

Prevalence of Dental Caries among School Children in Hyderabad Pakistan

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ABSTRACT

Objective: The present study was to evaluate the prevalence of dental caries among school children and to find out the association of socio-demographic characteristics with the prevalence of dental caries.

Design: This is the Cross-sectional and survey type study

Methodology: Study was conducted in schools of Hyderabad, Sindh. A total 100 Students aged 8-12 years were checked for presence of dental caries and asked about the hygienic habit and socio-demographic characteristics with the help of predesigned questionnaire. Data were analyzed using SPSS.

Results: 100 students contributed in the present study the generally prevalence of dental caries was found to be 90%. The prevalence of dental caries was higher between students belonging to family having less income. The prevalence was decrease between students belonging to family having high income.

Conclusion: Dental caries would be prevented by appropriate hygienic ways. Dental awareness among students and their parents should be prompted for prevention of this condition. Early diagnosis and prompt treatment can prevent further damage and can save the teeth. Dental and dietary habits are likely to increase this prevalence; hence the need for continuous monitoring, preventive and restorative programmes.

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INTRODUCTION

Dental caries is an infectious disease that causes demineralization of teeth. The association of four aspects accords this to occur: a susceptible tooth surface, specific bacteria in dental plaque, duration and a rich diet in fermentable carbohydrates, mainly refined sugars. The effect of dental caries contains oral pain which may distress

speech, eating, sleeping, swallowing and breathing.¹ It was reported that the prevalence of dental caries among school going children is 60% to 90% in Asia and in many developed countries the prevalence and severity of dental caries have declined substantially because of preventive oral health care programmes and changes in

living conditions and lifestyles.² Dental health is often neglected by a vast majority of population. In the developing countries like Pakistan the prevalence of dental caries is very high particularly among the children's. The prevalence is higher in rural people and among school children. The absence of practice of healthy habits often leads to this type of problem. Dental caries is not only a medical problem but many socio-demographic factors are said to be associated with this. Usually the habit of taking care of dental health is obtained from the parents and other senior members of family.^{3,4} In Hyderabad, Pakistan where the birth rate is still high and there is less spacing between two births, mothers often are not capable of giving proper care to all the children. The unhealthy practice of children often leads to many medical problems some of which can cause permanent damage. If dental caries develops after the eruption of permanent dentition and proper care is not taken,^{5,6} it may lead to permanent damage and spread of infection throughout the body can also occur. Utmost care must thus be taken so that dental caries should not develop. Early diagnosis with prompt treatment is also necessary.⁷⁻¹⁰ Present study was conducted in various schools in the Hyderabad, Sindh to evaluate the prevalence of dental caries between students to find out the association of socio-demographic features with the dental caries prevalence.

METHODOLOGY

Study was conducted in many schools in the area of Hyderabad, Sindh; Total 100 Students aged 8-12 years were checked for presence of dental caries and asked about the hygienic habit and socio-demographic characteristics with the help of pre-designed questionnaire. Inclusion criteria: (i) students between ages 8-12 years old. (ii) Present dental caries. Exclusion

criteria: Students with above 8-12 years old were excluded in the present study. Cross-sectional study was determining the relationship between dental caries and oral health practices among school children attending public and private schools in Hyderabad, Sindh. The study population consisted of 8-12 year children attending public and private schools. The Study was conducted between February and August 2014. Simple random sampling was used. Record was obtained and comprising all the 8-12 year children's. A single number was given to each child, and then a list of random numbers was formed using the computer by MS Excel. The study was done by interviewing the students using a pre-designed, pre-tested, semi-structured questionnaire and an examination of the condition of the teeth was done by dentist. Instruments used during the screening included dental mirrors and tongue depressors. Ethical clearance has been obtained from the Institutional Ethical Review Board. Data were entered and analyzed in statistical program SPSS version 16.0.

RESULTS AND DISCUSSION

100 students contributed in the present study the generally prevalence of dental caries was found to be 60% in 8- 10 years children and 80% in 11-12 years children. The dental caries prevalence was higher between students belonging to family having less income. The prevalence was decrease among students who had brushing habits and belonging high income family has compared to those having no brushing habit or not every day. (Fig: 1-3)

Dental caries is the basic problems in school going children. The present study conveys that prevalence of dental caries was higher in lower income family as compared to higher income family and also dental caries was found to be 60% in 8- 10 years and 80%

in 11-12 years children. People belongs to lower income family are lacking of sterile practice and they live in unhealthy environment these aspects lead to dental caries. Asked about students habits of brushing the teeth and it was observed that those who used to brush twice a day had less prevalence of dental caries as compared to those whose brushing habit are either once daily or not every day.¹¹⁻¹³ It was reported that in Kenya that brushing habit has no significant effect on the dental carries prevalence which is contradictory to the results of present study. However in other study found that 24% children had the brushing habit more than once a day and overall prevalence of dental caries is less in their study as compared to the present study.¹⁴ Dental caries is not only a medical problem but also a social problem. Awareness among students can be designed by the school teachers because they are the role model for the students.¹⁵ Parents should be aware of the dental health of their children and parent/teacher meetings should be frequently planned during which parents are educated on the importance of good hygiene practices in disease prevention. Health education should be integrated in the systematic activities of the school.

CONCLUSION

Dental caries would be prevented by appropriate hygienic ways. Dental awareness among students and their parents should be prompted for prevention of this condition. Prompt diagnosis and early treatment would prevent additional impairment and save the teeth. Dental and nutritive habits are likely to increase this prevalence; therefore the need for continuous monitoring, protecting and curative programmes.

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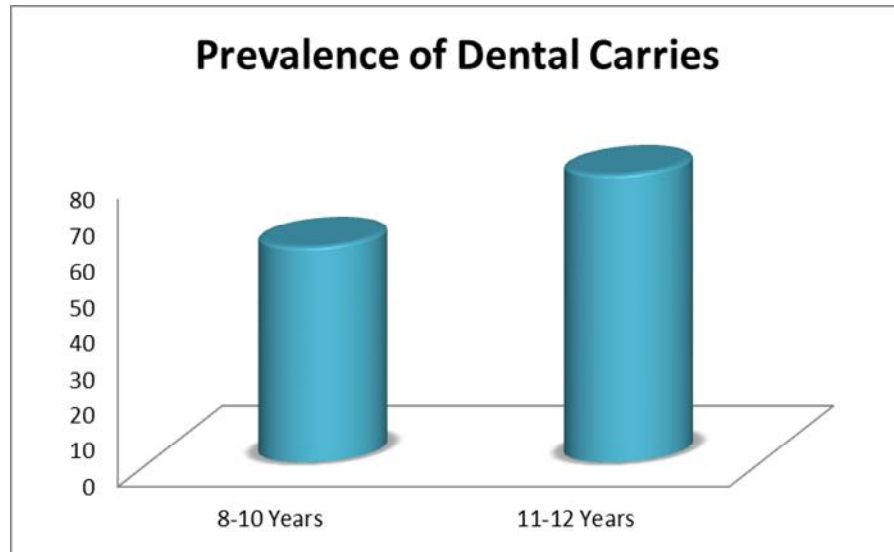


Figure 1. Prevalence of dental caries in age of 8- 10 years and in 11-12 years children

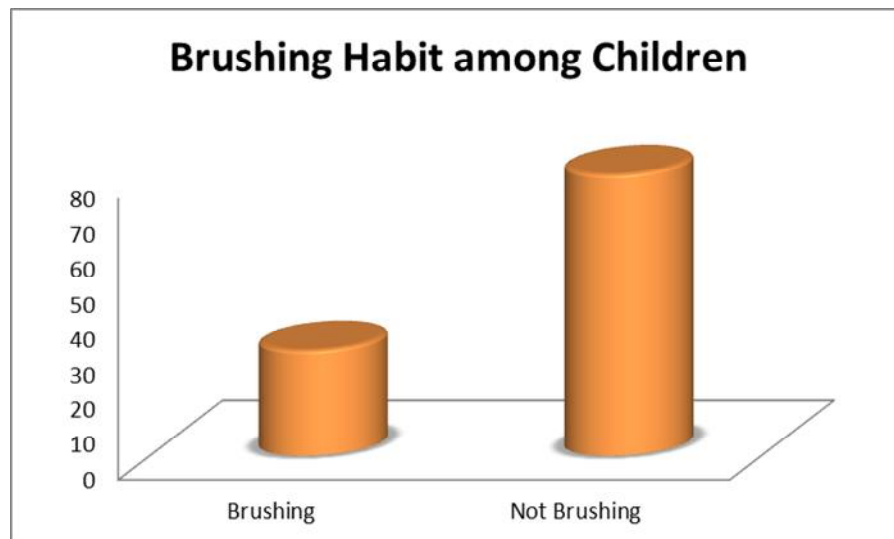


Figure 2. Decreases prevalence of dental caries in brushing habits as compared to non-brushing habit

