

Dental behaviour management problems among children and adolescents – a matter of understanding?

Studies on dental fear, personal characteristics and psychosocial concomitants.

AKADEMISK AVHANDLING

som för avläggande av odontologie doktorsexamen vid Göteborgs Universitet kommer att
offentligt försvaras i föreläsningssal 3, Odontologiska fakulteten, Göteborg,
fredagen den 22 januari 2010 kl. 13:00

av

ANNIKA GUSTAFSSON

Leg. Tandläkare

Fakultetsopponent:
Professor Göran Dahllöf
Avdelningen för Pedodonti
Karolinska Institutet, Huddinge
Sverige

The thesis is based on the following papers:

- I **Gustafsson A, Arnrup K, Broberg AG, Bodin L, Berggren U.** Child dental fear as measured with the CFSS-DS; the impact of referral status and type of informant (child vs. parent). *(Accepted for publication in Community Dent Oral Epidemiology).*
- II **Gustafsson A, Arnrup K, Broberg AG, Bodin L, Berggren U.** Psychosocial concomitants to dental fear and behaviour management problems. *Int J Paediatr Dent. 2007; 17: 449-459.*
- III **Gustafsson A, Broberg AG, Bodin L, Berggren U[†], Arnrup K.** Prediction of dental behaviour management problems – the role of child personal characteristics. *(Submitted)*
- IV **Gustafsson A, Broberg AG, Bodin L, Berggren U[†], Arnrup K.** “Can discontinuity of specialized dental treatment among children and adolescents with dental behaviour management problems be predicted?” *(Submitted)*

Göteborg 2010



UNIVERSITY OF GOTHENBURG

Dental behaviour management problems among children and adolescents – a matter of understanding?
Studies on dental fear, personal characteristics and psychosocial concomitants.

Annika Gustafsson,

Department of Pedodontics, Institute of Odontology at Sahlgrenska Academy at Göteborg University, Göteborg, Sweden, 2010

The primary aim of this thesis was to study dental fear, personal characteristics and psychosocial concomitants in relation to dental behaviour management problems (DBMP) and dental attendance. The study sample consisted of children (8-12 yrs) and adolescents (13-19 yrs) referred to the Specialized Paediatric Dental Clinic because of DBMP. They were compared to a reference group of same aged dental patients in ordinary dental care.

A methodological study explored the Dental Subscale of the Children's Fear Survey Schedule (CFSS-DS) in terms of agreement between self and parental ratings and age- and gender-differentiated cut-off scores as compared to the commonly used. Baseline data on children's and adolescents' dental fear, psychosocial situation and everyday life, and personal characteristics were analysed according to a variable-based approach using logistic regression analyses and tree-based modelling of group differences. From the frequency of missed or/and cancelled appointments or interruption of dental treatment the group of referred children was separated into two groups (non-attendees vs. attendees). The differences between the groups were analysed using logistic regression analyses and tree-based modelling.

It was found that children and adolescents referred because of DBMP differ in several ways from children and adolescents in ordinary dental care. These differences concerns dental fear, emotional and behavioural problems and temperamental aspects, as well as psychosocial concomitants. The results indicated an overall more negative and complex picture for the children and adolescents referred because of DBMP. The occurrence of single-parent families, child-parent separations, and professional support actions were clearly more frequent among patients referred because of DBMP. Dental fear was the only variable with consistent discriminatory capacity for DBMP through all age and gender subgroups. Aspects of anxiety, temperament, and behavioural symptoms contributed to the prediction of DBMP, but differently for different subgroups and at different levels of dental fear.

A non-attending behaviour within the DBMP group was predicted by family factors and a temperamental profile indicating an out-going and somewhat impulsive personal profile.

The results indicate further need to establish and validate age and gender differentiated cut-off scores and that self-rating on the CFSS-DS should complement parental ratings, since DF was the single best predictor of DBMP at clearly lower scores than commonly used. Avoidance may be seen as the extreme of DBMP, varying from irregular dental attendance to dropping out entirely from dental treatment. Therefore deeper knowledge and understanding of DBMP, will help the dental staff to meet and treat children and adolescents according to their individual need and act for the prevention of DBMP and irregular dental attendance.

Key words: child, adolescents, dental behaviour management problems, dental attendance, dental fear, anxiety, psychosocial concomitants
ISBN: 978-91-628-7964-8

Correspondence: Annika Gustafsson, Department of Pedodontics, Postgraduate Dental Education Center Örebro, Sweden; email: annika.gustafsson@orebroll.se