

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.

'FAIR SOCIETY HEALTHY LIVES'

Social determinants and dental health

Marmot M, Bell R. *Adv Dent Res* 2011; **23**: 201–206

'Proportionate universalism'

This paper, written by the distinguished epidemiologist Sir Michael Marmot, cites others who report that the life expectancy for men living in the most affluent area of Glasgow is 82 years old, compared with 54 years in the poorest part. Yet no-one who lives in Glasgow is on two dollars a day. This social gradient also applies to dental health. 'Causes of the Causes' has recently been well ventilated. When applied to health, this approach may address inequality, in contrast to an individualist approach that 'may even increase health inequality'. 'Proportionate universalism' aims to involve everyone in order to bring about change, but the scale and intensity of the actions are intensified with the level of disadvantage. There are three areas for action: 1) improving living standards, 2) adopting the structural drivers for health equity and 3) monitoring these, including capacity-building.

DOI: 10.1038/sj.bdj.2011.839

WHAT SHAPES PRIMARY DENTAL CARE?

How primary care dentists perceive and are influenced by research

Hopper L, Morris L *et al.* *Community Dent Oral Epidemiol* 2011; **39**: 97–104.

Dentists felt that some research was out of touch and 'politically driven.'

Using purposive sampling, information was gathered from a focus group comprising dentists and researchers (n = 6) and then qualitative interviews were carried out on 18 other dentists. In the second part of the study, 9 dentists declined to participate because they were 'too busy'. Is it odd or perceptive, that it was felt research lags behind primary care? Indeed some research was considered to undermine the care of patients. However, the participants did regard that an evidence-based dentistry (EBD) approach should drive patient care. Cynically, guidelines were considered tools to deliver policy. Scientific journals were considered 'a little bit obscure'. When asked what influences their own care of patients, 'A big factor is if it is profitable for me to do it to be quite honest'. The new EBD blog Dental Elf (<http://www.thedentalelf.net/>), may help reconcile some of these conflicts.

DOI: 10.1038/sj.bdj.2011.840

RIGOUR WITH CLINICAL RESEARCH

Fifteen common mistakes encountered in clinical research

Clark GT, Mulligan R. *J Prosthodont Res* 2011; **55**: 1–6

'Lies, damned lies and...'

Statistics have a central role in clinical research. The statistician is integral in 1) developing a protocol, 2) processing data, not only after but during their collection, and 3) research governance in their role as an 'auditor attesting to the diligence and honesty of the research process and analysis'. Before embarking on a study, a power analysis and an estimate of the sample size must be calculated. A run-in phase reduces drop-out rates but then the study become less generalisable. Low power results in equivalence. They advise the 'novice researcher' not to assert that a particular premise is true but to instead reject the null hypothesis. This paper is full of 'Hints'. One gem, is to make known to colleagues on the proverbial Gantt chart, that the researcher has followed the '100% Rule'!

DOI: 10.1038/sj.bdj.2011.841

TENSION-TYPE HEADACHES

Headache: short- and long-term effectiveness of a prefabricated appliance compared to a stabilization appliance

Doepel M, Nilner M *et al.* *Acta Odontol Scand* 2011; **69**: 129–136

Good outcomes when using splints to treat headaches.

Tension-type headaches (TTH) have been reported in up to 40–70% of patients with temporomandibular disorders (TMDs). Occlusal appliances, including the use of a 'prefabricated appliance' (this appliance only extends from canine to canine and has a silicone fit surface), have been shown to successfully treat those with TMDs. The aim of this study was to compare the efficacy of a 'prefabricated appliance' and a stabilisation appliance (no group allocated a sham-splint) to treat 66 patients with TTH. Both appliances were associated with significant improvements in headaches although a quarter of the subjects dropped-out during the study. There is some commonality between the 'prefabricated appliance' used in this study and the NTI-tss (NTI-tss covers the maxillary incisors with no contact of the canines during lateral excursion). It is therefore disingenuous of the authors to question the use of the NTI-tss because of the 'risk of undesired effects'.

DOI: 10.1038/sj.bdj.2011.842