

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 Paul Hellyer

The links between oral and systemic disease

Focal infection revisited – the swinging of the pendulum

Gutmann JL. *Dental Historian* 2017; **62**: 81–90

A historical review, focusing not only on disease, but also on the relationship between the medical and dental professions.

In the early decades of the 20th century, the medical profession felt that oral sepsis (focal infection) was responsible for ‘various diseases ... which have been found to result from the action of micro-organisms which have collected in the mouth’. It was suggested that oral sepsis was not only a consequence of oral conditions, such as ‘pyorrhoea alveolaris’, but also a result of dental procedures themselves (‘foul septic toothplate stomatitis’). Whilst admiring the technical skills of dental surgeons, one physician felt that no one, rich or poor, was free from the surgical malpractice of building ‘mausoleums of gold over a mass of sepsis’. However, others felt that poverty and a consequent inability to afford dental treatment was largely responsible for these infections. The sole treatment suggested by physicians for these conditions was a full dental clearance.

Dentists, however, began to think that there was a lack of evidence for both the assumption of the connection between oral infection and systemic disease and the relevance of the drastic treatment prescribed. They cited insufficient payments to carry out treatment, stating that they ‘cannot get paid for the time needed to remove pulps properly and to seal root canals aseptically’, and a lack of co-operation and understanding between the medical and dental professions, as possible causes of the problem. By 1938, focal infection was being described as an example of ‘a medical theory which is in danger of being converted into the status of accepted fact’. At the same time in the USA, study clubs and learned societies with an interest in endodontics began to meet, indicating the real interest of the dental profession in the preservation and restoration of teeth, rather than their wholesale extraction.

Between 1947 and 1989, 82 papers were published, addressing possible links between oral and systemic disease. Since 1989, however, there have been more than 1,200 such publications. These indicate that there are associations between oral disease and conditions such as coronary heart disease, stroke, pneumonia, diabetes, liver disease, rheumatoid arthritis and infant low birth weight. Whilst these links are not established as causal, the relationship between the mouth and the rest of the human body is being made yet again but this time on a scientific basis, showing that the dental profession does have a role to play in the health of the patient as a whole. Whether science can similarly establish links between oral disease and poverty, payment systems and a lack of inter-professional co-operation was beyond the scope of this paper.

DOI: 10.1038/sj.bdj.2017.862

Less caries, less obesity?

Trends in dental caries in children and adolescents according to poverty status in the United States from 1999 through 2004 and 2011 through 2014

Dye BA, Mitnik GL, Iafolla TJ, Vargas CM. *J Am Dent Assoc* 2017; **148**: 550–565

Study shows an improving trend in child dental health in the USA and indicates that targeted interventions may be successful.

Using data from the US National Health and Nutrition Surveys, the authors evaluated the change in prevalence of dental caries in young people aged 2 to 19. The data showed that, while there was little change in the prevalence of caries in the older cohorts, in pre-school children from poorer backgrounds, caries experience decreased from 42% to 35% and that untreated caries decreased from 31% to 18%.

The authors report that this decline in caries experience in 2–5-year-olds is paralleled by the suggestion of other investigators that obesity may also be declining in this age/poverty cohort. The reasons for this remain unclear, but may be linked to low income families being enrolled in nutrition education programmes and the extension of insurance plans to those on low incomes. Dental initiatives include introducing the concept of a ‘dental home’ by encouraging visits to the dentist for children from the age of one and additional reimbursements for dental screenings and preventive interventions, such as the applications of fluoride varnish.

DOI: 10.1038/sj.bdj.2017.863

Syrian refugees worry for their children’s oral health

Parental perception of oral health-related quality of life of Syrian refugee children.

Pani SC, Al-Sibai SA, Rao AS, Kazimoglu SN, Mosadomi HA. *J Int Soc Prev Community Dent* 2017; **7**: 191–196.

A questionnaire- and interview-based study concerning access to dental care is limited in refugee camps.

Healthcare concerns in long-term refugee camps change as time passes, from the seeking of emergency care to the management and prevention of chronic conditions such as dental diseases. In this small sample study, refugee parents in Turkey, many educated to degree level, express concern for the oral health of their children. Oral hygiene is difficult because of an inability to replace worn out toothbrushes and to purchase toothpaste. Gargling with salt water and washing the mouth with soap (provided in their care package) are methods to which they resort. In contrast to their homeland, access to dental treatment is limited. Dental pain acts as a trigger for deep feelings of anger and frustration with their circumstances and a reminder of their powerlessness to help their children.

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