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

Behavioural science; orthodontics

Behaviour management needs for the orthodontic treatment of children with disabilities

Chaushu S, Becker A
Eur J Orthod 2000; 22: 143-149

This retrospective study of 49 disabled children gives rare data on modes of management for treatment of their malocclusions.

Malocclusions occur more frequently in children with physical or mental handicaps, and some authors have identified a higher prevalence in mental handicap. To children already disabled in other ways, malocclusion may be a further burden.

In the present study there were 17 children with mental retardation, 9 with cerebral palsy, 7 with Down syndrome, 6 with muscular dystrophy, 3 with autism and 7 with other disorders. All were assessed for level of co-operation, gag reflex, uncontrolled movements, ability to remain still and drooling. A composite score based on these indicators was devised by the authors to indicate management difficulty, with a maximum of 150.

Placing appliances was facilitated by behavioural modification (BM) alone, sedation (SED) or general anaesthesia (GA). The age range was 7–21 yrs (mean 13). BM sufficed for 30 patients, and only in the cerebral palsy group were most patients treated with SED or GA. The mean composite scores were BM: 23 (range 5–45), SED: 66 (50–85) and GA 98 (75–130). All SED patients required this adjunct because of inability to remain still.

Conservative dental surgery

Age of restorations at replacement in permanent teeth in general dental practice

Mjör IA, Dahl JE et al.
Acta Odontol Scand 2000; 58: 97-101

The time of decisions to replace restorations related mainly to clinician gender, experience and practice setting.

This study concerned the decisions of 243 representative practising Norwegian dentists to replace 11,800 restorations which had been deemed to have failed by virtue of tooth- or restoration-related criteria. The ages of 6,761 of these failed restorations were known, and the median age of replaced amalgams was 10 yrs, of composites, 8 yrs, and of glass ionomers (polyalkenoates), 3 yrs.

On average, female dentists replaced amalgam and composite restorations some 2 years earlier than males, and salaried dentists replaced these fillings around 2 years earlier than private practitioners. Dentists qualified for <10 years replaced amalgams with median age 10 yrs, composites aged 6 yrs and polyalkenoates aged 3 yrs; for those qualified 30+ yrs, respective ages were 13.5, 10 and 5.5 yrs, with related transitional scores for the intermediate experience groups. In a heterogeneous group of other materials (inlays, onlays and crowns), dentists with <20 yrs experience replaced restorations of median age around 10 yrs, compared with dentists with 20+ yrs experience who made the decision at a median restoration age of over 20 yrs.

Addiction management

Tobacco and oral health: attitudes and opinions of European dentists; a report of the EU working group on tobacco and oral health

Allard RHB
Int Dent J 2000; 50: 99-102

Two-thirds of responding EU dentists considered that dentists should offer information on quitting smoking, but only one-third actually did so.

In this study, questionnaires were sent to dentists in the 12 EU countries. In Denmark, the Netherlands, UK, Sweden and Finland, the samples were randomly chosen and the response rates were over 50%. In Austria, Belgium, Germany, France, Greece, Italy and Portugal, the samples were not random in some cases, and all the response rates were below 50%. However, similar answers were forthcoming from both groups.

Dentists had a good knowledge of the effects of smoking on general health, with 2 exceptions: only two-thirds knew that it was implicated in implant failure, and a quarter wrongly thought that there was evidence that it was related to caries. In all countries, more than 80% of dentists asked patients about tobacco use at least occasionally, and fewer than 10% of EU dentists smoked every day. Most dentists agreed that dentists should advise patients on tobacco cessation, and the main drawback seemed to be the time involved.

Behavioural science; preventive dentistry

Preschool children's consumption of drinks: implications for dental health

Watt RG, Dykes J et al.
Community Dent Health 2000; 17: 8-13

More than half the children drank soft drinks every day.

This study was an analysis of data from the UK national diet and nutrition survey of a representative sample of 1,675 children aged 1.5–4.5 yrs in 1992–3. In addition to 4-day dietary analysis, the survey included blood tests, dental examinations and parental interviews.

Soft drinks were consumed more frequently than milk, and diet or low sugar soft drinks least. Over half the children took more than one soft drink per day. Milk intake was reduced as age increased. There were no differences by gender and few by socio-economic group, except that twice as many children of non-manual workers consumed fruit juices, compared with children of manual workers, who in turn were more likely to drink tea or coffee.

The authors comment that the children's predilection for sugary soft drinks may contribute to caries development, and also that tannin in tea and coffee reduces absorption of iron and other minerals in this age group of children who are also a high risk group for anaemia. Skimmed milk was also drunk by more children in the 2.5–4.5 yr age group, whereas whole milk is recommended for children of this age for dietary reasons.