

Children and adolescents with externalizing behavior in dental care

Akademisk avhandling

Som för avläggande av odontologie doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligens försvaras i Hörsal Arvid Carlsson, Academicum, Medicinaregatan 3, Göteborg, den 13:e juni, klockan 9:00

av Marie Staberg

Fakultetsopponent:

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Avhandlingen baseras på följande delarbeten

- I. Staberg M, Norén JG, Gahnberg L, Ghaderi A, Kadesjö C, Robertson A. Oral health and oral health risk behavior in children with and without externalizing behavior problems. Submitted for publication in Eur Arch Paediatr Dent. 2017
- II. Staberg M, Norén JG, Gahnberg L, Ghaderi A, Kadesjö C, Robertson A. Behavioural characteristics in externalising children with low and elevated risk for dental caries. Eur Arch Paediatr Dent. 2016;17:475-484.
- III. Staberg M, Norén JG, Johnson M, Kopp S, Robertson A. Oral health and dental care among children and adolescents with ADHD - A retrospective and exploratory study. JDOH 2015;15:5-13.
- IV. Staberg M, Norén JG, Johnson M, Kopp S, Robertson A. Parental attitudes and experiences of dental care in children and adolescents with ADHD - a questionnaire study. Swed Dent J. 2014;38:93-100.

**SAHLGRENSKA AKADEMIN
INSTITUTIONEN FÖR ODONTOLOGI**



Children and adolescents with externalizing behavior in dental care

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Abstract

Aim: To study children/adolescents with externalizing behavior and a subgroup diagnosed ADHD, regarding oral health, oral health behavior, and the parents' evaluation on their child's oral health and dental experience. **Patients and Methods:** Study Groups 1 & 2 consisted of families of 228 children (10-13 years), who participated in a parental training program. The parents answered the *Strengths and Difficulties Questionnaire*, *Disruptive Behavior Disorder Rating Scale*, *Parental Knowledge and Monitoring Scale*, and *Family Warmth and Family Conflict*, and evaluated the child's oral health and dental care. The children estimated dental fear via CFSS-DS and indicated diet and tooth brushing habits. Data, from dental records concerning caries, caries risks, dental injuries, dental fear, and behavior management problems, were compared to a control group. The study group was divided into low and elevated caries risk. Behavioral characteristics and family structure were studied. Study Group 3 consisted of families of children/adolescents with ADHD, 5-19 years of age, from the Child Neuropsychiatric Clinic in Gothenburg. The parents filled out forms regarding dental care, oral hygiene, and dietary habits. Dental records on dental care, caries, and dental injuries were obtained. **Results:** There was no difference in caries prevalence in children/adolescents with externalizing behavior, compared to controls. Children/adolescents with ADHD showed a high caries prevalence, compared with data from Region of Västra Götaland (RVG). There were more children with an elevated risk of caries among the children with externalizing behavior, compared to children in RVG. These children with an elevated caries risk showed higher levels of conduct problems, hyperactivity and impulsivity, compared to children with low caries risk. It was more common for children with externalizing behavior and children with ADHD to brush their teeth less than twice a day. Both of these groups of children preferred sweet drinks when thirsty. Children with externalizing behavior and children with ADHD had a high prevalence of dental injuries. There were no differences regarding the parents' assessment of oral health in the children with externalizing behavior, compared to controls. There was no difference regarding the parents' evaluation of dental care for the children with externalizing behavior, compared to controls. These children with an elevated caries risk had a higher risk of developing dental fear. Few parents of children/adolescents with ADHD perceived their child as having dental fear. The parents of children/adolescents with ADHD experienced shortcomings regarding neuropsychiatric knowledge, treatment, and patience from dental staff. **Conclusions:** Children with externalizing behavior, and children diagnosed ADHD, exhibited differences in oral health and had an increased risk behavior.

Keywords: ADHD, adolescents, behavioral characteristics, caries, children, dental care, dental trauma, externalizing behavior, oral health, neuropsychiatric disorders, parental attitudes, risk behavior.