

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.

Root caries

Risk indicators associated with root caries in independently living older adults

Hayesa M, Da Mataa C *et al.* *J Dent* 2016; **51**: 8–14

Neither those subjects who wore dentures, nor those who harboured caries-associated microorganisms had a higher prevalence of root caries.

This study found that those subjects with ‘poor plaque control (OR 9.59, 95% CI 3.84–24.00), xerostomia (OR 18.49, 95% CI 2.00–172.80), two or more teeth with coronal decay (OR 4.50, 95% CI 2.02–10.02) and 37 or more exposed root surfaces (OR 5.48, 95% CI 2.49–12.01)’ were more likely to have had root caries. An odds ratio (OR) of greater than 1 is when that exposure is associated with the condition. A large confidence interval (CI) indicates a low level of precision with the OR (see above CI for xerostomia). This study reported baseline findings from a cohort of independently living older adults (n = 334) living in the Republic of Ireland (70% of the public water supply is fluoridated between 0.6 and 0.8 ppm). Of note, neither those who wore dentures (multivariate testing only), nor those with high numbers of mutans streptococci and lactobacilli spp (<10⁵ or > 10⁵ CFU/ml saliva measured using commercial dip-slides), buffering capacity (buffer strips), and the ‘level of education’ were associated with caries.

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The missing calories

Counting calories. How under-reporting can explain the apparent fall in calorie intake

Harper H, Hallsworth M. The Behavioural Insights Team. London, 2016.

The increase in weight as a consequence of ‘every single adult in England jogging for around an hour less a day, every day, than they were in the 1970s’, lacks all credibility.

The key message from this 43-paged, scholarly and fully referenced report, is that, as with alcohol consumption (*Eur J Public Health* 2013; **23**: 1076–1081 – ‘the missing eight units’), calorie intake would also appear to be underreported. As background, official statistics have described a large decline in calorie consumption; yet there has been an increase in population weight. One explanation would be a reduction in physical activity, but such an explanation is highly unlikely. Very much more probable is an underreporting of calorie intake. This is supported 1) indirectly by those studies that use the gold standard for energy expenditure (Doubly Labelled Water method) and 2) data from Kantar Worldpanel (what people buy, consume and their attitudes). The authors of this report, Behavioural Insights Team (‘Nudge Unit’), is a social purpose company.

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Exercise – ‘best buy’

Update on the global pandemic of physical inactivity

Andersen LB, Mota J *et al.* www.thelancet.com; Published online 27 July 2016
[http://dx.doi.org/10.1016/S0140-6736\(16\)30960-6](http://dx.doi.org/10.1016/S0140-6736(16)30960-6)

At least one hour of moderate exercise a day to counteract a sedentary occupation.

The role that dental care professionals have in shaping patient’s lifestyle is growing. Referral for those who wish to quit smoking is now part of a dentist’s care repertoire, but should a dentist counsel a patient who is overweight? An approach that may chime with patient expectations is to link this non-communicable disease with dental disease. In those who are overweight, there is a small increased risk of developing periodontitis (*J Clin Periodontol* 2015; **42**: 495–505). Then, if as a consequence of weight loss for a relatively trivial disease, such would also minimise the risk of an high impact condition (cancer, diabetes or cardiovascular disease), both the aims of dental and general health are met.

This Comment, summarising four substantive papers and other commentaries published in the same issue of *The Lancet*, updates the first series of papers on physical inactivity published in this same journal back in 2012. In these historical papers, the key conclusion was that physical inactivity is an important modifiable ‘...risk factor for non-communicable diseases such as obesity and tobacco.’

In this most recent series of papers, one paper reported (*Lancet* 2016; published online July 27. [http://dx.doi.org/10.1016/S0140-6736\(16\)30383-X](http://dx.doi.org/10.1016/S0140-6736(16)30383-X)) high-income countries bear a larger proportion of economic burden, whereas low-income and middle-income countries have a larger proportion of the disease burden. It was also reported (*Lancet* 2016; published online July 27. [http://dx.doi.org/10.1016/S0140-6736\(16\)30728-0](http://dx.doi.org/10.1016/S0140-6736(16)30728-0)) that although physical activity interventions are effective in a research setting, initiatives must be implemented from a range of different sectors in the community in order to facilitate a population shift.

The systematic review and meta analysis of over one million subjects (*Lancet* 2016; published online July 27. [http://dx.doi.org/10.1016/S0140-6736\(16\)30370-1](http://dx.doi.org/10.1016/S0140-6736(16)30370-1)) has received considerable comment in the press. The investigators found the mortality risk associated for sitting more than 8 hours each day can be counteracted ‘... by more than 35.5 MET-h per week of activity’ (MET is the Metabolic Equivalent of Task (MET) with a value of 7 for jogging). But making links between physical inactivity and premature death are fraught with mixed messages (*Am J Clin Nutr* doi: 10.3945/ajcn.114.100065).

Returning to periodontal disease, as compliance/adherence with supportive periodontal therapy is sub-optimal in those that smoke (*J Clin Periodontol* 2014; **41**: 473–480), some adopt more conservative therapies until they quit. Should a similar approach be adopted for those who are overweight but are not taking on the necessary lifestyle change in order to lose weight?

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