Gum health – who cares?

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Key points

- Although UK gum health meets the criteria for a public health problem there has been little public advocacy for improvement.
- The British Society of Periodontology Patient Forum has highlighted that the public care strongly about gum health and the negative effects of gum disease on people's lives.
- Improving gum health requires collective health and social long-term planning with opportunities for many agencies and organisations to contribute and care.

Abstract

Much of the British population have poor gum health which can affect their daily lives and general health. Surprisingly, we don't often hear from the public whether they care about this situation. Is this a lack of interest or a lack of opportunity to be heard? In addition, gum health, like overall health, requires people to take care of themselves and to take ownership of their condition. Whose responsibility is it to promote this care? In this article, a BSP Patient Forum member (Barbara Sturgeon) and clinician (Professor Ian Needleman) explore and discuss the issues surrounding: gum health – who cares?

Ian:

As a clinician, I care greatly that gum health is poor in the UK. Worryingly, the proportion of the population with the most severe form remains around 10% and has not improved in recent surveys.[1] High levels of gum disease have also been reported in other developed countries.[2,3] In my practice, what I see daily is how these conditions affect the way people live their lives including their overall health and wellbeing, confidence, self-esteem and socialisation. I find that patients don't always talk about their gum health, but some open interviewing helps to uncover real concerns.

A film that we made in 2015, *The Sound of Periodontitis*, which is available through open access to view,[4] highlights this in a very powerful way. One of the participants talks about how, for her, gum disease was worse than cancer because the shame she felt about having the condition prevented her from talking about it and as a result she stopped going out with friends. This might seem extreme but new studies are opening our eyes to the broader impacts of gum disease. Common themes seem to be that people feel shame and embarrassment because they blame themselves for having the condition, which they perceive as 'dirty' brought on by self-neglect, and for not dealing with it sooner. Other themes that feature highly in the recent research are that patients feel social isolation and stigma of the disease and there is frustration and anger that the disease had not been identified earlier.[5,6,7]

In a set of fortunate circumstances, our practice was the first to carry out a study investigating what happened to these self-perceptions after gum treatment had taken place. We found that oral health-related quality of life was better for those who had received treatment compared with newly referred patients.[8] Since then other studies have confirmed that treatment not only improves gum health but also achieves measurable benefits in oral health-related quality of life.[9] This is a powerful message that we need to share more widely, particularly with the general public.

The disease burden on individuals can be substantial but there are also wider societal impacts to consider. Clearly, there are direct costs of treating gum disease (and if necessary the replacement of untreatable teeth) and of course these are on-going because maintenance or relapse-prevention is an essential part of care. There are also wider costs to consider such as: the increased healthcare costs because of the link between gum disease and systemic diseases,[10] its impact on employment opportunities, having to take time off work and how this all impacts on mental wellbeing. Compounding all these costs is the social gradient meaning that the most disadvantaged in society also have the most severe gum disease (and other health conditions).[11]

Again, as a clinician what is striking to me is that gum disease is so preventable and treatable, particularly in the earlier stages. There is a wealth of scientific literature demonstrating long-term stability after effective treatment of periodontitis.[12,13] As well as improvements in the patients' quality of life, there are other important benefits such as the link to improved diabetes health[14] and other systemic diseases. Considering the degree of high prevalence of gum disease, the impact it has on both individuals and the wider society, along with the fact that it is a preventable and treatable condition, the tenets for gum disease being classed as a public health problem are well met.[15] I fear that as a society we have not stepped up to meet this challenge adequately.

If gum disease is a public health issue, why as Stephen Hancocks asked in 2011, are the public not marching on the gates of government to protest?[16] What do we know about the public's awareness and priorities regarding oral health? Surprisingly, the answer is very little because we haven't taken the trouble to ask. For this reason, the British Society of Periodontology

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set up a Patient Forum in 2017 with the aim of giving the public a voice to influence gum health in the UK. Reports from the meetings can be found on our website (https://www.bsperio.org.uk/) and make interesting reading. Some of the major themes which have emerged from the Forum members so far are:

1. Gum health is important for overall health and wellbeing
2. Awareness of gum disease is low and needs to be increased with creative solutions. Simple messages are needed such as 'Bleeding gums aren't right' to trigger recognition that gum disease might be present along with guidance on how to seek professional help
3. We should work together with partners to promote gum health as part of overall health and wellbeing. These partners could include; medical practice teams, diabetes teams, pharmacy teams and industry. Simple messages and methods to signpost to dental professionals need to be strengthened
4. Cost of toothbrushes and in particular interdental brushes can be a barrier to many people. Low-cost versions should be more widely available
5. There needs to be greater awareness that the social stigma of gum disease is a barrier to seeking help. 'No social boundaries to gum disease, anyone can have it' was recommended by the Forum as a starting point for tackling this. They also suggested working with charities that have had success in addressing the stigma of mental health to explore new approaches to starting conversations about gum health
6. It is important that individuals take ownership and responsibility for their gum health (if they have autonomy). However, most people will need coaching and guidance from a dental team to achieve and maintain gum health. Where people have disabilities that are a barrier to self-management, an appropriate and effective care structure is needed.

What the British Society of Periodontology has been privileged to witness is that patients care strongly about gum disease but need a supportive forum for their voice to be heard, particularly with an understanding of the social issues about the condition. We need to encourage more opportunities for such expression. Barbara, I have already mentioned that the Patient Forum expressed strongly and repeatedly the idea that people must take ownership of their health, what are your thoughts?

Barbara:

Imagine this Ian. We are strangers, sharing a table in a crowded coffee shop. Within minutes I'm telling you that I have my eyes and my teeth checked regularly, I eat a healthy diet, don't smoke, and power walk 2.2 miles every morning before 6 am. You'd probably think I'm smug, self-righteous, and indifferent to the needs of the vulnerable in our society. I'm guessing you'd down your cappuccino in one and head straight for the door.

You'd be wrong about me, but perception is everything. My regime is what I call 'Trying to stay alive'. I also scoff fish and chips from the paper, overdo drinks with the girls, and binge watch TV shows – occasionally. And through both my personal and professional life I know all too well about the increasing needs of the vulnerable in our society, and our duty of care to them.

As the NHS celebrates its seventieth birthday, NHS England has just closed its consultation on developing a long-term plan giving priority to cancer, cardiovascular and respiratory disease, learning disability, autism and mental health.[17] It also acknowledges the need to engage the public directly in the choices they are making about their own health and wellbeing.

I think it's this fear of sounding smug, self-righteous and indifferent to the needs of the vulnerable that seems to have both politicians and health professionals reluctant to open up a full and honest debate about self-responsibility. That and the fact that we have our disposable income and quite rightly, expect the freedom to spend it how we choose. But why and how have we become overly reliant upon the NHS to sort out poor health conditions which are easily preventable? Why is taking responsibility for our own health seen in a negative light? Lack of awareness? Lack of information? Is it about money? Is it 'alright' for those who have plenty?

Like eye tests, dental checks reveal so much about our general health. My visits to the GP are fortunately rare, but even that's changed; I never see the same doctor twice. I realise that my regular dentist has now become my most consistent healthcare provider. Increasingly practices are providing a complete package of oral care under one roof – the dentist, hygienist, root canal specialist and importantly the periodontist. If necessary, a patient will be referred to their GP if something needs further investigation. As well as being a positive model for oral and general health provision, it also makes good business sense.

How much do we ordinary folk understand about gum healthcare? If we don't understand then why should we care about it? The importance of the structures supporting our teeth, and the diseases and conditions that affect them is an integral part of resolving the nation's major health concerns. It's a bold step for scientists and academics to open themselves to scrutiny, and in 2017, to help bridge the gap between experts and service users, the British Society of Periodontology launched the Patient Forum to be 'A voice for change for gum health care in the UK'. Helping us to find and express our voices about healthcare is important as it is not something we are comfortable to do on our own (www.bsperio.org.uk/patients/patient-forum/index.html).

Providing public information through good communication and the use of simple language to explain the facts is very much a Forum mantra. It should never be seen as dumbing down. What's the use of saying something important if nobody understands it?

Back to the NHS, Public Health England (PHE) Chief Executive Duncan Selbie, says that the NHS and PHE 'Must engage the public directly in the choices they are making about their own health and well-being'.[18] Dental professionals clearly have a role to play. There needs to be a multi-agency approach embracing physical, mental and social health care services. There needs to be a strategy across all political parties at National and Local Government level which doesn't consist of point scoring and claiming that throwing money at the problems will make them go away. Duncan Selbie[18] continues: 'There is now an urgent need to prevent, not just treat ill health. The time has come to be ruthless in our prioritisation and investment in preventative strategies'.

I'm conscious that we must be careful that those who need help don't slip through the net. All those entitled to free dental care should be made aware of the fact. I'm even more keen to see greater emphasis on teaching small children good oral habits. It's never too soon to take tiny tots with you to familiarise them with the sounds, smells and sights of the dental surgery. More sponsorship from industry is needed; free toothbrushes and toothpaste for Family Centres like Sure Start and Home Start would be beneficial.

Prevention is definitely better than cure; it's not great having major work carried out

Box 1 Possible framework for integrating oral health into diabetes care

1. Anyone with a diagnosis of diabetes should receive advice and signposting related to managing their diabetes and the risks to health including structured education (healthy eating and lifestyle, help to lose weight and bespoke physical exercise programme) and personalised care planning (including eye screening, foot screening, HbA1c, BMI etc).[19] Gum health screening should also be an essential part of the personalised care planning, co-located with the medical services since a high proportion of people with diabetes do not access dental care. The gum health screening could also include brief initial oral health advice and signposting to dental care teams if care is indicated
2. Dental teams already routinely check their patients' medical history and a diabetes finding should trigger contact with the patients' diabetes team to understand their level of control (and therefore risk for gum disease) and to advise them of possible impacts from existing gum disease if relevant. The dental team can also support the patient with brief lifestyle advice on nutrition, smoking, alcohol intake, physical activity and weight loss for example
3. The pharmacy team would also support these aspects with brief advice and signposting to NHS dental practice
4. Diabetes charities already provide oral health advice, but maybe the positioning of this in relation to other elements of diabetes risk and care need to be reconsidered
5. Social services would also be a key element of the network, particularly for vulnerable individuals
6. Consequently medical, pharmacy, dental health charity and social care teams work hand in hand to enable better diabetes care with oral health an integrated element.

on your teeth. A deftness of touch is clearly a professional asset. It only takes one bad experience for a patient to leave the surgery, swearing never to return, to any dentist, ever. I certainly can differentiate between discomfort and pain. Investment in the training of quality dental practitioners in all specialities, is crucial.

There is also always a case for more scientific research such as understanding the effects of chronic inflammation caused by poor diet and stress. From where I'm standing we are bogged down by both with bells on. Soaring levels of cortisol raging unchecked upon your immune system is known to be an assault on your general health.

We need a two-pronged approach to our urgent, critical, national public debate. Let's address those who can help themselves and their families and give equal time and resolution to those who can't. Dare I say that in resolving the first we'd be well placed to do right by the second?

Ian:

It seems to me Barbara, what you and the BSP Patient Forum are telling us is that 'everyone cares' for gum health but to make it work needs increased awareness (public, professionals and policy makers) with joined up care that enables better health and which supports people to take ownership. Perhaps it might look something like that outlined in Box 1 for diabetes because diabetes and oral health are so linked to each other.

The partners who need to work together include health and social care professionals across the spectrum, environmental planners, food producers and providers, the oral health consumer care industry and most importantly the public. Public Health England's *Improving people's health* strategy has recently been published. This hugely important and ambitious strategy aims to promote a culture 'in which healthy behaviours are the norm and in which the institutional, social, and physical environment support this mindset'.[20] We'll have to ensure that oral health is embedded within this culture. Does this seem a reasonable summary of what you and the Forum are advocating?

Barbara:

That's exactly what I'm saying Ian. We've already seen the BSP Patient Forum recommendations for simplification of language and visuals included in the *Periodontal health for a better life* patient information leaflet. We've been discussing new ways of raising public awareness and accessing services through interactive communication methods, like social media, blogs and podcasts. Not only do people exchange advice and experiences, they actually become supportive of each other; simple and hugely empowering. And Ian, you mentioned the stigma of being diagnosed with 'gum disease' and again our group felt that perhaps it's time to change that label to, for example, 'gum health'. The jury may still be out on that one. What we do agree about is that people need to know that general health can be signalled by gum health.

There's an urgent need for a multi-agency approach to encourage and support people to take ownership of their well-being. I think we're all in this together.

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References

1. White D A, Tsakos G, Pitts N B *et al.* Adult Dental Health Survey 2009: Common oral health conditions and their impact on the population. *Br Dent J* 2012; **213:** 567–572.
2. Eke P I, Dye B A, Wei L *et al.* Update on Prevalence of Periodontitis in Adults in the United States: NHANES 2009 to 2012. *J Periodontol* 2012; **86:** 11–22.
3. Norderyd O, Koch G, Papias A *et al.* Oral health of individuals aged 3-80 years in Jonkoping, Sweden during 40 years (1973–2013). II. Review of clinical and radiographic findings. *Swed Dent J* 2015; **39:** 69–86.
4. European Federation of Periodonology and British Society of Periodontology. *The Sound of Periodontitis* 2015. Available online at http://www.bsperio.org.uk/periodontal-disease/sound-of-periodontitis.html (accessed 17 September 2019).
5. Abrahamsson K H, Wennström J L, Hallberg U. Patients' views on periodontal disease; attitudes to oral health and expectancy of periodontal treatment: a qualitative interview study. *Oral Health Prev Dent* 2008; **6:** 209–216.
6. Stenman J, Hallberg U, Wennstrom J L, Abrahamsson K H. Patients' attitudes towards oral health and experiences of periodontal treatment: a qualitative interview study. *Oral Health Prev Dent* 2009; **7:** 393–401.
7. O'Dowd L K, Durham J, McCracken G I, Preshaw P M. Patients' experiences of the impact of periodontal disease. *J Clin Periodontol* 2010; **37:** 334–339.
8. Needleman I, McGrath C, Floyd P, Biddle A. Impact of oral health on the life quality of periodontal patients. *J Clin Periodontol* 2004; **31:** 454–457.
9. Shanbhag S, Dahiya M, Croucher R. The impact of periodontal therapy on oral health-related quality of life in adults: a systematic review. *J Clin Periodontol* 2012; **39:** 725–735.
10. Jeffcoat M K, Jeffcoat R L, Gladowski P A, Bramson J B, Blum J J. Impact of periodontal therapy on general health: evidence from insurance data for five systemic conditions. *Am J Prev Med* 2014; **47:** 166–174.
11. Sabbah W, Tsakos G, Chandola T, Sheiham A, Watt R G. Social gradients in oral and general health. *J Dent Res* 2007; **86:** 992–996.
12. Axelsson P, Nystrom B, Lindhe J. The long-term effect of a plaque control programme on tooth mortality, caries and periodontal disease in adults. *J Clin Periodontol* 2004; **31:** 749–757.
13. Needleman I, Nibali L, Di Iorio A. Professional mechanical plaque removal for prevention of periodontal diseases in adults – systematic review update. *J Clin Periodontol* 2015; **42:** S12–S35.
14. Simpson T C, Weldon J C, Worthington H V *et al.* Treatment of periodontal disease for glycaemic control in people with diabetes mellitus. *Cochrane Database Syst Rev* 2015; DOI: 10.1002/14651858.CD004714.pub3.
15. Sheiham A. Oral health policy and prevention. *In* Murray JJ (ed) *Prevention of oral diseases*. pp. 234–249. Oxford: Oxford University Press; 1996.
16. Hancocks S. Periodontal disease – who cares? *Br Dent J* 2011; **210:** 555.
17. NHS England. Developing the long-term plan for the NHS 2018. Available online at https://www.engage.england.nhs.uk/consultation/developing-the-long-term-plan-for-the-nhs/ (17 September 2019).
18. Public Health England. Prevention must be at the heart of the NHS long-term plan 2018. Available online at https://www.gov.uk/government/news/prevention-must-be-the-heart-of-the-nhs-long-term-plan (17 September 2019).
19. National Institute for Health and Care Excellence. NICE impact diabetes. London 2018. Available online at https://www.nice.org.uk/Media/Default/About/what-we-do/Into-practice/measuring-uptake/impact-diabetes.pdf (17 September 2019).
20. Public Health England. Improving people's health: Applying behavioural and social sciences to improve population health and wellbeing in England 2018. Available online at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/744672/Improving_Peoples_Health_Behavioural_Strategy.pdf (17 September 2019).