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 **Reena Wadia.**

Global effects of the pandemic

Campus G, Diaz Betancourt M, Cagetti M G. The COVID-19 pandemic and its global effects on dental practice. An international survey. *J Dent* 2021; DOI: 10.1016/j.jdent.2021.103749. Online ahead of print.

The reported rates of COVID-19 for dental professionals were not significantly different to those reported for the general population.
A multi-centre survey was designed to evaluate the impact of COVID-19 outbreak on dental practice across 36 countries, and estimate COVID-19-related symptoms/signs, work attitudes and behaviour, and the routine use of protective measures and personal protective equipment (PPE). Countries' data were grouped by the country positive rate (CPR) during the survey period. A total of 52,491 questionnaires were returned. Out of the total respondents, 15% reported symptoms/signs compatible with COVID-19. More than half of the sample stated to use FFP2/N95 masks, while 42% used eye protection. CPR and FFP2/N95 were significantly associated, while Gross National Income was not statistically associated with CPR. Oral health service provision has not been significantly affected by COVID-19, although access to routine dental care was reduced due to country-specific temporary lockdown periods. While the dental profession has been identified at high risk, the reported rates of COVID-19 for dental professionals were not significantly different to those reported for the general population in each country.

https://doi.org/10.1038/s41415-021-3373-5

Periodontal disease exacerbates hospitalisation

Larvin H, Wilmott S, Kang J, Aggarwal V R, Pavitt S, Wu J. Additive Effect of Periodontal Disease and Obesity on COVID-19 Outcomes. *J Dent Res* 2021; DOI: 10.1177/00220345211029638. Online ahead of print.

Obesity is associated with higher hospitalisation and mortality rates, and periodontal disease may exacerbate this impact.
This retrospective longitudinal study included 58,897 UK Biobank participants tested for COVID-19 between March 2020 and February 2021. Self-reported oral health indicators were used as surrogates for periodontal disease. Body fat levels were quantified by body mass index (BMI). Of 58,897 participants, 25% tested positive for COVID-19 infection. COVID-19 infection was higher for participants who were overweight and obese as compared with those of normal weight, but infection was not affected by periodontal disease. The hospital admission rate was 57% higher in the obese group, and periodontal disease increased with BMI category. For participants with obesity, the mortality rate was much higher in participants with periodontal disease than those without. Obesity is associated with higher hospitalisation and mortality rates, and periodontal disease may exacerbate this impact.

https://doi.org/10.1038/s41415-021-3400-6

Periodontal disease in dogs

Wallis C, Saito E K, Salt C, Holcombe L J, Desforges N G. Association of periodontal disease with breed size, breed, weight, and age in pure-bred client-owned dogs in the United States. *Vet J* 2021; DOI: 10.1016/j.tvjl.2021.105717. Online ahead of print.

Extra-small breeds of dog were up to five times more likely to be diagnosed with periodontal disease than giant breeds.
The objective of this study was to undertake a retrospective analysis of medical records to ascertain which sizes and breeds of dog are most frequently diagnosed with periodontal disease (PD). Over three million medical records, across 60 breeds of dogs visiting a chain of veterinary hospitals in the United States collected over a five-year period, were analysed. Statistical analysis of a subset of these records found that extra-small (<6.5 kg) breeds of dog were up to five times more likely to be diagnosed with PD than giant breeds (>25 kg). The majority of breeds most frequently diagnosed with PD were in the extra-small, small (6.5–9 kg) and medium-small (9–15 kg) breed size categories. Additional risk factors for PD diagnosis included age, being overweight, and time since last scale and polish.

Veterinarians should consider targeting client education about dental health.

https://doi.org/10.1038/s41415-021-3401-5

Pharmacy participation in dental care

Hu J, McMillan S S, El-Den S, O'Reilly C L, Collins J C, Wheeler A J. A scoping review of pharmacy participation in dental and oral health care. *Community Dent Oral Epidemiol* 2021; DOI: 10.1111/cdoe.12651. Online ahead of print.

Community pharmacists and pharmacy staff were interested in an expanded role, but this review identified lack of knowledge and suboptimal practice as potential barriers.
This study explored the scope of dental and oral healthcare (DOHC) provided by the pharmacy profession and associated outcomes, and attitudes of pharmacy staff and other key stakeholders towards pharmacy involvement in this context. Seventy studies met the inclusion criteria: 49 were conducted in developed countries; 60 were quantitative in design; and 38 involved community pharmacy settings only. Pharmacists and pharmacy support staff commonly managed DOHC inquiries, including the provision of advice and products with or without a further referral. Integrated pharmacist-led services in dental settings showed improved prescribing and quality use of medicines, but low community pharmacy referrals were identified in studies involving mystery shoppers with potential oral cancer. DOHC promotion programmes delivered by pharmacy staff and collaborations with dentists were limited. There was interest from the pharmacy profession for a role in DOHC; however, knowledge gaps were reported and needs for further training identified.

https://doi.org/10.1038/s41415-021-3399-8