VITAL GUIDE SERIES

8 Helping your patients achieve better oral health

- What are the main threats to good oral health?
- What oral health advice should you give patients?
- What are the latest recommendations for smokers?

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VITAL GUIDE TO

Oral health education

Welcome to the eighth article in the Vital Guide Series. Here, **Cathy Stillman-Lowe**¹ and **Ronnie Levine OBE**² update you on the key oral health messages for patients and describe new developments in smoking cessation and supporting behaviour change.

Introduction

The two most common oral diseases are tooth decay, or *dental caries*, and gum disease (*periodontal disease*). The principal cause of dental caries is the frequent consumption of sugars, mainly in confectionery, snack foods and soft drinks, acting on the layer of bacteria on the tooth surface, which is called plaque. The sugars are rapidly converted into acid by plaque bacteria and the build up of acid attacks the tooth surface causing a cavity and if untreated, destruction of the tooth with pain and possibly infection.

The common form of periodontal disease is caused by poor oral hygiene, allowing bacteria in the form of plaque to build up round the necks of the teeth. The toxins released from plaque cause inflammation of the gums, a condition known as *gingivitis*. The later stage of *periodontitis* develops when the supporting bone around the teeth becomes progressively destroyed, so that the teeth become loose and painful. Smoking is now recognised as a related cause. Unlike tooth decay, which is usually a rapid process, periodontal disease can

take many years to reach the stage where teeth become loose and may be lost.

Dental *erosion* appears to be an increasing problem, which causes wearing away of the surface of the teeth. The cause is usually acid in the soft drinks and juices increasingly being consumed by children and young adults, 50% of whom are now affected to some degree. Erosion can also be caused by gastric regurgitation, as can occur in pregnancy, or due to conditions such as hiatus hernia or bulimia.

There are many other diseases that occur in the mouth and there are some conditions arising elsewhere in the body that can have a visible effect within the mouth, such as pregnancy, anaemia and HIV infection (AIDS). The most life threatening oral disease is *oral cancer*. There are about 4,500 new cases each year, most being smoking or alcohol related. About half of these cases prove fatal, but early diagnosis greatly improves the chance of survival.

The key messages for patients

Diet: reduce the consumption and especially the frequency of intake of drinks, confectionery and foods with sugars

The consumption of sugars, both the frequency and the amount, is important in determining the rate of tooth decay. When sugars are consumed, they should be part of a meal rather than between meals. Snacks and drinks should be free of added sugars, whenever possible. The frequent consumption of acidic drinks (such

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In this article the authors summarise the advice provided in their book *A scientific basis of oral health education*, published by BDJ Books.

as fruit juice, squashes or carbonated drinks) should be avoided to help prevent dental erosion. The Food Standards Agency states that most adults and children in the UK are eating too much sugar, and so we should all be trying to eat fewer sugary foods such as sweets, cakes and biscuits and consuming fewer soft drinks.¹

Toothbrushing: clean the teeth thoroughly twice every day with a fluoride toothpaste

Effective daily toothbrushing with a fluoride toothpaste is the best way of preventing both caries and periodontal disease. Other oral hygiene aids such as floss and interdental brushes are best used after they have been demonstrated by a dentist, therapist or hygienist. Thorough brushing of all tooth surfaces and gum margins twice every day is of more value than more frequent cursory brushing, and a gentle scrub technique should be advised. A small soft to medium texture toothbrush should be used to allow all tooth surfaces and gum margins to be cleaned easily and comfortably.

Effective toothbrushing with a fluoride toothpaste will help control caries provided that the diet is also favourable. Rinsing with water immediately after brushing with fluoride toothpaste reduces the benefit both in relation to the development of new cavities and the prevention of recurrent caries around fillings. Patients should be advised to simply spit out the paste. Twice daily brushing is recommended, last thing at night, and on one other occasion. To reduce the risk of fluorosis, parents should supervise toothbrushing of children under seven years of age and use a small pea-sized amount of toothpaste on the brush (or a small smear for babies).

Dental attendance: have a regular oral examination

Everyone, irrespective of age and dental condition, should have regular oral examinations at intervals of no more than 12 months for those under 18 years of age, and no more than 24 months for all adults,² so that cases of oral cancer or other oral diseases can be detected early and treated. This advice also applies to those without any natural teeth. The shortest interval for all patients should be three months. The maximum period of 24 months may be appropriate for adults with no evidence of dental disease, who are in good general health and do not use tobacco and have low and infrequent sugar and alcohol consumption. Children may need to be seen more frequently, as may those who are at increased risk to oral disease because of smoking, medical, physical or social factors, or for whom dental treatment presents difficulties because of their medical or physical condition. A risk assessment should be made at each recall visit and an appropriate period advised for the next recall.

What's new in oral health education?

As health professionals, DCPs have an ethical duty of care to provide their patients with evidence-based treatment and prevention. The Department of Health has recently produced two new resources to support the dental team: these cover smoking cessation, and the delivery of evidence based preventive dental care to both children and adults. *Smoke-free and smiling*³ points out that this should include tobacco cessation advice; however, many dental practitioners still do not routinely record information on tobacco use, or advise smokers to quit. The care pathway shown in Figure 1 is recommended.

Advice for smokers

In the vast majority of cases, dental teams will only be involved in delivering brief advice to smokers. This should take less than five minutes of their time. The key elements in brief advice include:

- All patients should have their smoking status (current, ex-, never smoked) established and checked at regular intervals. This information should be recorded in the patient's clinical notes. The British Dental Association medical history form includes suitable questions on tobacco use. Smokers should then be asked some simple questions, in order to assess their degree of interest in stopping smoking.
- All smokers and chewers of tobacco should be advised both of the value of stopping, and of the health risks of continuing. The advice should be clear, firm and personalised. It is essential that the message all smokers take away with them is that only complete cessation will do. Cutting down on the number of cigarettes smoked or changing to a lower-tar brand will not in itself yield a significant health benefit. Smokers compensate for the reduced number or type of cigarettes by smoking each cigarette more intensively.
- Although most people know of the risks of tobacco use in relation to cancers and heart disease, fewer are aware of the detrimental effects on the mouth. Dental teams thus have a unique opportunity to highlight the dangers of tobacco use. The early signs of tobacco use – such as tooth staining, changes to the soft tissues and halitosis – are easily identified and are reversible, and this provides a useful means of motivating smokers to stop.
- All smokers should be advised of the value of attending their local NHS Stop Smoking Services for specialised help in stopping. Smokers who are interested and motivated to stop should be referred to these services.
- In a small minority of cases, dental patients who are smokers and who want to quit, but who do not wish to use the NHS Stop Smoking Services, should be offered appropriate help in stopping by their dental team. Only dental team members who have received accredited training in tobacco cessation should offer this assistance.

Finally, the Department of Health has collaborated with the British Association for the Study of Community Dentistry (BASCD) to publish *Delivering better oral health: an evidence-based toolkit for prevention*.⁴ The aim was to remedy 'confusion and a lack of consistency in the preventive information offered to patients'. The toolkit gives detailed advice on the use of fluorides, in toothpastes, tablets, varnishes and rinses, to which DCPs may wish to refer.

Putting it into practice

In 2007, the National Institute for Health and Clinical Excellence (NICE) issued guidance changing health-related behaviours.⁵ A summary of the principles most relevant to one-to-one health education is given below.

Practitioners whose work impacts on, or who wish to change, people's health-related behaviour should:

- Work in partnership with individuals, communities and populations to plan and implement interventions and programmes to change health-related behaviour. The plan should:
  - be based on a needs assessment or knowledge of the target audience
  - take account of the circumstances in which people live, especially the socioeconomic and cultural context
  - aim to develop – and build on – people's strengths or 'assets' (that is, their skills, talents and capacity)
  - set out which specific behaviours are to be targeted (for example, increasing levels of physical activity) and why
  - assess potential barriers to change (for example, lack of access to affordable opportunities for physical activity, domestic responsibilities, or lack of information or resources) and how these might be addressed
  - set out which interventions or programmes will be delivered and for how long
  - describe the content of each intervention or programme
  - set out which processes and outcomes (at individual, community or population level) will be measured, and how
  - include provision for evaluation.
- Prioritise interventions and programmes that:
  - are based on the best available evidence of efficacy and cost effectiveness
  - can be tailored to tackle the individual beliefs, attitudes, intentions, skills and knowledge associated with the target behaviours
  - are developed in collaboration with the target population, community or group and take account of lay wisdom about barriers and change (where possible)
  - are consistent with other local or national interventions and programmes (where they are based on the best available evidence)
  - use key life stages or times when people are more likely to be open to change (such as pregnancy, starting or leaving school and entering or leaving the workforce)
  - include provision for evaluation.

Practitioners working with individuals should select interventions that motivate and support people to:

- understand the short, medium and longer-term consequences of their health-related behaviours, for themselves and others
- feel positive about the benefits of health-enhancing behaviours and changing their behaviour
- plan their changes in terms of easy steps over time
- recognise how their social contexts and relationships may affect their behaviour, and identify and plan for situations that might undermine the changes they are trying to make
- plan explicit 'if-then' coping strategies to prevent relapse
- make a personal commitment to adopt health-enhancing behaviours by setting (and recording) goals to undertake clearly defined behaviours, in particular contexts, over a specified time
- share their behaviour change goals with others.

Conclusion

*Choosing better oral health*⁶ sets out a strong emphasis on prevention for the dental team. The key aim is to reduce both the prevalence of oral disease and oral health inequalities across all age groups in England by providing the NHS, dental practices and other organisations with the information and guidance needed to improve oral health. Dentists should ensure that their team has the skills and up to date knowledge to promote oral health effectively to patients, including at-risk groups, and to recognise problems that need referral to the wider primary healthcare team.

1. Food Standards Agency Website. www.eatwell.gov.uk.
2. National Institute for Clinical Excellence. *Dental Recall: Recall interval between routine dental examinations*. Clinical guideline 19. London: NICE, 2004.
3. Department of Health. *Smokefree and smiling: helping dental patients to quit tobacco*. London: Department of Health, 2007. Available from www.dh.gov.uk.
4. Department of Health/British Association for the Study of Community Dentistry. *Delivering better oral health: an evidence-based toolkit for prevention*. London: Department of Health, 2007. Available from www.dh.gov.uk.
5. National Institute for Health and Clinical Excellence. *Behaviour change at population, community and individual levels* (NICE public health guidance 6). London: NICE, 2007.
6. Department of Health. *Choosing better oral health: an oral health plan for England*. London: Department of Health, 2005.

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Fig. 1 Tobacco cessation care pathway for dental practice