

Letters to the editor

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Mental health and wellbeing

Worldwide burnout in dentists

Sir, based on an FDI World Dental Federation publication, dentists and students face high burnout and mental health risks, worsened by the COVID-19 pandemic.¹ Stressed work environments contribute, with signs appearing even during studies. The FDI urged dental associations and schools to take action: raise awareness, create accessible support like counselling, normalise mental health discussions in workplaces, and provide training on self-care and supporting colleagues. Schools should offer support resources and equip students with mental wellbeing skills for their careers. More research on burnout and mental health in dentistry is needed.¹

A recent dental study investigated burnout and depression in Turkish dentists.² Interestingly, dentists working in Oral and Dental Health Centers reported feeling more emotionally drained compared to those in private clinics or universities. Factors such as age or experience did not seem to influence burnout or depression. The study suggests that improving work environments in Oral and Dental Health Centers could be key to reducing burnout among dentists.

Castro *et al.* explored how COVID-19 impacted burnout with over 300 dentists answering questions about burnout, work factors, and pandemic worries.³ The study found dentists who felt unprepared or scared of catching the virus were more likely to experience burnout. Interestingly, age, working in the public sector, and private education also played a role.

Another study aimed to assess burnout, a state of emotional exhaustion and depersonalisation, among US dental faculty with under ten years in academia.⁴ They found that 13.46% of the 52 respondents exhibited a 'burnout' profile. The data suggested higher feelings of burnout at the nine-year mark,

particularly among those over 44-year-olds with increased administrative duties. Early identification of burnout factors and implementing reduction strategies were crucial for enhancing faculty productivity and satisfaction.

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Restorative dentistry

Bernard Smith's sense of humour

Sir, following Stanley Gelbier's article on Bernard Smith,¹ one aspect not touched upon was his excellent sense of humour.

In my final viva, I noticed that he was paired with a strict external examiner, and I prayed that Bernard would viva me. My heart sank when I arrived at the table for the external to say I would viva this candidate. As he opened his mouth, a secretary ran in to say that his mother-in-law had died and could he take the phone call. I asked Bernard if this was good or bad news. Bernard immediately burst out laughing and continued to giggle through the examination. The external arrived back just as the bell sounded!

My other memory of him was when we started the four-handed unit at RDH, which he was instrumental in setting up. A tape slide programme was used to instruct the students, with Bernard pictured as the operator. A

clock-face layout was used to inform the students of where the operator and nurse should sit. I thought that this would make a good sketch for the student Christmas show. Bernard agreed to have a photo taken at the clinic, one in the student bar with a pint of beer in his hand, and finally, one dishevelled and asleep, with the barman leaning over him and pointing to the door. The commentary ran, and now we see the operator at 1 o'clock, 6 o'clock, and 11 o'clock!

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Sustainable dentistry

Wastewater management

Sir, I write in response to the recent article by Suresh *et al.* on water and the Green Impact Toolkit in reducing the carbon footprint of dental practices.¹ While the article discusses important measures such as procurement, waste management, and water conservation, I believe there is an additional aspect of sustainability in dental practice that warrants consideration: wastewater management.

Traditionally, dental unit wastewater has been categorised as domestic wastewater and disposed of into urban sewer systems. However, recent legal rulings, such as the 'Corte di Cassazione Penale, sez III, sentenza 17 gennaio 2013, n°2340' in Italy, have reclassified dental unit wastewater as industrial wastewater.² This reclassification has significant implications for wastewater treatment and regulatory compliance.

Conventional wastewater treatment processes, particularly those employed in wastewater treatment plants, are known to be carbon-intensive. The energy requirements for processes such as aerobic activated sludge

and anaerobic digestion contribute to CO₂ emissions, posing challenges to achieving sustainability goals.

However, there are opportunities to mitigate these challenges through the adoption of energy-extracting wastewater technologies. For example, biogas produced from anaerobic digestion can be utilised for combined heat and power, reducing energy consumption and CO₂ emissions. Integrating water, energy, sanitation, and carbon considerations into wastewater treatment pathways offers a promising approach to achieving a net-zero-carbon water sector.³

In conclusion, while the study highlights the effectiveness of certain changes recommended by the Green Impact Toolkit in reducing the carbon footprint of dental practices, it is essential to consider holistic approaches to sustainability, including wastewater management. By raising awareness and promoting innovative solutions, we can work towards more sustainable and eco-friendly healthcare practices.

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Holistic health

Sweet warnings: a bold move against global health risks

Sir, we read the editorial by Habib Benizian and Sudeshni Naidoo with great interest, which highlights the critical need to integrate oral diseases and sugar consumption into the chronic non-communicable disease (NCD) framework.¹ We propose an aggressive yet feasible strategy: mandatory sugar packaging warnings.

The global burden of NCDs linked to sugar is astounding, with direct connections not only to dental caries but also to diabetes, obesity, and cardiovascular diseases. Despite the overwhelming evidence, public awareness remains low, and current interventions are insufficient. The article rightly points out the failure of existing policies to address the unique challenges posed by sugar.¹ In this

context, clear and explicit warnings on sugar packaging could serve as a critical lever in transforming public health.

Warning labels have proven effective in tobacco control, leading to increased awareness and reduced consumption.² A similar approach to sugars could increase consumer knowledge, influencing purchasing decisions and potentially reducing intake. Such warnings should highlight the risks associated with excessive sugar consumption, including increased risks of tooth decay, obesity, and diabetes.

Implementing this measure will undoubtedly face challenges, notably from the sugar industry. However, the health benefits of such a policy could be profound, leading to a reduction in the prevalence of sugar-related diseases and, consequently, a decrease in healthcare costs. This approach aligns with global health initiatives and supports the Sustainable Development Goals by promoting well-being for all ages. Sugar packaging warnings could not only educate the public but also catalyse broader changes in industry and consumer behaviour, ultimately leading to healthier populations. By ensuring that the dangers of excessive sugar consumption are clearly communicated, we can empower individuals to make healthier decisions that benefit both themselves and the broader community.³

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Obstructive sleep apnoea

RME and OSA

Sir, further to the *BDJ* article,¹ we would like to point out that maxillary expansion by rapid maxillary expansion (RME) device can be beneficial in treating patients with obstructive sleep apnoea (OSA) who have constricted maxilla.²

Maxillary constriction can cause low tongue position possibly resulting in retroglossal airway narrowing and can also be associated with increased nasal resistance resulting in mouth breathing, both of which play an important role in the pathophysiology of

OSA.³ RME results in maxillary widening by the principle of distraction osteogenesis by the application of orthopaedic force to the midpalatal suture. This anatomic area comprises mainly of compact bone laterally and fibrous tissue with fibroblasts, collagen fibres, and blood vessels centrally.⁴

This device is a fixed, two-band RME appliance with an expansion screw fitted to the maxillary molars. The screw will be turned two turns a day for the first ten days until the palatal cusp of the upper molar comes in contact with the buccal cusp of the lower molar. After this first phase, when the maxillary arch is sufficiently over-expanded, the device is assembled with two round stainless steel wires, soldered to the bands placed on the maxillary molars. The RME will be removed after one year.⁵

After the age of 25 years, surgical assistance is often needed to facilitate maxillary expansion, as the buttressing effect via the zygoma may inhibit orthopaedic movement. The procedure of surgically assisted maxillary expansion involves simple maxillary osteotomies followed by expansion. The total expansion effect consists of a downward and forward movement of the maxillary complex with a resulting increase in the nasal canal and improved position of the tongue.⁴ This expansion further decompensates the lingually tipped mandibular posteriors to an upright position, further improving tongue space.

Research has shown RME appliances were found to be effective in the treatment of OSA and improving the quality of life in OSA patients.^{5,6}

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