Ray Croucher

Why and How to get Patients to Stop Smoking

Abstract: Despite the fact that smoking cigarettes harms oral and systemic health, there is little current evidence of successful primary dental care involvement in smoking cessation. This paper aims to present the arguments for developing the role of primary dental care in smoking cessation and reviews the current literature on how this can be achieved in practice. It is argued that it is timely to incorporate this rapidly developing evidence base on what works in smoking cessation into primary dental care activity.

Clinical Relevance: Smoking cessation offers a simple therapeutic approach to reduce a patient's oral disease risk, especially periodontitis and oral cancer.

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There is a general recognition of the health impact of smoking cigarettes. One in three adults throughout the world is a regular smoker. The US Surgeon General[1] has concluded that smoking harms nearly every organ of the body, causing many diseases and reducing the health of smokers in general. Quitting smoking has immediate as well as long-term benefits, reducing risks for disease caused by smoking and improving health in general. Premature death is prevented.

Encouraging adult smokers to quit forms part of a widely based tobacco control programme, which includes pricing and legislative measures. Dentists, like other primary healthcare workers, acknowledge that helping smokers stop is part of their role. In common with primary medical care, there would appear to be little evidence of the successful integration of this activity into routine clinical practice,[2,3,4] even though it is now formally acknowledged that smoking cessation is part of the practice of dentistry. The aim of this paper is, first, to outline reasons for primary dental care workers to become more involved in practice-based smoking cessation and, secondly, to describe how this proposed involvement could be implemented.

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Getting involved in practice-based smoking cessation

The following five reasons together make an important case for primary dental care workers to become involved in smoking cessation:

- Smoking and oral disease;
- Better evidence for effective training;
- Patient expectations;
- Policy development;
- Evidence-based quit smoking models.

Smoking and oral disease

Smoking contributes to oral disease. It has long been recognized that there is a causal relationship between smoking and cancers of the oral cavity. The list of diseases caused by smoking has now been expanded to include periodontitis.[1]

Evidence from cross-sectional and case-control studies demonstrate that adult smokers are about three times as likely as non-smokers to have periodontitis. Smokers respond poorly to periodontal therapy and dental implant treatment.[5] They also show poorer levels of improvement in probing depths and clinical attachment levels. Over time the rate of periodontal disease progression is increased in smokers but decreases to the level of non-smokers following successful smoking cessation.[6] It has been suggested that, rather than focus on costly interventions such as scaling and root planing, it would be more effective to consider simpler therapeutic approaches for periodontitis such as smoking cessation.[7] Periodontitis is no different from other diseases such as coronary heart disease. Between 1981 and 2000 more than half of the decrease in coronary heart disease mortality from this condition in England and Wales could be ascribed to changes in population risk factors, the major factor being reductions in smoking.[8] This demonstrates that smoking may be described as a common risk factor[9] and that offering smoking cessation advice in the dental practice will impact upon an individual's oral and systemic disease

risk. Helping smokers quit will also reduce exposure to second-hand smoke and lessen disease risk amongst non-smokers, including young children and the unborn child.

Better evidence for effective training

The evidence base for appropriate professional development and involvement in smoking cessation is strong. Dental undergraduates are now introduced to the skills of smoking cessation and patient communication as part of their initial training.[10] Younger general dental practitioners are more knowledgeable, confident and active in smoking cessation.[2] United States dental hygiene students report higher levels of training, assessed as adequate, for patient smoking cessation.[11] This study should be repeated in the United Kingdom. A recent systematic review identified interventions that both increase the activity of primary healthcare teams, through increased patient screening and advice giving rates, and also their patients' quit rates. Outreach practice-based support that encouraged revision of professional roles, review of record systems and the adoption of audit was found to be effective.[12] Adopting a team approach ensures that smoking cessation activity is cost-effective by minimizing demands upon dentists.[13] This might include identifying a practice 'smoking cessation champion' who, in addition to providing specialist smoking cessation support for patients, would have the responsibility of making sure that the practice was made aware of, and could participate in, current local and national initiatives. Job descriptions could also be reviewed so that applicants would be aware that they will be working in a smoke-free environment. Finally, the opportunity provided by the oral examination is beneficial for tobacco cessation activity and should be used fully. Being able to show the patient the oral impact of smoking brings greater cessation success.[14]

Patient expectations

There is evidence that patients expect dentists to be interested in their smoking status and to discuss smoking with them.[15] Three-quarters of the respondents in this study expected dentists to show an interest in their smoking status, whilst 60% expect smoking to be discussed during a dental visit. Sixty two per cent of non-smoking and 59% of smoking patients also reported that they would not change their dentist if the issue of smoking cessation was raised opportunistically.

Policy development

Financial incentives are becoming available following the creation of the national networks of smoking cessation services. Increased referrals are being sought from primary care practices, at a rate of 10 per 100 smokers per year, as each local service attempts to meet its expected contribution to national targets.[16] Alternatively, suitably trained members of primary care teams can receive a fee for every smoker they recruit and support through a standard four-week smoking cessation programme. The proposed incorporation within primary care trust activity of the local commissioning of primary dental care services will also provide an opportunity for dental practices to offer a more integrated contribution to local smoking cessation activity. Funding for this would be sourced from outside the dental budget.

Evidence-based quit smoking models

There are effective, evidence-based models to help smokers quit.[17] The Level 1 (brief intervention) model involves prompting smokers to think about smoking cessation once a year by using the five As – Ask, Advise, Assess, Assist and Arrange. Only a very small percentage of people will be able to stop smoking having received this prompting. The more effective Level 2 (one-to-one support and advice) model builds upon this to offer, in additon, nicotine replacement therapy (NRT) and behaviour change support. This four-week model takes about 20–30 minutes in total and currently achieves a successful average cessation rate of 50%. The Level 2 model can be accessed either by referring a patient to a specialist clinic or through community-based trained health workers, such as pharmacists and practice nurses. Increasingly, it might be expected that members of the primary dental care team will have the opportunity to receive this training. Whilst available locally, the training should meet nationally agreed standards.[18]

In summary, evidence-based opportunities for primary dental care to take part in smoking cessation focus on the adoption of a whole practice approach to the issue. Training to implement existing models of smoking cessation is necessary and collaboration with other local and national cessation activity should be incorporated. As with any new behaviour, confidence and skill follows from support and successful practice.

How to get started with smoking cessation – the 5As and NRT

Incorporating the five As brief intervention model into clinical activity involves following a series of steps (Figure 1). These are described below along with some examples of questions that the patient should be asked. The questions assume that most commonly your patients will be cigarette smokers. Other patients, from ethnic communities, may also smoke or chew traditional tobacco products such as bidi or paan. These products create oral health problems similar to those of manufactured cigarettes.

Ask: All patients should have their tobacco use status checked on an annual basis

There are three key questions to ask:

- Are you a smoker?
- How many cigarettes do you smoke each day?
- How soon after waking do you have your first cigarette?

Answers to the last two questions will provide an indicator of the level of dependency of the patient and demonstrates why people smoke. Smoking provides a rapid, high but transient concentration of arterial nicotine. Nicotine creates a higher level of dependency than heroin. Nicotine's short half-life of two hours requires the smoker to maintain this arterial concentration on a repetitive and regular basis with overnight levels dropping close to those of non-smokers. A high dependency smoker will have the first cigarette of the day within 30 minutes of waking and smoke, on average, more than 14 cigarettes daily. Smoking tobacco

to access nicotine exposes the smoker to a wide range of harmful poisons which lead to harmful health impacts.

These questions could be asked either orally or as part of a health questionnaire completed by the patient in the waiting room. The patient record should be updated to note the questions asked and the patient's responses. There is evidence that this does not happen. Forty-eight per cent of a sample of English dentists reported taking this simple step.[2]

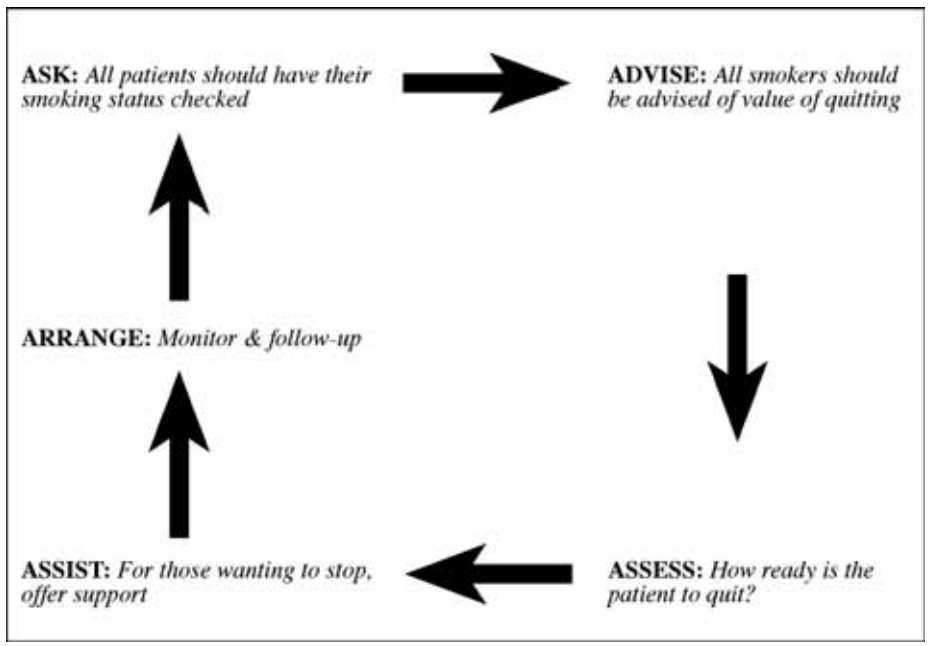

Figure 1. Using the 5As to get started in smoking cessation.

Advise: All smokers should be advised of the value of quitting

The key question is:
How do you feel about smoking?
Simple, clear non-judgemental advice can use the following positive phrases:

- The best thing you can do for your general and oral health is to stop smoking.
- It is never too late to stop.
- Help is available when you decide to stop.

Social support is very important for successful cessation. Three sources of help are important – from the cessation adviser, family and friends.

Additional arguments to those related to health can also focus on the costs of smoking and the alternatives that this expenditure offers. The average smoker spends £1,050 a year at the current pack price. Smokers pay additional life and critical illness insurance premiums. A household with two 20 per day smokers will currently spend about £57 per week, more than the average household spends on food and drink.

This advice may be supported by offering the patient written leaflets, although the evidence suggests that this simple clear advice is more effective.

Assess: Identify how ready (motivated) a patient is to quit

Dental practice routine probably requires no more than responses to the following questions to assess this:

- Do you want to stop smoking for good?
- Are you interested in making a serious attempt to stop in the near future?
- Are you interested in securing help with your quit attempt?

Responses to these questions will help differentiate between the more and less motivated smoker. The more motivated will be more likely to respond positively. Patients ready to quit will be offered specific advice that would not be appropriate to the less motivated.

Assist: For smokers wanting (motivated) to stop appropriate support should be offered

This will involve moving into the Level 2 one-to-one intensive support model. How this support is offered will depend upon the practice policy. If there is a specialist in-house adviser, a referral can be made within the practice. Alternatively, referrals can be made either to other local community specialist advisers or the specialist clinic. For any referral appropriate protocols will have to be agreed.

The adviser will support the motivated smoker wanting to stop with help to set a quit date. This is when smoking will stop completely. In addition, plans can be made to address future problems and people who can provide social support during the quit attempt identified.

An important part of this process will be the prevention of relapse into smoking by proposing the use of NRT. There are six NRT formulations: the patch, gum, lozenge, sublingual tablet, inhaler and spray – on general sale in supermarkets and pharmacies. The higher strength forms of nicotine replacement, such as the patch or inhaler, are particularly recommended for high dependence smokers, those smoking 15–20 cigarettes a day and/or smoking within 30 minutes of waking. Smokers with lower levels of consumption may be able to use NRT gum successfully. Obtaining nicotine from NRT is safer than doing so from cigarettes, as it is not associated with the harmful products of tobacco combustion. However, whilst cigarette smoking offers rapid and high levels of arterial nicotine, NRT products rely on systemic venous absorption, offering a lower level achieved over minutes or hours.

The use of NRT reduces the impact of withdrawal symptoms. A range of general withdrawal symptoms have been identified (Table 1). Whilst common, most last no more than four weeks. It is now also recognized that smoking also exerts a strong, chronic dose-dependent suppressive effect on gingival bleeding[19] and that an increased frequency of mouth ulcers following smoking cessation might be expected.[20] Management of these may involve the use of topical steroids and perhaps referral to an oral medicine clinic to exclude any potential systemic disorders.

Arrange: Monitor and follow up patient progress at intervals of 1–2 weeks

This also allows support and encouragement to be offered. Monitoring can be done either face-to-face or by telephone. It will be important eventually to validate current cessation compliance. Measuring carbon monoxide in exhaled air is a useful way of monitoring progress which offers immediate feedback.

Conclusion

This paper has presented a rationale for the involvement of primary dental care in smoking cessation. It has been noted that this involvement will help contribute to a wider, nationally co-ordinated tobacco control strategy. One impact of this national strategy has been to change patient expectations so that there is less likelihood of a defensive reaction to questions about smoking. A more robust evidence base to support the introduction of this activity in primary dental care is now becoming available. Providing help for those patients wishing to quit can offer substantial oral and general health benefits. Whilst the literature has realistically outlined the barriers to this activity in primary dental care, it should now be recognized that the evidence base and policy context is changing rapidly. It may be concluded that now is the time to apply what is known to work about smoking cessation in primary dental care.

Symptom	Duration	Prevalence
Irritability	<4 weeks	50%
Depression	<4 weeks	60%
Restlessness	<4 weeks	60%
Poor concentration	<2 weeks	60%
Increased appetite	>10 weeks	70%
Light-headedness	<48 hours	10%
Insomnia	<1 week	25%
Urges to smoke	>2 weeks	70%
Increase in weight	Long term	>80%

Table 1. Common withdrawal symptoms following smoking cessation.

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Further Reading

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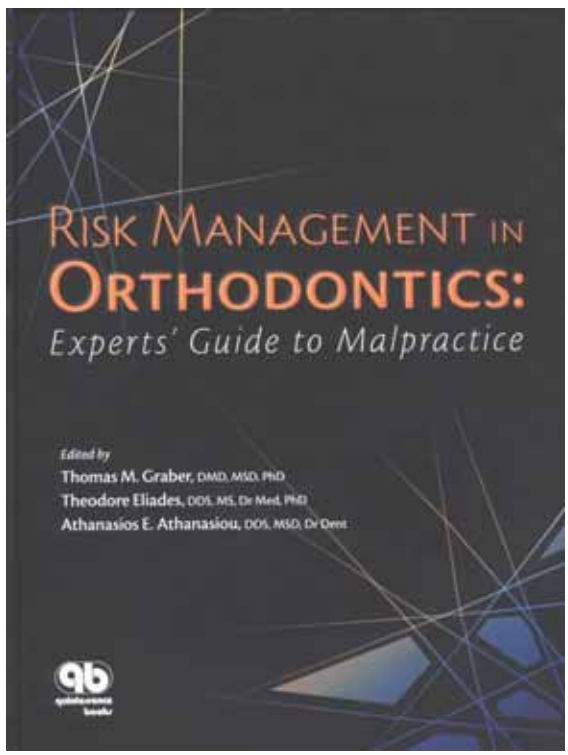
Book Review

Risk Management in Orthodontics: Experts' Guide to Malpractice. TM Graber, T Eliades, AE Athanasiou (eds). Quintessence Books, Chicago, USA, 2004 (238pp., £78h/b). ISBN 0-86715-431-4.



Of the thrills and spills dispensed daily in orthodontic practice, the receipt of an allegation of malpractice ranks amongst the most unwelcome. Malpractice, simply defined, is your failure to undertake what an average colleague would have done under similar circumstances. The sting of malpractice is not the two years or so of tumult and disciplinary scrutiny that precede its pronouncement or rebuttal, but the lifelong inner shame and questioning, 'Could I have done more or should I have done nothing at all?'

Curiously, what ignites the quest for a malpractice settlement is often not technical deficiency, but is more to do with a parent's fury at your apparent arrogance at and beyond the chairside. Perhaps, under pressure of time, you glossed over those few but vital minutes needed to confirm a patient's true informed consent personally, including failing to provide an opportunity for patient feedback on any areas about which he/she is unsure. Delegate this to others and you could risk later displeasure. Have patients been kept waiting without the simple courtesy of an explanation or apology? Do your notes consist of, at best, hieroglyphics, or do they document, through signposts such as bullet points, aimed to reassure lay viewers such as judges years later, that a patient has at all times been given the fullest range of choices in simple, non-technical language tailored to his/her clinical needs and style of absorbing information.

The patient's perspective is beautifully put by Professor Thomas Graber and David Thomas, a defence attorney. 'Would you accept this standard of care for yourself or your child?' Although a simple question, it is not so simply answered, especially to the satisfaction of lay committee members. It skirts neatly around such considerations as the patient whose non-compliance, for instance, retching, fear or anxiety, contributed to a less than ideal result, including such problems as residual overjet or spacing. It is on this, together with the simple prejudice at a clinician's apparent wealth, that a malpractice allegation may succeed, especially where a patient feels coerced into paying privately for treatment he/she considers should be offered within the NHS.

Within the 15 chapters, other contributions include minimizing orthodontically induced root resorption, the TMJ and cracked enamel or other pathology.

It is salutary that *Risk Management*'s publication accompanies the formation of the London-based Association for Disciplinary and Regulatory Lawyers. Similarly, *Complaints: your hidden profit opportunity* is a forthcoming seminar from the General Dental Council's lay member at the BDA conference in May 2005.

Our chairside manner is crucial. Patients inevitably think we earn far more than we really do. Their time is as precious as ours. If we are asked to criticize others, must we, especially when the human mind filters all our carefully chosen modifiers and seizes upon negatives? Our simple courtesy of explaining personally why we are running late or treatment is slow says that we care about our patient's time too. In general, people do not sue people they like. *Risk management* will surely reduce the incidence of clinicians having stumbled in their orthodontic endeavours rueing that 'If my foresight was as good as my hindsight, I'd be better off by a darn sight.'

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March

CPD Answers

1. A, B, C, D	6. A, B, C, D
2. A, B, C	7. A, B, C, D
3. B, C, D	8. A, B
4. A, B, D	9. B, C, D
5. A, C, D	10. A, C