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.

DIY orthodontics

Carter A, Stokes S. Availability of 'Do-It-Yourself' orthodontics in the United Kingdom. *J Orthod* 2021; DOI: 10.1177/14653125211021607. Online ahead of print.

There has been an increase in the number of DIY orthodontic companies operating in the UK over the last three years and there is a clear need to ensure these activities are regulated appropriately.

This review identified the number of companies providing Do-It-Yourself (DIY) orthodontics and explored information available online. A web search was completed in November 2020 and April 2021. Seven DIY orthodontic companies were operating in the UK. Websites reviewed revealed: product costs were in the range of £799–£1,599; 'treatment' length quotes were in the range of 4–12 months; Trustpilot reviews were in the range of 1.6–4.8 stars; and websites claimed their aligners were suitable for individuals with an age range of 12–18 years. Quality of content regarding risks described on websites varied and there was limited information regarding involvement of a dental professional. Quality of websites' information scored 'poor' or 'very poor'. It is crucial to ensure these activities are regulated appropriately with adequate information available to satisfy informed consent and with greater transparency over dental professional involvement to safeguard the public.

<https://doi.org/10.1038/s41415-021-3273-8>

Gender gap in authorship

Schumacher C, Eliades T, Koletsi D. Gender gap in authorship within published orthodontic research. An observational study on evidence and time-trends over a decade. *Eur J Orthod* 2021; DOI: 10.1093/ejo/cjab036. Online ahead of print.

A gender gap related to orthodontic research publications is persistent, with participation of women either as senior, or as leading authors, being suboptimal.

This study assessed the representation of female authors in orthodontic research publications. An electronic search was performed within three major orthodontic journals to identify all types of research articles published within two distinct year cohorts, 2008–2010 and 2018–2020. The outcomes of interest pertained to proportion of women in senior (last) and leading (first) position, and fraction of overall participation in the author list. A total of 2,539 articles were eligible, with an overall number of contributing authors being 11,608. For seniority in authorship, 30% of the publications within 2018–2020 were attributed to female authors, while 26% was identified in 2008–2010. For leading (first) authorship, the respective percentages were 45% within 2018–2020 and 35% in 2008–2010. The median proportion of female authors was 33%. Consistent efforts should be set in place to facilitate more equal representation of women in research publishing.

<https://doi.org/10.1038/s41415-021-3286-3>

MIH – stainless steel crown or composite?

de Farias A L, Rojas-Gualdrón D F, Mejía J D, Bussaneli D G, Santos-Pinto L, Restrepo M. Survival of stainless steel crowns and composite resin restorations in molars affected by molar-incisor hypomineralization (MIH). *Int J Paediatr Dent* 2021; DOI: 10.1111/ipd.12849. Online ahead of print.

In molars with MIH and the need for restorative treatment, stainless steel crowns had a significantly higher survival rate than composites over 24 months.

Currently, there is no consensus on the superiority of any material for the restorative treatment of molars affected by molar-incisor hypomineralisation (MIH). This retrospective cohort study evaluated the survival of restorations with stainless steel crown (SSC) or composite resin (CR) in first permanent molars affected by MIH for 24 months. Sixty-one CR and 54 SSC restorations performed on molars affected by MIH of patients, aged between seven and ten, that were treated and overseen at a university dental clinic in the period of 2017–2020 were evaluated. The primary outcome was the failure-free survival time. The survival of SSC and CR restorations after 24 months was 94% and 49%, respectively. This difference was influenced by the presence of previous restoration and cusp involvement. In molars with MIH and the need for restorative treatment, SSC had a significantly higher survival rate than CR over 24 months.

<https://doi.org/10.1038/s41415-021-3285-4>

Amelogenesis imperfecta – the burden

Lafferty F, Al Siyabi H, Sinadinos A *et al.* The burden of dental care in Amelogenesis Imperfecta paediatric patients in the UK NHS: a retrospective, multi-centred analysis. *Eur Arch Paediatr Dent* 2021; DOI: 10.1007/s40368-021-00638-x. Online ahead of print.

AI carries a high burden of specialist dental care to patients and families. Specialist centres are required to provide longitudinal, comprehensive care.

Amelogenesis imperfecta (AI) results in weak, discoloured and often sensitive teeth. Specialist paediatric care is available, but the care provided is inconsistent. This study analysed the provision of treatment and burden of care for children with AI across paediatric dentistry centres in the UK. A retrospective evaluation of AI patient clinical records across four UK consultant-led paediatric dentistry centres was completed. In total, 138 records were available for analysis. The average patient age at first referral was 7.7 years and families travelled an average of 21.8 miles per appointment. Patients attended on average 4.5 appointments per year for 5.8 years. In total, 65% had experience of local anaesthetic, 28% inhalation sedation and 32% general anaesthetic. Dental treatment, including restorations and extractions, was commonly required on multiple teeth per patient.

<https://doi.org/10.1038/s41415-021-3287-2>