

# Is it time for change of approach in prevention and management of gingivitis?

Proceedings of a GSK round table discussion, 2022.

## **Participants**



lain Chapple

Professor of Periodontology, Head of Research for Institute of Clinical Sciences, University of Birmingham, UK.



Filippo Graziani

Professor of Periodontology, Department of Surgery, Medical, Molecular and Critical Area Pathology, University of Pisa, Italy.



lan Needleman

Professor of Restorative Dentistry and Evidence-Based Healthcare at UCL Eastman Dental Institute and Honorary Consultant in Periodontology with UCLH.



Dagmar Slot

Professor of Oral Prevention, Academic Center for Dentistry Amsterdam (ACTA), University of Amsterdam and Vrije Universiteit, Amsterdam, The Netherlands.



Fridus Van der Weijden

Professor of Periodontology, State University Dental School, Utrecht.

- On 21st January 2022 GSK Consumer Healthcare convened a meeting of global periodontal experts to discuss prevention of periodontal disease and the clinical efficacy of parodontax, a 67% sodium bicarbonate and fluoride daily toothpaste, in reducing plaque and gingival inflammation and the role that support from a brand such as parodontax, could play.
- Dental professionals agree that there needs to be more focus on the prevention of periodontal diseases. Periodontal disease is the 6<sup>th</sup> most prevalent health condition globally, affecting 796 million people.¹ Association between periodontal disease and other non-communicable diseases, such as cardiovascular disease, diabetes and Alzheimer's are also influencing the momentum in preventing and managing the condition.² Periodontitis is also a 'social disease' as prevalence is clustered amongst socioeconomically deprived groups across Europe.²





Professor Iain Chapple shared a study published in The Economist,<sup>2</sup> for the European Federation of Periodontology (EFP), which explored the societal and economic impact of periodontitis and sought to understand the cost within Europe. The report showed that making efforts to eliminate gingivitis, thus preventing progression to periodontitis, would have a positive impact on the number of healthy life years (HLY).<sup>2</sup> The research concluded that there is a need to embed the prevention message into community settings such as community centres.

There was a consensus amongst the group that the focus needs to be on gingivitis management for prevention of periodontitis, as this will have the biggest impact on periodontal health and patient quality of life.

"What's come out for me in the last month is the view that gingivitis is regarded as fairly trivial...if I see a patient with periodontitis, I focus on treating that, but the question I should be asking is why has it developed in the first place",

Professor lain Chapple, GSK round table meeting.

"...It's about getting public health messages out there that gingivitis is actually not normal, it's not health, and that your gums shouldn't bleed. And, we need to get this message to oral health professionals because they have traditionally focused on treating periodontitis – after the horse has bolted from the stable – rather than preventing it", Professor lain Chapple, GSK round table meeting.

To do this effectively we need to use a broader approach outside the dental team – both to address the volume of work created and to enable reach to sectors of the public that do not traditionally engage with the dental profession. It was believed by the round table panel that an opportunity exists to help increase collaboration across wider dental team members, from dental nurses to periodontal specialists, to amplify the efforts for prevention of gingivitis. In addition, as wider public engagement is essential to maximise prevention of gingivitis within the population, there is certainly a role for organisations and groups outside of the primary care dental teams including oral care manufacturers.

"...it's important that we prevent [gingivitis] but we don't have enough dentists, dental hygienists, and therapists to treat gingivitis and I don't think that should be the aim for the dental practice but could be for a toothpaste or mouthwash manufacturer", Professor Fridus Van der Weijden, GSK round table meeting.





As part of the round table session GSK raised the question; 'If prevention and management of gingivitis is a priority, how can GSK in partnership with dental professionals enable patients to change their oral care habits?'. The panel highlighted that they face challenges when it comes to changing patient behaviour. They can work with the patient when present in the dental chair, however outside of dental visits, when patients undertake daily oral care, their influence can be limited. This was identified by the panel as an area where GSK could provide support to raise awareness amongst patients of the importance of daily oral hygiene. A UK example was shared that with changes to the NHS dental contract and funding, there is a shift to additional funding for prevention work with patients who are "engaging" with home care and GSK could help to support this.

"It seems to me that so many people, and I include myself, not too many years ago, would have struggled with behaviour change... that somehow, I should be able to do it but I haven't been taught and I didn't have the experience and where on earth do I start",

Professor Ian Needleman, GSK round table meeting.

It was identified by the panel that just giving people more and more information about something will not necessarily change behaviours. In the same way inferring that people with gingivitis have done something wrong may not change how they subsequently behave. The group highlighted that it is important to move away from inferring that gum disease means a patient has a 'dirty mouth' and focus on 'individual risk' and the control individual people have, to create change.

"You don't motivate by flooding people with information...We all do things we know are wrong...It's all about creating a new skill – visuals and videos to teach new skills is the best opportunity"

Professor Filippo Graziani, GSK round table meeting.

GSK, together with the dental profession, need to support dental teams and the public in delivering genuine behaviour change and create a greater focus on prevention. It is important to understand what truly motivates people. Professor Ian Needleman highlighted one study with elite athletes where the key motivators for better oral hygiene were the inflammatory response impact on performance and appearance.

"Highlight the risk factors for patients, help them understand they are different because of risk factors – it's not a dirty mouth – dentists demotivate [patients] when they do this – we need to build self-efficacy for patients then move to a phase where they know what they can do and how to do it"

Professor lain Chapple, GSK round table meeting.

"It is key to demystify and destigmatise gingivitis – it's not just a dirty mouth, it doesn't mean you are a bad person"

Professor Ian Needleman, GSK round table meeting.

GSK Consumer Health shared some its collaboration on patient behaviour change with Dr Koula Asimakopoulou, a behavioural scientist from King's College Dental Institute London. It was agreed by the panel that there is an opportunity for GSK Consumer Healthcare to help provide patient insights and resources, such as videos and demonstrative infographics, to support patient behaviour change. GSK Consumer Healthcare has made a commitment to progress and develop this further for use in partnership with health professionals and their patients.

# parodontax



It is well accepted that effective daily plaque removal, through brushing and interdental cleaning at home, is the most effective way to prevent gingivitis and progression to periodontitis. The question was posed to the group regarding the role a specialist toothpaste could play in enhancing mechanical plaque removal, improved gingival health and improved patient outcomes. Data from a pooled analysis of 6 clinical studies was shared by GSK Consumer Healthcare, for a fluoride toothpaste containing 67% sodium bicarbonate. It showed that the toothpaste can significantly enhance daily plaque removal and reduction in bleeding sites versus a standard toothpaste.

"The traditional public health focus is always on caries, particularly in children – hence the focus on fluoride. Now is the time to change the focus to periodontal disease and it is up to us to do it. Explain that change is coming – other ingredients in toothpastes reduce biofilm levels and the difference by the way is statistically significant",

Professor lain Chapple, GSK round table meeting.

Traditionally, the focus of public health messages relating to toothpaste has been on the fluoride content and frequency of brushing, as an anti-caries measure. Could now be the time to extend this message to drive consideration of additional ingredients in toothpaste? The panel agreed that the pooled analysis of 6 clinical studies presented on the 67% sodium bicarbonate toothpaste was credible, with a further opportunity and interest in understanding more about the mechanism of action which delivers these results.

"Got to teach the professionals within dentistry, toothpaste is more than a carrier for fluoride, not just the public",

Professor Dagmar Slot, GSK round table meeting.

"Sodium bicarbonate does contribute to mechanical plaque removal, baking soda toothpastes do work, can communicate that it helps to reduce plaque and gingivitis", Professor Fridus Van der Weijden, GSK round table meeting.

"Information from industry is still not taken seriously, associations need to take the lead in providing credibility",

Professor Dagmar Slot, GSK round table meeting.





How can the dental profession, in partnership with GSK Consumer Healthcare, drive meaningful change? The panel agreed that messages need to be simple and clear to help cut-through amongst a busy dental profession flooded with protocols and demands. It is also vitally important that GSK Consumer Healthcare use patient insights to develop materials which deliver for the wider public who have been less engaged with gingival health in the past.

Professor Ian Needleman highlighted the need for simple messages which don't require a professional to spend a lot of time understanding in busy practice life, where the dental team is bombarded with protocols and clinical information and competing interests. He explained that ideally these would be in a form where they can be shared directly with patients as a partnership.

A 'mouth map' visualisation tool which demonstrates the clinical efficacy of 67% sodium bicarbonate containing fluoride toothpaste at individual tooth sites from the pooled clinical studies was shared. The panel agreed that the visual representation of data will enhance dental professional understanding and that there is an opportunity for the model to incorporate individual patient data, which could be shared as part of the patient consultation.

"It's refreshing how open you are with the data, and you don't overstate it. You highlight the variability. It's credible",

Professor Ian Needleman, GSK round table meeting.

"[The mouth map is]...Extremely good in communicating information to clinicians, extended again as a tool to communicate to patients as well", Professor Filippo Graziani, GSK round table meeting.

From the discussions in the round table, GSK Consumer Healthcare has a role to play in partnership with the dental profession to support behaviour change and increase the focus on prevention and management of gingivitis.

Traditionally, the focus for communication related to periodontitis has been towards older patients (35+). However, with a greater focus on prevention and health, the group highlighted the need to reposition the message for younger 'healthy' consumers. Campaigns through digital platforms and social media could offer the opportunity to reach those people who may not visit their dentist regularly and enable an aspirational approach.

"Images of people with frailties and in their 50's should be changed dramatically", Professor Filippo Graziani, GSK round table meeting.



## Conclusion

- Developments in our understanding of periodontitis, its causes, and systemic links with other NCDs, alongside new research, such as the Economist study,<sup>1</sup> highlight the fact that whilst periodontitis will continue to need treatment there is a need to increase focus on prevention and management of gingivitis.
- There is an opportunity for GSK Consumer Healthcare to partner with the dental profession to raise condition awareness and support with prevention messaging. This may include product developments with robust clinical research, such as that for 67% sodium bicarbonate toothpaste, which could offer enhanced plaque removal as part of patient advice.

#### References

- **1.** Global, regional, and national incidence, prevalence and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet 2018; 392: 1789-858.
- **2.** Time to take Time to take gum disease seriously. The societal and economic impact of periodontitis. The Economist Intelligence Unit. 2021.

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