Short Communication

The Correlation between Oral Health and Learning Ability

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Aim: To determine the relationship between children’s oral health status and school attendance and performance. Materials and Methods: A cross-sectional study using a closed-ended questionnaire. The survey was constructed using paper as well as an online link. The questionnaire included questions about the knowledge of parents, brushing frequency, and dental visits. 184 subjects participated in the study, descriptive statistics of frequency distribution and percentages were calculated for the categorical variables. All the data were analyzed by using SPSS version 25 (Armonk, NY: USA). Conclusion: There was a negative correlation between oral health and learning ability. 25% of kids do not go to school because of dental problems and most parents have a bachelor’s degree, also parents do not supervise their kids and use a rich fluoridated toothpaste that can lead to dental fluorosis.

Keywords: Oral health, Children, Correlation, Dental caries, Learning ability.

INTRODUCTION

Caries is a significant public health problem affecting pre-school children, and the most common chronic disease of childhood, affecting 28 percent of children two to five years of age, or over four million children nationwide. [2] Dentistry has come to emphasize early childhood as an important time to introduce proper oral health practices to address this growing problem. [8] Regular oral hygiene practices, professional oral health risk assessment, and the first dental visit should all occur after the child’s first birthday. [8] Some targeted programs exist, but it appears that in general, oral health receives little attention, particularly in those programs that do not receive federal funds. [8]

The quality of child care, including oral health activities, can be influenced by a number of non-regulatory and regulatory approaches, including technical assistance, credentialing of individuals, accreditation standards, funding standards, and licensing requirements. [8] These programs can provide oral health services such as brushing of children’s teeth in the classroom, education of the child or parent, and assurances that the child has a dental visit. [8] By Educating parents on proper hygiene techniques, including daily brushing, is necessary for promoting children’s oral health starting in early childhood and preventing ECC from developing into cavities later in life. [3]

It is important that the oral health needs of infants and young children be addressed as early as possible and as a part of well-child care since the dental disease is preventable. [2] Collaboration has the potential to improve the effectiveness of health promotion education and enhance the opportunity for a child to have a lifetime free from preventable oral disease. [2]

MATERIALS AND METHODS

This is a cross-sectional study using a closed-ended questionnaire. The survey was constructed using paper as well as an online link. The questionnaire included questions about the knowledge of parents, brushing frequency, and dental visits. 184 subjects participated in the study, descriptive statistics of frequency distribution and percentages were calculated for the categorical variables. All the data were analyzed by using SPSS version 25 (Armonk, NY: USA).

RESULTS

A total of 184 subjects participated in the study, in which most of them were Saudi nationals (90.2%), married (66.8%) having 1-3 children (69.6%). More than half of the children were in the age range of 9-12 years (52.7%). A very high number of
mothers (95.1%) compared to the fathers (4.9%) who participated in the study.

Most of the study participants were in the age range of 18-30 years (40.8%), followed by 31-40 years (23.9%), 41-50 years (23.9%). The least number of participants were in the age group of 50 years and above (11.4%). A high percentage of participants had bachelor’s (67.4%) level of education followed by Secondary (21.7%), higher than bachelor’s (8.7%) and less than secondary education (2.2%).

More than half (56.5%) of the study participants mentioned that their children brushed their teeth once daily. Nearly (40.2%) participants took their children regularly (every 6 months or a year) to the dentist for examination.

Just less than half (48.6%) (out of 110) participants never thought of taking their children for regular examination. While (29.7%) and (21.6%) avoided regular dental examination as their children did not suffer from pain and any previous bad experience, respectively.

Most of the study participants (80.4%) mentioned that their children start using toothbrushes and toothpaste at the age of 2-4 years. While the majority (56%) did not supervise brushing and flossing of their children. Half of the parents used soft toothbrushes and while the other half mentioned that their children used very soft toothbrushes. More than half (52.2%) of the study subjects used fluoride-rich toothpaste for their children. Less than half (48.9%) of the study participants knew about the wiping of the baby’s gums before the eruption of the teeth. Responses to the questions related to the oral health of the children are displayed.

When asked about the effect of oral health on their children, (26.6%) mentioned problems with the appearance of the teeth. Seventeen parents, out of (n=49) complained of caries and 39 mentioned the absence offront teeth. While one-fourth (25%) parents complained about the refusal of their children to go to school due to dental problems. More than one-fourth (25.5%) of parents said that they remained absent from work due to the dental problems of their children.

CONCLUSION

Within the limitation of this study, it showed a negative correlation between oral health and learning ability. However, it showed 25% of kids do not go to school because of dental problems and most parents have a Bachelor’s degree, also parents do not supervise their kids and use a rich-fluoridated toothpaste which can lead to dental Fluorosis. Multiple factors at child-, family- and community-level influence young children’s oral health and their oral hygiene practices. [3] An opportunity exists to enhance the limited attention to oral health in state regulations. [9]

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CONFLICT OF INTEREST

There is no conflict of interest among the authors.

REFERENCES


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