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.**

Reducing human error

Brennan P A, Holden C, Shaw G *et al*. What can we do to improve individual and team situational awareness to benefit patient safety? *Br J Oral Maxillo-Facial Surg* 2020; **58:** 404-408; DOI: 10.1016/j.bjoms.2020.01.030.

Learning from aviation.

Brennan (a maxillo-facial surgeon) and co-authors (who include a commercial airline pilot and Red Arrows pilot) discuss how improved situational awareness (SA) may reduce the risk of human error. They begin with the premise that everyone makes mistakes. SA is being aware of what has happened, what is happening now and what might happen in the future.

SA is developed in teams through empowering all involved to be free to speak without fear of retribution at all times. Possible complications within a clinical setting should be discussed at a team briefing, highlighting particularly 'what if …?' and the importance of every team member being clearly aware of their role if something does go wrong.

Both distraction and intense concentration may affect SA. The authors recommend taking a break if operators are hungry, angry, late or lonely, tired (HALT) and at any time, be prepared to stop (down tools, think, engage brain), look (what is out of the ordinary here?), assess (is the unexpected being expected?), manage (regroup, talk, change approach if appropriate) – SLAM.

https://doi.org/10.1038/s41415-020-1857-3

Oral health training for medics

Blaylock P, Lish R, Smith M. Oral health training for general practitioners and general practice teams. *Educ Prim Care* 2020; DOI: 10.1080/14739879.2020.1753584.

May reduce antibiotic prescribing.

General medical practitioners (GMPs) lack training in oral health, yet increasing numbers of patients are seeking dental advice from them. The risk factors common to oral diseases and heart disease, cancer and diabetes indicate the relevance of oral health to holistic patient care.

Free oral health training was offered to GMPs and their practice teams in the northeast of England. Provided by three dental nurses over 1-hour sessions, the training covered the relationship between oral health and systemic health, common oral conditions and their risk factors, preventive dentistry and the NHS dental system arrangements.

After the course, GMPs reported greater confidence in examining patients' mouths, including screening for oral cancer and in prescribing fluoride toothpaste and dry mouth products. Signposting to dental practices for treatment was understood as important to reducing inappropriate antibiotic prescribing.

Barriers to training included time and the perception that in attending, they would be expected to carry out the work of a dentist.

https://doi.org/10.1038/s41415-020-1873-3

Anxiety levels unchanged ….

Freeman R, Maguire A, Ryan V *et al*. The FICTION trial: Child oral health related quality of life and dental anxiety across 3 treatment strategies for managing caries in young children. *Comm Dent Oral Epidemiol* 2020; DOI: 10.111/cdoe.12537.

…. across three different treatment modalities.

This study recruited 72 dental practices across England, Scotland and Wales and the researchers provided training in clinical procedures, research methods and data collection. Practitioners recruited into the study children aged between 3 to 7 years, who had at least one carious lesion into dentine.

Those with lesions were randomly assigned within each practice to one of three treatment protocols: (1) Best practice prevention alone – diet and toothbrushing advice, topical fluoride application and fissure sealants to permanent teeth; (2) PA + removal of carious tissue under local anaesthetic and placement of a conventional restoration; (3) PA + sealing in the caries with an adhesive restoration or a preformed metal crown.

Around one third of the participating children experienced treatment related anxiety, but the results suggest that there are no clinically meaningful differences in child anxiety levels and quality of life measures across the time of the trial between the three treatment modalities.

https://doi.org/10.1038/s41415-020-1874-2

Damaged radiographic phosphor plates ….

Thang T S T, Kishen A, Moayedi M *et al*. The effects of physical photostimulable phosphor plate artifacts on the radiologic interpretation of periapical inflammatory disease. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2020; DOI: 10.1016/j.oooo.2019.11.001.

….. reduce diagnostic confidence.

Photostimulable phosphor plates (PSP) have the advantages that they are thin, flexible and are available in different sizes. The active surface of the plates is, however, prone to damage from scratching, bites and bending. Damaged plates cause artifacts.

Screens of phosphor plates used on clinic, with varying amounts of damage, were superimposed on 100 anonymised clinical radiographs and reviewed by 25 experienced dentists for evidence of periapical disease. Participants were asked to interpret the radiographic image for possible periapical pathology, score the confidence level of that interpretation and record whether they would discard the PSP on which the radiograph was 'recorded'.

Whilst the interpretation of the radiographs appeared unaffected by the level of damage to the PSP, confidence in the diagnosis decreased with increased damage. Lack of confidence in a diagnosis may lead to further radiographic exposure for the patient and/or a delay in treatment.

https://doi.org/10.1038/s41415-020-1875-1