Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.
The abstracts on this page have been chosen and edited by Paul Hellyer.

Dental therapists are underused in NHS dental practice

Barnes E, Bullock A, Chestnutt I G, Cowpe J, Moons K, Warren W. Dental therapists in general dental practice. A literature review and case study analysis to determine what works, why, how and in what circumstances. *Eur J Dent Ed* 2020; **24**: 109–120.

Current funding systems do not encourage the employment of therapists.

An ageing population with complex dental needs requires skilled practitioners to manage care planning and carry out treatment. However, improvements in oral health amongst younger generations suggest that they may require minimal interventions which could be carried out by dental therapists (DTs). A teamworking approach in dental practice was suggested as long ago as 1993 by the Nuffield report but change has been slow to come. The introduction of direct access to DTs and the widening of their scope of practice has not accelerated the process. This paper examines the context of general dental practice (the internal and external factors which influence it) and the mechanisms needed to generate the desired outcome of greater teamworking and the introduction of DTs into practice.

A literature review reveals that external factors include funding systems and workforce supply and treatment demand that exceeds capacity. Internal factors may include dentists' understanding of the DT role, confidence in their abilities and attitude to delegation. The mechanisms might include an established internal referral system, good communication within the staff team and an appropriate funding system. Outcomes might be job satisfaction for the DTs, time freed up for the dentist to carry out complex work and improved practice productivity. Wider outcomes included improved dental access, population health improvements and a greater emphasis on preventive care.

Interviews with 38 team members from six dental practices across South Wales were undertaken. In the context of the dental practice as a business, funding was a major issue. DTs cannot directly contribute to UDAs, which do not appropriately remunerate prevention and associates tend to view referral to DTs as an additional cost to them ('it was easier to do everything myself'). In practices where DTs were employed, part time working and allowing a mix of private and NHS work were sometimes beneficial.

In the context of a dental practice as a health care provider, the dentists' lack of knowledge and understanding of the role of the DT were highlighted. Team meetings and an embedded appropriate in-practice referral system worked well in practices with a DT, as they did with practices who made use of extended duties dental nurses. Regulatory factors seen as barriers were the inability of DTs to report on X-rays and to sign prescriptions for toothpastes and mouthwashes.

The authors highlight the conflict between running a business and operating as a healthcare provider, but stress that policy and funding change is required if the role of DTs is to be developed.

<https://doi.org/10.1038/s41415-020-1379-z>

NiTi instruments considered reusable in the USA?

Logsdon J, Dunlap C, Arias A, Scott R, Peters O A. Current trends in the use and reuse of Nickel-Titanium engine driven instruments: a survey of endodontist in the United States. *J Endod* 2020; DOI:10.1016/j.joen.2019.12.011.

Endo instruments still being cold sterilised by some.

Use of nickel-titanium files (NiTi) is increasing in both specialist and general practice. In this study, 4,000 endodontic specialists were asked to complete a survey on their use of NiTi files (response rate: 23%).

NiTi instruments were used by 97.8% of the respondents. Of the respondents, 22.9% used pre-sterilised files, 41.6% sterilise new files before use and the remainder use new files without pre-sterilising. Of the respondents, 74% re-use NiTi instruments, most of whom were single handed practitioners. 40.5% of solo practitioners discard instruments after their third use. Of the practitioners, 7.4% sterilise files with cold sterilisation methods.

Compared with a study from 2009, NiTi use appears to have increased by 38%, with a corresponding increase of 24% in the number of endodontists who reuse files. The authors speculate that re-use is most likely to be a consequence of the cost of instruments. Despite the extensive range of systems available, 90% of respondents use Dentsply or EdgeEndo products.

<https://doi.org/10.1038/s41415-020-1380-6>

Dentists and hygienists training together ...

Kersbergen K J, Creugers N H J, Hollaar V R. Perceptions of inter professional collaboration in education of dentists and dental hygienists and the impact on dental practice in the Netherlands: a qualitative study. *Euro J Dent Ed* 2020; DOI: 10.1111/eje.12478.

... may improve teamworking and communication in practice.

This study investigated one cohort of dental hygiene and dental students who were trained together in their final year, with a follow up questionnaire two years post graduation.

At undergraduate level, each group recognised their own and each other's expertise and responsibilities. They learnt skills from each other (understanding of treatment planning, for hygienists and periodontal skills, such as scaling and giving oral hygiene instruction for dentists) and how to collaborate.

However, in practice, two years later, both groups noticed differences in collaborative behaviour, the understanding of roles, communication and a lack of preliminary discussions around treatment planning. In general, hygienists felt underused stating for instance that 'ordinary dentists don't know what a dental hygienist does.' Part time working was considered a barrier to communication.

Starting inter professional education earlier in the curriculum would be beneficial for mutual understanding and collaboration.

<https://doi.org/10.1038/s41415-020-1381-5>