RESEARCH INSIGHTS

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 John R. Radford.

'...what to do about health inequalities...'

Preventive dental visiting: a critical interpretive synthesis of theory explaining how inequalities arise

Harris RV, Pennington A et al. Community Dent Oral Epidemiol 2017; 45: 120-134

Positive experiences from dental visits, particularly for those patients from low socioeconomic status, feed into future 'help-seeking behaviour'. The aim of this systematic review was to look for links between socioeconomic inequalities in early dental visiting, and to identify potential intervention points. Not unexpectedly, it was found that dental visiting is influenced by the 'importance of obtaining care', and 'perceived control'. But this is balanced by other demands including 'affordability and avail-ability of services'. The message from these authors is that there is a complex interplay between the individual in their social setting (micro-level), shaped by communities or organisations (meso-level) that drives the intention to seek care. But then this can be ruinously disrupted by changes in economic interactions (macro-level).

DOI: 10.1038/sj.bdj.2017.618

Dental anxiety

The importance of acknowledgement of emotions in routine patient psychological assessment: the example of the dental setting Hally J, Freeman R *et al. Patient Educ Couns* 2017; doi: 10.1016/j.pec.2017.05.005

Does active engagement by the dentist exploring their patient's fear, allay dental anxiety?

Dentists are increasingly quantifying the level of anxiety for their patients using the Modified Dental Anxiety Scale (MDAS). This paper summarises the findings from three distinct but linked studies that investigated the role that assessment of dental anxiety has in the care of patients undergoing dental treatment. This abstract will only report on Study 3. In this, carried out with 53 dentally anxious patients, anxiety was quantified from videotapes of dentist/patient interactions and physiological measures (heart rate). The two experimental arms were 1) patients completing the MDAS and handing the questionnaire sheet directly to the dentist, and 2) the control arm when patients completed the MDAS but gave the sheet to the receptionist, but blind to the dentist. The investigators reported anxiety levels 'immediately following the dental visit were not significantly different between the arms of the study'. However, a key finding was that if the dentist acknowledged the patient's dental anxiety in the first two minutes of the consultation, this had an effect of reducing dental anxiety in their patients at three-month follow-up. The authors of this paper and abstractor were both friends and colleagues of the first author of this paper, Dr Jenny Hally, now so sadly deceased. Study 3 was carried out by Jenny as part fulfilment for her PhD.

DOI: 10.1038/sj.bdj.2017.620

۲

White spot lesions

Effect of resin infiltration on the color and microhardness of bleached white(-)spot lesions in bovine enamel (an *in vitro* study) Horuztepe SA, Baseren M. *J Esthet Restor Dent* 2017; doi: 10.1111/jerd.12308

This study would appear to give little steer as to which of the many approaches most effectively manage white spot lesions.

It speak volumes that many non-invasive methods of camouflaging white spot lesions have been described. These include CPP-ACP, fluoride-containing products, microabrasion and even the use of a laser. But which is most effective? This study examined outcomes of resin infiltration and bleaching, both singly and in combination, on white spot lesions. This in-vitro study used caries-like artificial demineralisation lesions in bovine teeth. The investigators reported that after bleaching the white spot lesions were less visible (measured using the CIE L*, a*, and b* system). This finding is difficult to interpret in that Table 2 shows no difference in colour alteration values between 'Baseline vs white spot lesion formation' (P = 0.878). It was also argued, but did not test, that if these white spot lesions were then treated with resin infiltration, future diffusion of stains would be precluded. Resin infiltration increased the microhardness of bleached and unbleached white spot lesions. The study (Acta Odontol Scand 2015; 73: 441-446) showing that white spot lesions can regress without any intervention was not cited.

DOI: 10.1038/ sj.bdj.2017.619

SDA v full arch occlusal configuration

Shortened dental arch and prosthetic effect on oral health-related quality of life: a systematic review and meta-analysis Fueki K, Baba K. J Oral Rehabil 2017; **44:** 563–572

Are quality of life measures that embrace the multidimensional nature of oral health, more important than normative need set by experts? The authors of this systematic review compared how patients rated their quality of life when they were functioning with a shortened dental arch (SDA) or when their posterior edentulous saddles were restored with either a removable prosthesis or implant-supported fixed partial prosthesis. It was found that patients were comfortable with a SDA approach at both 6 and 12 months after treatment. Not only did this have as favourable patient-centred outcome, particularly in the elderly, but that this approach would reduce costs. These conclusions must be viewed in the light that this systematic review was based only on two RCTs (SDA vs removable prosthesis) and one non-RCT (SDA vs implantsupported fixed partial prosthesis). In this latter study, carried out in Japan, there was a trend in favour of restorations of the edentulous space with implant-supported fixed partial prosthesis.

DOI: 10.1038/sj.bdj.2017.621