette smoke, and in many cases they are comparable with the levels in NRT.

E-cigarettes are not regulated and there are quality control issues with some products. There are also concerns that they may act as a gateway to smoking and that the use of e-cigarettes in public places could re-normalise smoking by giving the appearance that smoking behaviour is more acceptable.

The first-line, evidence-based, approved pharmacotherapies discussed above are recommended initially for smokers wishing to quit. However, for those who have failed to quit with current approved therapies, e-cigarettes offer an alternative method of quitting. They may be especially beneficial for smokers for whom handling cigarettes is an important part of their smoking ritual.

The risks and benefits of e-cigarettes should be explained to the patient. The final decision to use them or not belongs to the smoker.



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