COMMENT

Letters to the editor

Send your letters to the Editor, *British Dental Journal*, 64 Wimpole Street, London, W1G 8YS. Email bdj@bda.org.
Priority will be given to letters less than 500 words long. Authors must sign the letter, which may be edited for reasons of space.

Endodontics

Sodium hypochlorite test

Sir, sodium hypochlorite (NaOCl) solution is highly cytotoxic and leads to devastating consequences when injected or extruded into surrounding tissues. Despite recommended precautionary measures, many such cases have been reported. NaOCl and other solutions such as local anaesthetic (LA), distilled water, saline, and ethylenediamine tetra-acetic acid (EDTA) are mostly colourless, clear, and transparent. Hence, NaOCl can be wrongly dispensed as, or easily mistaken for, these solutions and accidentally injected as LA or extruded due to casual or forceful delivery into a root canal assuming it is another irrigant.[1,2] Even an experienced clinician may find it difficult to identify NaOCl when these solutions are loaded and/or dispensed in a delivery device. Accidental injection or extrusion of NaOCl is a serious iatrogenic error with potential medico-legal implications, and the onus lies with the clinician to prevent it. In this regard, I have presented a clinical method in the form of a dental bib sheet test (Fig. 1) which can assist the clinician to check for NaOCl in a delivery device intended for delivering other solutions.

The dental bib sheet, which is available in different colours, shapes and designs, has a protective liquid barrier or plastic side and an absorbent side. When a drop of NaOCl solution is placed on the absorbent side of the sheet, it immediately gets absorbed into the sheet and decolourises the area of contact due to the bleaching effect of NaOCl. Other solutions such as LA, distilled water, saline and EDTA do not decolourise the sheet. This forms the basis for the test (Fig. 1).

This test must be carried out by keeping a dental bib sheet with its plastic side facing down and absorbent side facing up on the worktable or bracket table of a dental chair. When a container and/or a delivery device such as anaesthetic syringe and standard dental syringe, with or without labelling or marking, is readily dispensed with any of these solutions, deposit a drop of the solution onto the sheet just before or after loading it from the container, or before taking the readily dispensed delivery device into the oral cavity. A decolourised surface in the deposited area suggests that the container and/or delivery device is wrongly dispensed with NaOCl instead of the intended solution. Similarly, it helps to identify a NaOCl-containing delivery device which is mistaken with and taken up for use instead of the one with the intended solution. Thus, any accidental injection or extrusion of NaOCl can be averted. This test is simple, safe, chairside, and economical. Its limitation could be that it is useful to identify only NaOCl, but not other solutions which may also have a potential to cause similar mishap.

A. R. Vivekananda Pai, Melaka, Malaysia

Fig. 1 The dental bib sheet test using an assortment of solutions

References

1. Hülsmann M, Rödig T, Nordmeyer S. Complications during root canal irrigation. *Endod Topics* 2009; **16**: 27–63.
2. Verma P, Tordik P, Nosrat A. Hazards of improper dispensary: literature review and report of an accidental chloroform injection. *J Endod* 2018; **44**: 1042–1047.

https://doi.org/ 10.1038/s41415-022-5030-z

Scientific research

DORA challenges

Sir, we read with interest a recent letter in the *BDJ* entitled 'Author-level Altmetrics?'[1] For improvement in the evaluation of research and researcher output, we would like to draw readers' attention to the San Francisco Declaration on Research Assessment (DORA) developed in 2012, which challenges the use of journal-based metrics to assess the contribution of a scholar to their field. Owing to the limitations associated with the calculation of Journal Impact Factors, the declaration focuses on evaluating research based on its merit. Significant community support is needed to promote change in the decision-making process in academia

surrounding career opportunities like funding and hiring decisions. The recommendations given are for funding agencies, institutions, publishers, organisations that supply metrics, and researchers globally. Interested parties can add their names to this Declaration.[2]

A. Upadhyay, London, UK; A. Kaushik, Chandigarh, India

References

1. Naved N, Umer F. Author-level Altmetrics? *Br Dent J* 2022; **233**: 169.
2. DORA. San Francisco Declaration on Research Assessment. Available at https://sfdora.org/read/ (accessed August 2022).

https://doi.org/10.1038/s41415-022-5047-3

Teledentistry

Forestalling collateral damage

Sir, I read with interest the recent publication entitled 'Head and neck cancer presentations in the emergency department during the COVID-19 pandemic'.[1] The collateral damage due to the COVID-19 pandemic due to neglect and delayed diagnosis of concurrent oral and other systemic diseases is now well known. This article clearly illustrates the case in point, and highlights a mere sliver of the UK population where such neglect led to increased severity of their disease, occasionally with deadly outcomes. The profession should now learn from this experience and appraise how such pandemic-induced collateral damage could be forestalled in the future.

One approach that could lead to significant remediation of this situation is the wider use and popularisation of teledentistry, defined as 'the remote facilitating of dental treatment, guidance, and education via the use of information technology instead of direct face-to-face contact with patients'.[2] This is particularly true when viral diseases such as monkeypox are re-surfacing,[3] and COVID-19 is declared an endemic infection with its variant viral subpopulations.[4]

Currently, there appear to be several challenges in adopting teledentistry as a care management tool, such as its novelty and the resulting reluctance among both dentists and patients to accept it. These concerns need to be allayed to popularise its utility, which will undoubtedly come of age as a robust diagnostic and patient care management tool owing to the increasing use of cloud-based data services, artificial intelligence (AI), and big data resolution through bioinformatics.[5]

It is time that authoritative professional bodies promulgate guidelines on the use and utility of teledentistry, and universities include it in their curricula as an integral health management tool. Further, teledentistry can also complement the current compromised dental health management systems in the UK.

L. Samaranayake, Hong Kong, SAR of China

References

1. Stringer H, Mohammad N, Mumtaz S *et al.* Head and neck cancer presentations in the emergency department during the COVID-19 pandemic. *Br Dent J* 2022; DOI: 10.1038/s41415-022-4505-2.
2. Ghai S. Teledentistry during COVID-19 pandemic. *Diabetes Metab Syndr* 2020; **14:** 933–935.
3. Samaranayake L, Anil S. The Monkeypox outbreak and implications for dental practice *Int Dent J* 2022; DOI: 10.1016/j.identj.2022.07.006.
4. Samaranayake L, Fakhruddin K S. Pandemics: past, present and future: Their impact on oral health care. *J Am Dent Assoc* 2021; **152:** 972–980.
5. Schwendicke F, Samek W, Krois J. Artificial intelligence in dentistry: chances and challenges. *J Dent Res* 2020; **99:** 769–774.

https://doi.org/10.1038/s41415-022-5043-7

NHS dentistry

Post-Brexit NHS money?

Sir, the recent BBC reports on 'dental deserts', where NHS dental practices are unable to accept new patients, have opened a fresh, public debate on our profession's heroic efforts to provide a viable service to our patients.

The Brexit campaigners promised the electorate that leaving the EU would repatriate £350 million per week for spending on the NHS, making £18.2 billion per year. There would have been many demands on that money although even a portion of that would have covered the costs of many courses of dental work, but where has that money gone? Was the electorate sold a lie?

There is a catastrophic lack of staff across the NHS, including dental practices, and we certainly know where many of the NHS staff have gone: post-Brexit working conditions made them so unwelcome here that they have gone home to their EU countries. I have always been impressed by how my NHS colleagues have worked ridiculously hard in order to balance the conflicting demands of providing a professional level of dental care, within the draconian constraints of the 2006 contract, and keeping their practices financially viable. My respect for my NHS colleagues is huge.

An alarmingly dystopian vision has recently been added to the mix by the recent *BDJ* articles which encourage dentists to question the 'strategic importance' of a tooth before deciding which treatment to provide, on account of the restricted NHS funding. I am sure that we all can think of other aspects of NHS work which are of less strategic importance than enabling people to have a healthy, functioning mouth, but the money can be found for those services. Again, where is the promised Brexit money for funding the NHS?

Not only is the whole of the NHS falling apart, due to its lack of funds and staff, but my work as a magistrate has shown that the same is happening within the judicial system. Southampton's court house, where I sit, has six available courts but we regularly have only one of those courts in action, leading to a vast backlog of cases and a lack of justice for the victims of crime. Our probation colleagues have ridiculously high targets to meet, without being given the funding and resources to make those targets remotely achievable. Does that problem sound familiar? In the meantime, work has been proceeding on enabling people to travel between Birmingham and London in 20 fewer minutes, at a cost of at least £110 billion. Who really wants to be able to do that, at a cost of £5.5 billion per minute, especially now that so many meetings can be equally effective when conducted remotely? Who can doubt that the obscene amount of money needed for this vanity project would have brought so many benefits to the NHS? Where is our promised, post-Brexit NHS money?

C. Marks, Southampton, UK

https://doi.org/10.1038/s41415-022-5046-4

Dental care professionals

A forgotten workforce?

Sir, the UK has invested heavily in the education and training of dental hygienists and dental therapists but has never established appropriate conditions to allow them to exercise their skills fully.

Oral healthcare professionals with qualifications in both dental hygiene and dental therapy are able to undertake approximately 70% of primary care dentistry. In the UK, almost all education in this field is offered as a three- or four-year Bachelor of Science (BSc) programme in Oral Health Sciences. The standard of education is robust,