

# By students, for students: Oral health initiatives at the University of Liverpool

**Karun Saini,<sup>1</sup> Amir Mukhtar,<sup>2</sup> Charlotte Dobbs,<sup>3</sup> Posey Jolly,<sup>4</sup> Joanne Bowles<sup>5</sup>** and **Adejumoke Adeyemi<sup>6</sup>** describe how students from the School of Dentistry in Liverpool have led outreach programmes to engage with the student population on oral health.

## Introduction

Starting university is often an exciting, memorable and formative time. For many young adults, it will be the first time living away from home, bringing a new rhythm of life and a sense of independence. Adapting to changes in diet (such as snacking), sleep, and other daily habits can increase the risk of dental disease. Amidst the new routine, oral health can easily slip down the list of priorities.

Students on campus are often an overlooked group for targeted oral health education, despite the formation of many lifelong habits during these years. This highlights the need for student focused oral health initiatives. Although some undergraduate students attend Liverpool University Dental Hospital as patients, most patients tend to be working or retired adults.

Students from the School of Dentistry in Liverpool have led two outreach programmes to engage with the wider student population on campus. These projects focused on two areas: promoting gum health and improving oral health knowledge among students living in halls.

## Author information

<sup>1,2</sup>Fifth year dental students, <sup>3</sup>Third year dental therapy student, <sup>4</sup>Third year dental student, <sup>5</sup>Senior Lecturer in Dental Therapy and Vice-Dean for Learning, <sup>6</sup>Senior Clinical Lecturer and Honorary Consultant in Periodontology, University of Liverpool, School of Dentistry, Liverpool, UK

## Gums rock! Promoting periodontal health – Charlotte, Posey and Karun

'Inflammatory periodontal conditions due to plaque are very common.'<sup>1</sup>

Although largely preventable, periodontal disease remains highly prevalent. Results from the most recent UK Adult Dental Health Survey (2009) showed that 'only 17 per cent of dentate adults had very healthy periodontal (gum) tissues and no periodontal disease.'<sup>2</sup> To help raise public understanding of periodontal disease and its wider health implications, the European Federation of Periodontology (EFP) launched Gum Health Day – an international awareness day held annually in May. The campaign promotes periodontal health as a key part of overall well-being.

Together with 11 other dental and dental therapy students, we ran two interactive oral health stalls – one of which was set up in a university library (Fig. 1). The stall included a variety of resources (Fig. 2) to help volunteers engage with other students, such as a 'Know Your Gums' quiz, gum themed bingo cards, patient information leaflets, as well as a visual comparison between healthy and unhealthy gums.

Some of the key points covered on the prompt sheets for the stalls include:

- What gum disease is
- The warning signs to look out for
- What happens if it's left untreated
- How to prevent gum disease.

We found that students were initially drawn to the stall by the images on display comparing healthy and unhealthy gums. The more severe presentations of periodontal disease sparked curiosity/interest and prompted questions, particularly about how



Fig. 1 Students at the Library Stall

to avoid developing gum disease. This gave our volunteers the opportunity to provide oral health advice. Many students expressed concern about the aesthetic impact of gum disease, which allowed us to emphasise the importance of good oral hygiene through interactive demonstrations of effective toothbrushing and interdental cleaning techniques. Quiz responses revealed that most students were unaware of the risks associated with gum disease and the potential consequences of leaving it untreated.

Previous attempts to use interdental cleaning aids emerged as a recurring theme. Many students had discontinued their use due to gingival bleeding, which was often interpreted as a sign of incorrect technique

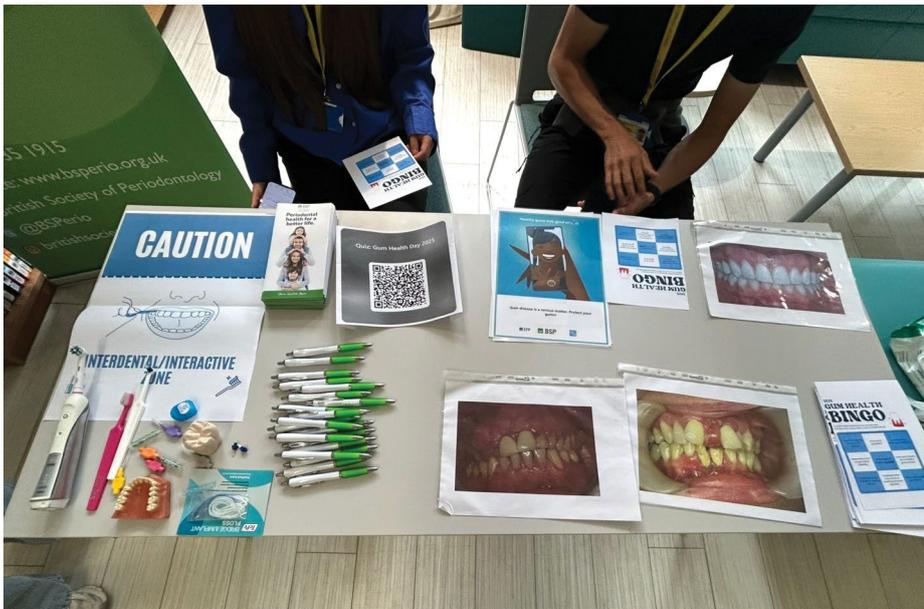


Fig. 2 Resources at the Library Stall

or as damage to the gingival tissues caused by improper use. These interactions provided a valuable opportunity to educate attendees on the nature of gingival inflammation – emphasising that bleeding is a common and expected response when beginning interdental cleaning. We explained that with consistent and correct use, bleeding typically reduces as gum health improves, reinforcing the importance of persistence and proper technique in maintaining effective oral hygiene.

Despite being in the middle of exam season, the stall attracted a steady stream of students. There was high footfall which led to high impact. Engaging with peers proved to be a rewarding experience for those of us involved, and we hope next year's team can build on the work we have started.

### Healthy smiles at halls – Amir

I had the opportunity to set up an oral health stall (Figs 3 and 4) at a local student accommodation housing hundreds of students from across the UK and internationally. It was great to be able to interact with so many students, giving general oral hygiene advice, providing free toothbrushes and toothpaste, and advising on how to find a dentist. All the students were very grateful for the interaction and advice.

Through conversations with students, the main challenges they faced included: how to find a dentist (especially international students and those living away from home), some students were unsure about certain oral & dental hygiene practices e.g., toothbrushing techniques, when to use mouthwash, if it is important to use interdental cleaning aids, and how long toothbrushing should last. All these queries were addressed accordingly with demonstrations and signposting.

The programme was a good starting point to gauge how the student body on campus understood dental health. Moreover, it highlighted the need for further outreach to students, particularly those not local to the city, and providing more opportunities for them to gain information needed to promote good oral health. Perhaps other student accommodation buildings on campus could contact the Dental School to collaborate in arranging events, for example during Fresher's Week.

### Closing remarks

Our oral health campaigns have given us insight into the organisation and running of public health initiatives. Although conducted on a relatively small scale compared to the number of students on campus, we hope

*‘These interactions provided a valuable opportunity to educate attendees on the nature of gingival inflammation.’*



Fig. 3 Amir's oral health stall in university halls



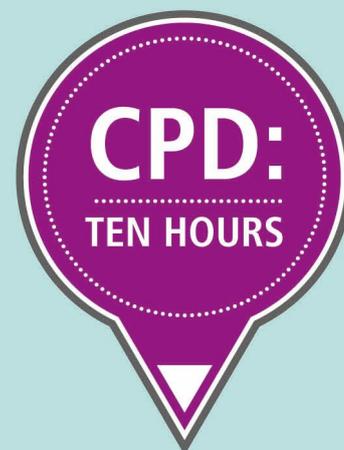
Fig. 4 Amir's oral health stall in university halls

# BDJ Team

## Free CPD!



**Stay up-to-date!**  
10 hours of free CPD every year



[go.nature.com/TeamCPD25](https://www.nature.com/TeamCPD25)

*‘Our oral health campaigns have given us insight into the organisation and running of public health initiatives.’*

our campaigns have improved students’ understanding of oral health, empowered them to take better care of their teeth and gums, and encouraged/inspired other dental students to engage/get involved with student focused outreach.

### Acknowledgements

We would like to thank all the student volunteers who helped at the stalls, as well as the staff whose support made our events possible. We are also grateful to the University of Liverpool for kindly providing spaces to host our outreach activities. In addition, we would like to thank the British Society of Periodontology (BSP) for supplying leaflets, pens, and banners used for Gum Health Day.

### References

1. NICE. Gingivitis and periodontitis: How common is it? 2023. Available at <https://cks.nice.org.uk/topics/gingivitis-periodontitis/background-information/prevalence/> (accessed 30 June 2025).
2. NHS Information Centre for Health and Social Care (UK). Executive Summary: Adult Dental Health Survey 2009. NHS Information Centre, 24 March 2011. Available at <https://digital.nhs.uk/data-and-information/publications/statistical/adult-dental-health-survey/adult-dental-health-survey-2009-summary-report-and-thematic-series> (accessed 4 July 2025).

<https://doi.org/10.1038/s41407-025-3068-x>