

planning with respect to space requirements. There are several methods available to an orthodontist to alter the anchorage balance, for which the extraction pattern is one. Anchorage loss results from unwanted tooth movements.<sup>3</sup> It is possible that during this period unwanted tooth movement and space loss occurs which may compromise the final orthodontic result or lead to extended treatment times.

Without routine dental appointments taking place, general dental practitioners are not able to carry out orthodontic assessments and subsequently refer patients for orthodontic treatment. Timely orthodontic referrals are essential for the management of patients that require interceptive treatment, treatment with functional appliances and those with impacted teeth or pathology, eg root resorption.<sup>4</sup> It is also possible that during this time patients that may have been eligible for treatment on the NHS turn 18 years of age, which means they no longer qualify for treatment. It is essential that we are aware of these possible consequences and consider strategies to manage them when practice resumes.

*J. L. Jopson, L. C. Kneafsey, P. Fowler,  
Bristol, UK*

## References

1. British Orthodontic Society. COVID19 BOS Advice. Available at: <https://www.bos.org.uk/COVID19-BOS-Advice/COVID19-BOS-Advice> (accessed April 2020).
2. Travess H, Roberts-Harry D, Sandy J. Orthodontics. Part 6: Risks in orthodontic treatment. *Br Dent J* 2004; **196**: 71-77.
3. Roberts-Harry D, Sandy J. Orthodontics. Part 9: Anchorage control and distal movement. *Br Dent J* 2004; **196**: 255-263.
4. Jawad Z, Bates C, Hodge T. Who needs orthodontic treatment? Who gets it? And who wants it? *Br Dent J* 2015; **218**: 99-103.

<https://doi.org/10.1038/s41415-020-1690-8>

## VR systems in dental education

Sir, we read with great interest the letter from B. Dunphy proposing replacement of conventional teaching aids during the coronavirus pandemic.<sup>1</sup> In various countries importance is being given to implementing the use of 3D virtual reality (VR) systems in health sciences. Here, a student utilises a digital system and VR glasses to monitor a patient and perform clinical examination procedures in a realistic virtual setting while being monitored by the teacher from a main cabin.<sup>2</sup> VR teaching gives students the

advantage of learning through trial and error without physically harming a patient.

Alternatively, in some universities in Latin American and European countries, it is common to pair haptic simulators with VR systems in stomatology. This consists of the use of technological equipment that reliably imitates the sensation of touch that the operator may experience when in contact with real objects without coming into physical contact with them. In this way, haptic simulators are being applied in the field of endodontics, restorative dentistry and dental prostheses, among others.

We believe that it is important to implement such haptic simulators systems as an alternative in all dental faculties to enable students with the development of skills in the clinical field while complying with social distancing measures throughout the duration of the COVID-19 pandemic.

*C. F. Cayo, L. A. Cervantes, R. Agramonte,  
Universidad Inca Garcilaso de la Vega, Perú*

## References

1. Dunphy B. Alternative teaching aids. *Br Dent J* 2020; **228**: 567-568.
2. Pottle J. Virtual reality and the transformation of medical education. *Future Healthc J* 2019; **6**: 181-185.  
<https://doi.org/10.1038/s41415-020-1689-1>

## Psychosomatic problems

Sir, the high transmissibility of the coronavirus and other contributing factors may cause psychological problems, including anxiety, depression, and stress. Patients who experience dental problems, especially such as acute pulpitis, oral haemorrhage, dental and maxillofacial trauma during the pandemic may also suffer tremendous psychosomatic problems.

Furthermore, isolation at home for a long period of time, suspension of dental services and high risk of dental treatment due to aerosolised respiratory secretions and close doctor-patient contact may exacerbate existing mental conditions and produce new oral psychosomatic disorders such as temporomandibular disorders (TMD), burning mouth syndrome (BMS), dental anxiety and other oral complaints.

Online psychological counselling services have been widely established in mainland China which provide free cognitive behavioural therapy (CBT) for depression, anxiety and insomnia for dental patients who

suffer from psychosomatic problems. CBT has been proven effective for the treatment of psychiatric disorders, and has begun to be applied for psychosomatic problems in the dental patients. The prevalence of TMD in a community sample was almost 17.5% and the incidence even higher during the worldwide epidemic. Studies reported that CBT was more effective than no treatment.<sup>1</sup> Although CBTs were mainly conducted by psychologists, those conducted by trained dental hygienists were also found to be effective in reducing TMD pain and pain-related interference.

BMS is characterised by a burning sensation of the oral mucosa, with a prevalence of 3.7-9% and is frequently associated with stressful life events, anxiety, and depressive disorders.<sup>2</sup> Various methods including psychological and pharmacological approaches have been applied for BMS with either long sessions of CBT or short duration of treatment improving the pain severity and discomfort of patients. Approximately 10-12% of the adult population suffer from dental anxiety.<sup>3</sup>

A significant reduction in subjective anxiety was achieved by patients with CBT when compared to those who received no treatment or anaesthesia/sedation. This study suggests more attention needs to be paid to patients with psychosomatic problems caused by acute dental pain and other urgent conditions; accessibility to online consulting service systems should be further strengthened and improved, particularly for confirmed cases who are in self-quarantine.

*Ainiwaer Mijiti, Muhetaer Huojia,  
Shenzhen, China*

## References

1. Litt M D, Shafer D M, Kreutzer D L. Brief cognitive-behavioral treatment for TMD pain: long-term outcomes and moderators of treatment. *Pain* 2010; **151**: 110-116.
2. Honda M, Iida T, Kamiyama H *et al*. Mechanical sensitivity and psychological factors in patients with burning mouth syndrome. *Clin Oral Investig* 2019; **23**: 757-762.
3. Gordon D, Heimberg R G, Tellez M *et al*. A critical review of approaches to the treatment of dental anxiety in adults. *J Anxiety Disord* 2013; **27**: 365-378.  
<https://doi.org/10.1038/s41415-020-1688-2>

## Redeployment DFT survey

Sir, we conducted a voluntary survey amongst DFTs to discover the factors that would influence their transition, their perceived needs, and their current skillset into redeployment. We received over 72

responses from various regions across the UK: 41.7% had already been redeployed into secondary care, with the remainder either waiting to hear about their new placement or had not redeployed. By rating individual factors on a 5-point Likert scale, we were able to determine what influenced their willingness to be redeployed as their decision is a voluntary one.

Perceived lack of provision of adequate PPE, risk of exposure and transmission of COVID-19 to family and friends, and provision of adequate training prior to taking on new roles were ranked highly as deterrents to redeployment. Gaining new skills during redeployment and wanting to work in a larger team ranked highly as positive factors. Interestingly, factors such as working extra or unsociable hours, working in a new location or in a hospital were not ranked as major preventative factors.

In terms of assessing skillsets that DFTs held at the time of redeployment in relation to working in ICU, on average responders had low confidence levels regarding familiarity with ICU lines, phlebotomy, and cannulation. As DCTs we can reassure our junior colleagues that these skills can be learnt with support and will be useful if they are considering further postgraduate training.

These factors provide insight into the driving forces to recruit young clinicians into an unfamiliar role. They may be useful

for key decision makers if we were to have a second peak or another pandemic.

*S. Fernando, V. Raniga, M. Cairns, London, UK*  
<https://doi.org/10.1038/s41415-020-1687-3>

### Webinar popularity

Sir, to determine the use and perceived benefit of webinars and online learning, a brief survey was sent to dentists across the UK; 50 responses were received from a mix of those working in general dental practice, hospital and community.

Prior to the outbreak of COVID-19, only 17% of dentists had attended a webinar, however, within the last six weeks 64% have done so. For dentists who have engaged with these, 60% had attended five or more, demonstrating a proactive attitude towards learning; 94% found the content beneficial and 92% stated they would attend a webinar in the future, once social distancing measures have been relaxed.

Interestingly, although there is a clear and obvious advantage of face-to-face teaching, 35% would prefer online over face-to-face. We believe this demonstrates the advantages of online education and a possible shift in the future of teaching. Regarding face-to-face study days, dentists felt the biggest barrier to attending was the ability to get time off work (71%), closely followed by the location, and costs involved with travelling, course fees and hotels. Taking time away from clinical practice has obvious financial implications whereas

webinars offer the flexibility to study during a clinician's own time. Of course, this can only be a supplement and not a replacement for hands-on training. Will COVID-19 change the future of education in dentistry?

*J. A. Bell, S. R. Mahmood, Bradford, UK*  
<https://doi.org/10.1038/s41415-020-1686-4>

### DIY ultrasonic scaling

Sir, recently, a friend messaged asking my opinion on a 'DIY ultrasonic tooth cleaner' after deciding that since the dentist is closed she may need to take dental care into her own hands.

I was surprised to discover that commercially available is an 'electric plaque reduction tool'.

These tools were advertised as being designed to effectively reduce dental plaque, dental calculus, hard tartar, stains and help decrease bacteria in the mouth. The design appears similar to that of an electric toothbrush but with a sharp, scaler tip attached rather than a brush head. These devices don't produce water; however, some are advertised as capable of vibrating at a rate of 12,000 times per minute. This tool if used incorrectly has serious potential to cause damage to the periodontal tissues and dentition and I advised my friend accordingly. It is worthwhile readers being aware of these kinds of tools that are available to patients so that the appropriate advice can be given.

*S. Pahal, Bristol, UK*

<https://doi.org/10.1038/s41415-020-1685-5>

## Orthodontics

### Safe braces

Sir, the British Orthodontic Society (BOS) and the Oral Health Foundation have recently collaboratively launched a much-awaited campaign, Safe Brace Campaign, alerting the public to the dangers of direct to consumer orthodontics, also known as 'DIY Braces' ([www.safebrace.org](http://www.safebrace.org)). Both organisations provide patients with expert and evidence-based information that relates to their oral, orthodontic and overall health.

The campaign was launched after the recent statement released by the General Dental Council recommending that for all dental interventions patients should have a face-to-face consultation with a trained clinician at the beginning of treatment. This is of paramount importance as patients

need to make informed decisions about their treatment, and the only way to do so, is for the patients to see a trained clinician in person to discuss the treatment (and indeed alternatives) in detail (including risks and complications) so that they are fully informed of what to expect from the outset.

Jonathan Sandler, BOS President, said: 'In my professional opinion, if you embark on any orthodontic treatment without a suitably trained clinician taking the time to examine you and make appropriate recommendations, you could be in danger of having serious conditions missed, as well as inappropriate and dangerous treatment carried out. What other transforming dental or medical treatment would you undergo, without an in-person evaluation or supervision by a medical professional?'. He continued: 'For me, one of the issues with "DIY Braces" is

that it offers just one narrow solution when there may be a more appropriate one for the patient. The value of informed choice cannot be over-estimated.' This is a huge step that should, hopefully, raise awareness of the dangers of direct to consumer orthodontics to the general public.

*A. Alkadhimi, London, UK*

<https://doi.org/10.1038/s41415-020-1684-6>

## Patient anxiety

### A simple pleasure

Sir, I enjoyed the paper entitled *Experience of listening to music on patient anxiety during minor oral surgery procedures: a pilot study* by Gupta and Ahmed<sup>1</sup> and feel that music can be an invaluable tool in calming patients during procedures. Using music as medicine is a safe and non-pharmacological method