

## **Abstract**

### **Maternal dental anxiety and its effect on caries experience and first dental visit of children**

**Introduction:** One of the psychological factors affecting oral and dental health behaviors is dental anxiety, which may be transferred to the child and cause a decrease in visits to the dentist due to fear or negligence in visiting the dentist. With this mentioned hypothesis, this study was conducted with the aim of investigating the effect of maternal dental anxiety on the time of the first visit to the dentist and the rate of caries in children.

**Materials and methods:** This cross-sectional study was conducted on 220 children aged 3 to 6 years and their mothers who referred to health centers in Ardabil city in 1402. Maternal dental anxiety was measured with the Modified Dental Anxiety Scale (MDAS). Children's caries experience was calculated using dmft index, finally the collected data were analyzed using Spearman's correlation coefficient, multiple linear regression, Kruskal Wallis test. SPSS version 26 software was used for data analysis. A significance level of less than 0.05 was considered.

**Results:** The results of the survey showed that mothers in most cases (69.1%) had low or no anxiety, however, 11.8% of mothers had high and severe dental anxiety, which significantly decreased with age ( $P=0.043$ ), but mothers' education had no effect on their dental anxiety ( $P = 0.118$ ). There was a significant relationship between mother's dental anxiety and the reason for the visit (visit and caries) ( $P=0.008$ ). Also, with the increase of mothers' dental anxiety, the amount of dmft and the age of the child's initial visit to the dentist increased ( $P < 0.05$ ).

**Conclusion:** Overall, the results showed that with the increase in mothers' anxiety, the child's dmft index and the age of going to the dentist increased.

**Keywords:** Anxiety, Dental Anxiety, Dental Caries.