

Letters to the editor

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Dental education

Mental health at dental school

Sir, during my experience at dental school, I have been overwhelmed by the number of students that experience mental health challenges. These challenges have been described as a range of both physical and psychological symptoms that include but are not limited to palpitations, gastrointestinal disturbances, anxiety and depression.

Whilst there have been comprehensive studies into the mental health of medical students, there has been limited research into the mental health, support and opinions of dental undergraduates during their studies. Dental students participate and endure the pressures of an academically challenging degree accompanied by high contact hours, making them vulnerable to burnout. Throughout this, they are expected to maintain a highly professional demeanour, and are often concerned regarding the implications of declaring mental health complaints.

After sending an online questionnaire aiming to measure mental health challenges faced by dental students based in London, I found that 60.71% (17/28) of dental students acknowledged that they had experienced mental health related challenges during their time at dental school, of whom only 30% sought support. Upon discussions with students it became clear that whilst there are a number of provisions for mental health support, students are often unaware as to how to access them.

Having identified that the majority of dental students experience mental health related challenges at university, there is reason to suggest that stress management and wellbeing courses should be integrated into BDS programmes. There is evidence that mindfulness-based stress reduction training for medical and psychology students has a significant positive effect in mental

wellbeing.¹ Furthermore, a study by Collin *et al.* showed that as many as 58.7% of general dental practitioners reported high levels of occupational stress.² I believe that developing stress management skills from an early stage in the dental career would be beneficial to students' mental health not only during their studies but also in their future careers, in turn resulting in them becoming more competent clinicians providing a high standard of care.

A. Mahmud, London, UK

References

1. de Vibe M, Solhaug I, Tyssen R *et al.* Mindfulness training for stress management: a randomised controlled study of medical and psychology students. *BMC Med Educ* 2013; **13**: 107.
2. Collin V, Toon M, O'Selmo E, Reynolds L, Whitehead P. A survey of stress, burnout and well-being in UK dentists. *Br Dent J* 2019; **226**: 40-49. <https://doi.org/10.1038/s41415-019-1117-6>

Dental caries

Food impaction

Sir, it was interesting to read the article *How to assess and manage external cervical resorption [ECR] in the British Dental Journal* (2019; **227**: 695-701). The descriptions of Figure 5 and Figure 6 have been exchanged by mistake.

The author has mentioned many causes of ECR but missed out the most important cause which is food impaction. The impacted food acts as a foreign body thereby generating an inflammatory response which leads to ECR. ECR in other words is root caries. The impacted food also puts pressure on the root which also contributes to resorption of the root.

Third molar mesio-angular impaction causes resorption of the distal surface of the second molar. In these cases again, the pressure from the third molar, the pressure from impacted food and inflammation caused by the impacted food cause the resorption of the distal surface of the second molar.

After the removal of the third molar there is no food impaction distal to the second

molar and the resorption of the distal surface of the second molar gets arrested.

I have many radiographs of mesio-angular impactions of third molars before, and follow up of the distal surface of the second molar after extraction of the third molars.

L. K. Bandlish, London, UK

Corresponding author Jaymit Patel responds: I thank the correspondent for their letter in relation to our article. With respect to the lesion highlighted in this letter (resorption associated with impacted third molars with concomitant food packing), I feel that there has been some confusion in relation to the aetiology of resorption.

Dental caries involving the distal surface of lower second molars in cases with an impacted lower third molar is a recognised clinical presentation. In this situation tooth tissue loss occurs as a result of caries, rather than the resorptive mechanism described in our recently published article.

The aetiology of the resorptive process in ECR is poorly understood. It is thought to relate to mechanical or chemical trauma affecting the external surface of the root, which results in dentine exposure. This process is sustained through either an inflammatory stimulus or an 'aseptic resorptive process' (with no consensus on which mechanism induces and sustains this process). Whilst it has been reported that bacterial microorganisms may have a role in the resorptive process, this is likely to be in sustaining an inflammatory process and thus supporting osteoclastic resorption, rather than initiating it.

Resorption of a second permanent molar tooth as a result of an adjacent impacted third molar tooth is a presentation described in several published articles. Other commonly affected teeth include upper lateral incisors and central incisors as a result of impacted canine teeth. Whilst some papers do report on the role of pressure from the erupting tooth on the resorptive process, the true mechanism remains

unclear. Additionally, this process is reported to involve any part of the root of a tooth, with the cervical region being least affected and is, therefore, commonly referred to as external surface resorption (based on the classification of resorption by Andreason in 1970). This process is distinct from dental caries. In contrast to the aetiology of resorption (described above), dental caries results from the detrimental effect of the acidic by-products of bacterial metabolism and enzymatic action, causing the chemical dissolution of tooth tissue and removal of organic tissue (ie this process does not involve osteoclastic resorption).

The distinction between these two clinical presentations is important in relation to the management of dental caries and resorption with the former benefitting from changes in patient behaviours and the provision of a cleansable restored tooth surface, and the latter benefitting from the removal of the tissues that drive resorption.

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International dentistry

Collecting smiles

Sir, I vividly remember that moment in the student union when I realised that I first noticed a person's teeth before their eyes! Since then, I have collected smiles across the globe (Fig. 1). My elective project at university was on the Mayan civilisation in Mexico, researching how they adorned their teeth with jewels to depict their wealth, drilling perfect holes to mechanically retain precious stones such as jade and turquoise. Today, Central American countries and the Caribbean still value gold teeth over the Western white smile, with one blind and edentulous patient I treated in Trinidad asking for gold canines on her full upper denture.

Japan, however, has moved away from the traditional practice of *ohaguro*, where teeth would be permanently blackened as a sign of beauty. This black lacquering process was also thought to prevent caries. The Uros tribe who live on Lake Titicaca, which borders Peru and Bolivia, also had a novel method in preventing tooth decay. Not only do they use the totora reeds to build their floating islands and homes, but also chew them to release the natural fluoride. Their smiles gleam from ear to ear in the high altitude sunshine.

Whether you've visited eight or 80 countries, you only need to look around you to see the thousands of smiles dentists



Fig. 1 Some of the photographs Victoria Mellish has taken of smiles on her travels around the world

facilitate. It's the pride and joy I see when I photograph a stranger's smile that feels so warming and satisfying. What a great role we play as dentists in society: creating and enabling happy and healthy smiles.

V. Mellish, London, UK

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Paediatric dentistry

No surprise

Sir, the British Society of Paediatric Dentistry (BSPD) welcomes the paper *Is access to paediatric dental general anaesthesia by need or by postcode?*¹ Sadly, the findings of the survey – chiefly that patients may struggle to access specialist services in parts of the UK – come as no surprise to BSPD. We are aware of the shortage of both specialists and consultants in paediatric dentistry and continue to try and highlight the issue, most recently in our evidence to the Health and Social Care Committee inquiry into dentistry services.²

We are grateful to the cohort of dentists who are stepping into the breach in order to provide extractions under GA. We recommend that non-specialists undertaking extractions under dental general anaesthesia (DGA) both link up with their local Managed Clinical Network in paediatric dentistry and join the ranks of BSPD so we can provide support.

There are early signs that the number of hospital admissions for DGA may be going down for the first time in many years. But this should not lead to complacency. As the survey lead Helen Sanders rightly points out, to receive the best treatment it's essential that children have access to comprehensive care and this is provided by consultant or specialist-led services. This is the model advocated in our Commissioning Standard for Paediatric Dentistry³ and which we would like to see widely adopted. We also support the introduction of a national database of paediatric GAs for audit and service evaluations.

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