ABSTRACTS

Abstracts on this page have been chosen and edited by Dr Trevor Watts

ADDICTION; ORAL HEALTH

Tobacco prevention in Swedish dental care

Helgason AR, Lund KE et al. Community Dent Oral Epidemiol 2003; **31:** 378-385

Half the dentists questioned did not see tobacco prevention as part of their work.

In the county of Stockholm, every third dentist (582) and all 353 hygienists were asked to complete a questionnaire on this topic. Respective response rates were 61% and 67%, mean length of work 22 and 13 yrs, mean number of patients treated per week 47 and 30, and tobacco use was routinely recorded in 70%-90% of patients. In both groups there was a 60:40 split between private and community practice.

The main barriers identified in respect of tobacco cessation activity included results not justifying the effort (respectively 48% and 34%), time consumed (57%, 41%), preference for referral (88%, 88%), lack of knowledge (57%, 66%), lack of payment (78%, 57%) and no perception that this was a duty of dentists or hygienists (49%, 27%).

Most dentists and hygienists had never assisted patients in tobacco cessation and most had not tried to increase their knowledge in this area. Respective mean times spent on all tobacco cessation activity in the previous month were estimated as 1.4 and 2.9 hrs.

doi:10.1038/sj.bdj.4811033

BEHAVIOURAL SCIENCE; ORAL HEALTH

Coping and optimism in relation to dental health behaviour — a study among Finnish young adults

Ylöstalo PV, Ek E et al. Eur J Oral Sci 2003; 111: 477-482

Optimists may have better dental health, possibly because they tend to cope actively with problems.

Currently there is interest in the different health behaviours associated with problem-focused and emotion-focused coping when people are faced with personal problems. The former is an active attempt to change the situation and the latter is a passive avoidance or diversionary activity. Problem-focused coping is considered to be generally more effective. Optimism has been associated with better outcomes in some health situations, and is associated with active coping.

This study centred on a 31 yr-old birth cohort of 11,541 Finns, 75% of whom responded to a questionnaire enquiry. There was a small but significant effect of optimism on dental health behaviour, educational level had a similar effect, and there was better behaviour in females. Optimism was associated with active coping, but the latter had no effect on health behaviour when the former was taken into account. There was also a relationship of optimism, but no other variables, with reductions in self-reported caries, gingival bleeding and oral pain.

doi:10.1038/sj.bdj.4811034

DERMATOLOGY; ORAL PATHOLOGY

Salivary gland function in persons with ectodermal dysplasias

Nordgarden H, Storhaug K et al. Eur J Oral Sci 2003; 111: 371-376

Salivation rates and some salivary constituents were reduced.

Developmental defects in ectodermal dysplasias (EDs) affect at least 2 of: hair, teeth, nails and sweat glands. Since salivary glands are of ectodermal origin, they might also have defects. In this study, 39 ED subjects (median age 12 yrs; 24 male) were compared with an age and gender matched healthy control group.

Median submandibular flow rate was 39% lower in the ED group (P = 0.003), but the difference in parotid flow did not reach significance. Median concentration of proline-rich proteins were 36% higher in the ED group, and this affected products identified in respect of each of 2 genetic loci.

The authors relate the lower submandibular flow rate to 3 cases of candidal infection found in the ED patients, but report that little caries was identified. They suggest that sialometry is indicated for ED patients who have excessive mucosal dryness.

doi:10.1038/sj.bdj.4811035

PERIODONTICS; MICROBIOLOGY

Clinical responses to mechanical periodontal treatment in Chinese chronic periodontitis patients with and without *Actinobacillus actinomycetemcomitans*

Tong KSK, Zee K-Y et al. J Periodontol 2003; **74:** 1582-1588

Presence of this suspected pathogen did not prevent a good treatment outcome.

A. actinomycetemcomitans (Aa) is a periodontal organism which has aroused much interest in relation to periodontitis, but without any clear demonstration of its role *in vivo*. Some authorities have suggested that failure to eradicate this organism will lead to failure of periodontal treatment. In this study, 21 patients aged 30-55 yrs were treated for moderate periodontitis, with 2 dropouts. In each patient 4 sites were examined for Aa, and one sampled tooth which was Aa negative was extracted for unrelated reasons.

At baseline, Aa was found in 13 subjects at 29 sites. Three months after non-surgical treatment, Aa was not found in 5 previously +ve subjects, but were found in one who was previously -ve. By 12 months, Aa was not found in 3 previously +ve, but found in 1 initially -ve patient. Comparison of Aa +ve and -ve patients showed similar improvements in periodontal health: baseline PD reduced from a mean 7.5 mm by about 3 mm at 3 months and a further 1 mm at 12 months; PAL improved respectively 1 mm, and then a further 0.5-1.0 mm. There were no significant differences between groups.

doi:10.1038/sj.bdj.4811036