themed issue of the *BDJ*. In 1981, I suggested that correct posture should ensure straight teeth for life.[1] Oral myologists are trained to do this. Appliances can also change posture, then no retention is required, but I don't think this is taught in any British university?

J. Mew, Kent, UK

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Microbiology

Cannabinoids – high expectations?

Sir, health stores have been rolling up sales following a relatively recent addition of CBD products onto their shelves due to their implication in several health benefits. This raises the question: are there any potential dental uses for cannabinoids in the pipeline?

In the last few years, CBD has been incorporated into multiple products ranging from face creams and teabags to pure CBD oil taken sublingually for its muscle relaxant and anxiolytic effects. It has also been found to be antimicrobial against gram-negative and gram-positive bacteria.[1]

These findings have potential implications within dentistry, as there is little research currently available on the efficacy of cannabinoid molecules in targeting oral commensal bacteria found in dental plaque. Incorporation of cannabinols into dentifrices may have positive outcomes on prevention of periodontal disease. Studies conducted recently had small sample sizes and lacked reproducibility; thus, more research is needed in this area.

The current legal status of healthcare products containing cannabinoids stands that any cannabis-derived product with more than 0.01% THC (psychoactive component of cannabis) has to be prescribed by a specialist doctor. Over-the-counter cannabinoid products may be sold without a 'hemp licence,' if the THC component is not detected (0.01% as verified by accredited ISO lab).

As outlined in a paper published in the *BDJ* in 2016,[2] smoking cannabis with tobacco can have detrimental effects in the oral cavity. Namely, lasting xerostomia post-oral cannabis use, cariogenic foods consumed after use, higher DMFT scores in cannabis users compared to non-cannabis smokers, risk of thermal injuries to soft tissues, higher risk of oral candidiasis and potentially a greater risk of oral cancer compared to non-cannabis smokers. More research is needed on the impact of non-smoking-related oral use of cannabinoids, such as in toothpaste or mouthwash.

Larger studies should be conducted to ascertain whether there are beneficial outcomes for patients with high plaque levels. Research thus far has shown similar bacteriocidal efficacy to the gold standard chlorhexidine digluconate without the detrimental staining potential.[3] However, the authors of the study were found to have conflicts of interests as they are financially invested in cannabinoid production. It would be interesting to explore the dental potential of cannabinoids in future unbiased studies.

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The practice of dentistry

Standards in dentistry

Sir, we read with great interest the letter from E. Roberts-Harry entitled 'Guidelines are not standards'.[1] The letter covered succinctly and eloquently the many challenges the dental team face in the UK and the point made about 'The GDP is stuck between a rock and a hard place' rang true, when considering the many pressures as highlighted.

In writing the second edition of the FGDP(UK) *Standards in dentistry*,[2] and the third edition of *Clinical examination and record keeping*,[3] the editors were acutely aware of, and hoped to address, a number of the issues raised by E. Roberts-Harry. For example, in *Standards in dentistry*, we highlighted the definitions as follows:

'Clinical guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate healthcare for specific clinical circumstances.

'A standard is a definable measure against which existing structures, processes or outcomes can be compared'.

Similarly, the editors highlighted the following:

'Any measure of performance has to:

'Be judged against minimum standards, not aspirational standards, that were acceptable at the time.

'Be considered within the specific context of the particular patient and environment.

'Take account of the practitioner's justification, which should be evident from the records'.

The FGDP(UK) has worked tirelessly in preparing such documents, and as we move forwards through the College of General Dentistry, these will be at the heart of establishing evidence-based guidelines and standards for the whole dental team.

E. McColl, R. Witton, C. Tredwin, A. Pal, I. Mills, Plymouth, UK

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Law and ethics

Breakingbury v Croad: should we have seen this coming?

Sir, the recent case of *Breakingbury v Croad*[1] triggered shock waves among practice owners.[2] Many of us empathised with the retired Mr Croad when he was found liable for negligent work carried out at his dental practice by self-employed dental associates. However, since the principles which led to the findings of a non-delegable duty of care and vicarious liability by the County Court have been made clear by the Supreme Court for almost a decade, should we have seen this coming?

In *Woodland v Essex County Council*,[3] the Supreme Court emphasised that there are five defining features whose presence give rise to non-delegable duties of care. With words pertinent to dental services highlighted herein in brackets, these are: that the claimant is a patient; there is an antecedent relationship between the claimant (the patient) and the defendant (the practice owner) which places the claimant in the actual care of the defendant and from which it is possible to impute to the defendant the assumption of a positive duty to protect the claimant from harm; the claimant has no control over how the defendant chooses to perform those obligations; the defendant has