

## **Evaluation of the relationship between dental fear and anxiety in children aged 5 to 10 years with the rate of dental caries, history of trauma and socio-economic status in patients referred to Ardabil dental clinics in 1401**

### **Abstract**

**Introduction:** Dental fear, with its complex and multifactorial origin, is an important factor in causing health problems in children. Dental caries is one of the factors that can be related to dental fear. Literatures have shown that children with a painful experience at a young age are expected to be more likely to develop dental anxiety. It seems the family income and socio-economic status are factors influencing the level of caries and dental anxiety in children. Therefore, the aim of this study was to evaluate the relationship between dental fear and anxiety in children aged 5 to 10 years with the rate of dental caries, history of trauma and socio-economic status status in patients referred to Ardabil dental clinics in 1401.

**Materials and Methods:** The statistical population of this study included children referred to Ardabil dental clinics within age range of 5-10 years. A questionnaire was provided to the parents, which included the demographic information of the child and socio-economic status of family. The dmft/DMFT index was evaluated to evaluate the oral and dental health status of the child. Children's dental fear and anxiety was measured by two standard scales FIS and CFSS-DS. Data analysis after collection was done using SPSS v21 and Chi-2 test and the significance level of the test was 0.05.

**Results:** The prevalence of dental anxiety was 11.4% based on the FIS and 18.2% based on the CFSS-DS. Children's age had a statistically significant relationship with dental anxiety, and the level of anxiety was higher in the age group of 5-7 years ( $P=0.043$ ). Children's who had dental visit history, showed higher levels of anxiety based on the CFSS-DS ( $P=0.002$ ), but according to the FIS, children without a history of dental visit were higher in the "very upset" group ( $P=0.009$ ). No correlation was observed between the dmft and anxiety levels ( $P=0.665$ ), but severe caries in permanent teeth (DMFT) was associated with a higher level of anxiety ( $P=0.028$ ). No statistically significant relationship between gender ( $P=0.329$ ), number of siblings ( $P=0.059$ ), child's position in the family ( $P=0.636$ ), parent's education ( $P=0.337$ ), Family income ( $P=0.457$ ) and history of trauma ( $P=0.788$ ) was observed with dental anxiety.

**Conclusion:** The prevalence of dental fear and anxiety in children of Ardabil city was 18.2% based on the CFSS-DS index and 11.4% based on the FIS index. Age, history of dental visit and dental caries were the factors that had significant relationship with dental anxiety in children.

**Keywords:** Dental anxiety, Dental caries, Dental trauma, Socio-economic status