

Abstract

Introduction: Dental caries is one of the most chronic diseases in children. Socioeconomic factors increased the risk of dental caries. The purpose of this study was to determine of dental caries prevalence among 6-12 yearsold school children in Ardebil city and its relationship with socioeconomic status of family in 2012- 2013.

Materials and Method: In this descriptive – cross sectional study a total of 874 school children (444 girls and 403 boys) were randomly selected from public and private schools. Pupils were examined clinically for dental caries according to world health organization (WHO) Criteria (DMFT, dmft, DMFS) and Dental caries prevalence . Dental examinations of students were done under artificial light, using explorer, tongueblade, glove, mask and dental mirrors. Data was obtained through a questionnaire containing questions about child age and sex, number of sibling, fathers / mother's level of education and their occupation, family income, diet (snak foods), frequency of daily tooth brushing, dental visit. Data was analysed by spss software 16 version and chi- square tests, ANOVA, T- Test. The differentiations with $P < 5\%$ were significant.

Results: Dental caries prevalence "overall" was 79.7, 71.1 in permanent dentition, and 88.3 in Primary dentition among 6-12 years old school children. The mean dmft, DMFT, DMFS index were (2.5 ± 0.1 , 2.5 ± 0.1 , 3.6 ± 0.2) in girls and ($3.1 \pm 13\%$, 3.5 ± 0.1 , $3.2 \pm 17\%$) in boys. The mean dmft, DMFT index were (5.1 ± 0.2 , 5.7 ± 0.2) in 7 yearsold and the mean DMFS index (5.4 ± 0.3) in 12 yearsold in schoolchildren. Comparing means of DMFT and dmft index showed significant differences between the gender and age ($P = 0.001$). The comparing means of DMFS index showed significant differences with age ($P = 0.001$) but There was no significant difference in relation to gender ($P = 0.67$) . ANOVA analysis and T-Test and chi- square test showed meaningful relationship between fathers and mother's ,level of education, and father's occupation, family income, diet (snak food), frequency of daily toothbrushing, number of sibling and dental vists, with dmft, DMFT, DMFS index.

Conclusion: Dental caries prevalence among 6-12 years-old school children in Ardebil is higher than the global standard of WHO for 2020. The current study has identified a very high prevalence of caries among schoolchildren with low

socioeconomic status. Socioeconomic status are strong predictors in dental caries. Therefore, improving the existing dental services and performing early oral education, prevention and treatment programs for school children seems to be necessary in the future.

Key words : Dental caries prevalence, socioeconomic status, dmft, DMFT, DMFS(index), school children, primary school, Ardebil city.