Smoking and GPs: time to cough up
Successful interventions in general practice

BACKGROUND Smoking is the largest single preventable cause of death and disease in Australia. Tobacco smoking causes an estimated 19,000 deaths and 142,500 hospital admissions per year. Approximately 23% of the population are smokers. Patients see general practitioners as having a key and supportive role in smoking cessation. Brief, repeated nonjudgmental advice by a GP is effective. However, GPs only identify just over half the smokers in their practice and counsel just a third to quit smoking.

OBJECTIVE This article discusses the role of the GP, provides a summary of the recent Australian smoking cessation guidelines, touches on the range of effective interventions available to GPs in their practices, and outlines an approach that can be offered routinely to all patients who smoke.

DISCUSSION The implementation of smoking cessation by GPs can be significantly improved by the adoption of a systematic (whole practice) approach to smoking cessation, a more strategic approach to counselling, and utilisation of the 5As model. Motivational interviewing techniques to provide brief, behavioural counselling to patients who smoke, and more effective use of practice nurses and the active call back line offered by the Quit program are important strategies.

In a recent comparison of the burden of illness of a number of conditions – and the impact of a wide range of preventive activities to address them – assessment of tobacco use in adults and provision of smoking cessation counselling ranked second, with only immunisation of children having a greater priority. A 50 year follow up of a British doctors’ smoking cohort demonstrated the increasing morbidity associated with early and heavy smoking (with up to two-thirds dying as a result of their smoking), and that the benefits of quitting were even more demonstrable than previously reported.

Approximately 23% of the population are smokers. Just over half are seriously thinking about quitting in the next 6 months, and nearly half of all smokers have made an attempt to quit in the past 12 months. However, general practitioners identify only just over half the smokers in their practice and counsel just a third to quit.

How can GPs be more effective?

Effectiveness reflects the impact in real world settings. It is the product of efficacy, reach and uptake. Effective delivery of smoking cessation requires two sets of strategies:
• utilising efficacious counselling strategies with a patient who smokes, and
• ensuring that all patients who smoke are offered these strategies.

Understand the counselling dose response curve

Increasing the amount of time spent counselling a patient about lifestyle change will generally be associated with a larger impact, but in most

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circumstances, this will not be a linear effect, ie. spending twice as long is generally not associated with being twice as effective (diminishing effect).  

**Focus on coverage as well as efficacy**

General practitioners tend to focus on trying to improve their effectiveness by improving efficacy rather than improving coverage. However, improving coverage may produce a higher return for effort.  

Table 1 shows the impact of both coverage and GP efficacy on quit rates. The GP efficacy has been drawn from randomised trials of brief GP advice for smoking cessation. The reach is the number of smokers GPs report that they could counsel using the specified average time per patient approach. Spending one minute on prevention with more patients rather than more time on less patients is usually a more effective strategy to achieve results. Consider the following two approaches.

The 1 minute strategy, which reflects current GP time spent on smoking, is considered first. General practitioners estimate that this would be feasible to provide to about 60 out of every 100 smokers seen in their practices. Hence, in a typical week where a GP sees 150 patients, and 30 patients (20% of 150) are smokers, this would mean providing brief 1 minute counselling to about 18 patients a week with a return of 1–2 quitters for spending 18 minutes in total.

If, on the other hand, GPs decided to spend 10 minutes on average per smoker, then the efficacy improves from 10% to 16%. At the same time, GPs report that they could only offer this with 10 out every 100 smokers. The total time spent with these smokers is the 100 minutes (10 smokers x 10 minutes per smoker) to yield 1–2 quitters. In a typical week, the GP would see 30 smokers (20% of the 150 patients per week) and counsel three of them. After three and half weeks they would have counselled 10 patients. The time spent to achieve one quitter is 67 minutes, or twice as long as using the 1 minute strategy.

The loss of efficiency occurs for two reasons: less patients are counselled (three vs. 18 per week) using the 10 minute average approach when compared with the 1 minute approach, and the improvement in efficacy is only 6%, despite the GP spending twice as long (on average) per patient.

**Use efficacious interventions**

Effective implementation strategies can be relatively simple, for example:

- survey patient interest in quitting and flag all case notes with smoking status
- use trained practice nurses to provide brief smoking cessation counselling, and
- link to telephone counselling support.

The 5As approach is described in detail elsewhere, but in summary involves:

- Ask (identify all smokers in your practice)
- Assess (interest and confidence in quitting using motivational interviewing techniques together with assessment of level of nicotine dependence)
- Advise (clear, nonjudgmental advice to quit)
- Assist (give patient a Quit book and offer pharmacotherapy), and
- Arrange (referral to Quit program and offer follow up appointment) (see Resources).

**Be more strategic in the selection of interventions**

A number of systematic reviews have demonstrated that implementation strategies need to be combined strategically, addressing the identified barriers and using a conceptual framework. General practitioners can double their effectiveness in assisting patients to quit smoking by:

- systematically identifying patients who smoke in their practice
- focussing on smokers who express an interest in quitting
- offering pharmacotherapy, eg. nicotine replacement therapy
- organising support, and
- arranging a follow up appointment.

The quit rate can be increased up to fourfold by engaging the patient in an active call back program, eg. the Quitline. While all patients who smoke are likely
to gain some benefit from quitting, the earlier in their smoking history the better.2 Smokers with coexisting smoking related morbidity may gain more in the short term than smokers who are asymptomatic.21

Refer to effective alternative delivery agents
As mentioned above, a range of other health care professionals and organisations can provide similar effectiveness to the GP, often at a lower cost.22

Case study – Joanne S
Joanne is a single mother with two children, Courtney aged 8 years and Sam aged 5 years. She has brought Courtney in to see you. Courtney has had an URTI for the past 3 days. She became wheezy this morning and has had a nagging cough. Courtney uses a reliever (Ventolin) as needed for her asthma, and has had one trip to a hospital emergency department in the past 2 years. The asthma is usually triggered by viral infections. Joanne’s other child Sam has had three episodes of otitis media in the past 2 years. There has been no evidence of a perforations or any hearing loss.

Your examination of Courtney demonstrates that she has a mild exacerbation of her asthma. After giving her some Ventolin via a spacer and instructing Joanne in what she needs to do over the next few days, you have a little time while waiting to see how Courtney responds to the Ventolin. You have an opportunity to talk to Joanne further about her smoking and its impact on her children.

Further information
Joanne has smoked for the past 15 years, 15 cigarettes per day. She finds smoking helps her to cope and relax. She finds looking after the children quite a handful. She has no smoking related symptoms or problems.

How would you raise the issue of Joanne’s smoking?

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Raising the issue
Most smokers are sensitive about their smoking and often react when asked about it. Similarly, most parents are very concerned about any actions on their part that may adversely affect the health or wellbeing of their children. Joanne may react defensively to a discussion of her smoking. Practical tips to minimise the likelihood of confrontation and aggravation are:

- normalise the enquiry
- avoid giving a lecture (even when it is your favourite topic) i.e. just raising the issue signals your concern
- provide the patient with time and space to work through the consequences of the information.
- seeing a connection between a behaviour and health consequences is a necessary first step in the quitting process.23 However, quitting is a complex process that requires tackling addiction to nicotine, the habit, and the psychological aspects of quitting
- understand their perspective. Ask them how they feel about their smoking? Acknowledge that quitting is difficult
- avoid premature advice. Providing advice to quit without exploring their interest to do so may enhance their resistance24
- maintain rapport/therapeutic alliance by working with the patient. Ensuring agreement on what the problem is and respecting the patient’s autonomy both facilitates the communication process and improves health outcomes25
- leave the door open. Patients see their GP 5–6 times a year.26 The next consultation with Joanne or her children could provide an opportunity to follow up where you left off.

Facilitating motivation
Motivational interviewing (MI) has been defined as ‘directive, patient centred counselling style for eliciting behaviour change by helping patients to explore and resolve ambivalence’,27 and is a useful approach to assessing Joanne’s interest in quitting. Core principles of MI24 include:

- adopting a patient centred approach
- expressing empathy, promoting autonomy and encouraging mutual participation
- letting the patient decide how much of a problem they have
- developing patient discrepancy between patient goals and current problem behaviour using the patient’s own expressed benefits (likes) and costs (dislikes) associated with health related behaviour
- avoiding argumentation by assuming that the patient is responsible for the decision to change
- rolling with resistance rather than confronting it, and
- supporting self efficacy and optimism for change.

Key strategies to guide your approach
Refer to self help materials for advice on quitting. Make it clear that you do not want to confront her directly and that you understand her concerns. Joanne may be receptive to suggestions for helping her children. Try to include her children in your discussion and ask the child’s opinion about their mother’s smoking. Acknowledge that: 

- ambivalence is normal
- patient decisions are rational,
• there is a need to consider both benefits and costs associated with smoking to highlight that patients make choices.24,27
Systematically explore both likes (benefits) and dislikes (costs) as perceived by the patient. (Table 2 shows this exercise for Joanne. Start with what the patient likes about their smoking. Use the decision balance to categorise their responses. The decision balance can be written into the case notes after either going through the categories together with the patient, or when the patient has filled it out separately and brings it back for discussion.

Let the patient decide how much of a problem they have
• Remember that patient’s believe what they hear themselves say
• Use the patient’s language and examples when exploring their concerns
• Encourage the patient to rate their motivation to quit out of 10. If the score is low, explore what would need to happen to increase this score, eg. ‘You state your motivation is 4 out of 10. What would have to happen to make this 8–9 out of 10?’ If it is high, why is it so high and not a lower score
• Repeat the process (score out of 10) for confidence to quit.

Avoid argumentation and confrontation
• Confrontation or moving ahead of the patient generates reactance/resistance and tends to entrench attitudes and behaviour
• Externalising the problem minimises reactance, eg. come alongside the patient, focus the ‘confrontation’ on the discrepant beliefs/values of the patient.

Encourage discrepancy
• Change is likely when a person’s behaviour is seen to conflict with their personal goals
• Conflict should be generated internally not between doctor and patient
• Highlighting the discrepancy and allowing the patient to make the connection generates self reflection and motivates change, eg. ‘What will happen in the next 6 months if you continue to smoke? What would happen if you quit?’

Conclusion
There is good evidence for the effectiveness of GP brief smoking cessation advice. Despite the availability of evidence, GPs counsel less than half of their patients who smoke. Effective strategies to improve GP performance include:
• the adoption of a systematic (whole practice) approach to smoking cessation that includes the

<table>
<thead>
<tr>
<th>Continue smoking</th>
<th>Likes</th>
<th>Dislikes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gives her a break from the children, a sense of time out</td>
<td>Cost of a packet of cigarettes does get to her</td>
</tr>
<tr>
<td></td>
<td>Most of her friends smoke</td>
<td>It is becoming increasingly difficult as the cost of cigarettes rise</td>
</tr>
<tr>
<td></td>
<td>It definitely helps with stress when she gets uptight</td>
<td>(it costs her $1800 a year)</td>
</tr>
<tr>
<td></td>
<td>It is one of the few things she has to look forward to</td>
<td>She is often nagged by her children who have seen</td>
</tr>
<tr>
<td></td>
<td>She enjoys it</td>
<td>antismoking ads on television</td>
</tr>
<tr>
<td></td>
<td>She sees it as her ‘one pleasure’</td>
<td>She had not been aware that it may worsen asthma or that it could</td>
</tr>
<tr>
<td>Quit smoking</td>
<td>Her children wouldn’t get sick as often</td>
<td>contribute to ear infections (otitis media)</td>
</tr>
<tr>
<td></td>
<td>Would save some money</td>
<td>Increased stress and she would be concerned how</td>
</tr>
<tr>
<td></td>
<td>Would make the children happy</td>
<td>she would cope, ie. it would be harder to deal with the</td>
</tr>
<tr>
<td></td>
<td>Sets a good example for the children (who may otherwise take up</td>
<td>children and cope generally</td>
</tr>
<tr>
<td></td>
<td>smoking)</td>
<td>It would take away one of her only social activities</td>
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<tr>
<td></td>
<td></td>
<td>with her friends</td>
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<td></td>
<td></td>
<td>She would lose her only ‘treat’; it’s the only thing she</td>
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<tr>
<td></td>
<td></td>
<td>does for herself and not the children</td>
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<tr>
<td></td>
<td></td>
<td>She would put on weight</td>
</tr>
</tbody>
</table>

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presence of a supportive organisational infrastructure
• a more strategic approach to counselling using the
  ‘less is more’ principle
• more effective use of practice nurses and the Quit
  program
• understanding and skills in motivational interviewing
  techniques
• utilisation of the 5As model to provide brief,
  behavioural counselling to patients who smoke.

Resources
• Quitline 131 848 www.quit.org.au
• A detailed summary of the 5As framework is outlined in
  Smoking cessation guidelines for Australian General Practice:
  health-pubhlth-publicat-document-smoking_cession-cnt.htm
• The 5As framework has also been summarised for GPs
  (and practice nurses) based upon which of the activities
  can be done when time is limited. www.cancersa.org.au/i-
  cms_file?page=544/GPdeskprompt.pdf
• GP Lifescript tools being developed as part of the
  Commonwealth Health Department Prevention Strategy

Conflict of interest: none declared.

References
   recommended clinical preventive services. Am J Prev Med
2. Doll R, Petro R, Boreham J, Sutherland I. Mortality in relation to
   smoking: 50 years observations on male British doctors. BMJ
   2004;328:1519.
3. White V, Hill D, Siapouh M, Bobevski I. How has the prevalence
   of cigarette smoking changed among Australian adults?
4. Owen N, Davies M. Smokers preferences for assistance with ces-
   practitioners' promotion of healthy life styles: what patients think.
7. Heywood A, Ring I, Sanson-Fisher R, Mudge P. Screening for
   cardiovascular disease and risk reduction counselling behaviours
8. Humair JP, Ward J. Smoking cessation strategies observed in
10. Glasgow R, Lichtenstein E, Marcus A. Why don't we see more
    translation of health promotion research to practice? Rethinking
    the efficacy-to-effectiveness transition. Am J Pub Health
11. Silagy C. Physician advice for smoking cessation. The Cochrane