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RESEARCH ARTICLE

ASSESSMENT OF ORAL HYGIENE PRACTICES AND BELIEFS IN PRETEEN CHILDREN

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ABSTRACT

Aim: The purpose of this study was to identify factors that may motivate children to practice good oral hygiene.
Method: A cross-sectional survey was conducted. A questionnaire was given to 150 school going children regarding their histories with caries, perceived confidence in brushing, self-perceived susceptibility and vulnerability for caries and/or poor oral health, and perceived benefits and barriers to practicing oral hygiene.
Results: Most children thought good oral health as being central to their overall health; however, some viewed poor oral health as occurring only in the old age. A greatest motivator for brushing was good esthetic appearance of teeth. The greatest barriers to performing oral hygiene were lack of time and limited access to toothbrushes and dentifrice when away.
Conclusions: To motivate children in this age range, emphasis should be placed on the positive aspects of maintaining good oral hygiene for its contribution to appearance.

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INTRODUCTION

Dental caries is the most common oral infectious disease and has been identified as chronic childhood disease. However caries is easily preventable and its prevalence and severity can be lessened. The common preventive measures for caries are brushing teeth twice daily or use of floss. However the compliance of these among most age groups, especially children, is usually low (Mahboubi *et al*., 2017). Children's beliefs about oral health can lead to their compliance or noncompliance with oral hygiene practices (Walker, 2015). One of the important aspects in prevention of dental disease is the understanding of the cognitive process that helps children take decisions to practice preventive health care behaviors (Ryan *et al*., 2008). Various theories and models have been proposed that can predict individual's health behaviour. One such is the health belief model. Health belief model (HBM) is a theory that assesses the values individual place on the desire to avoid illness or stay well (value) combined with their belief that a health action can prevent illness (expectation) (Walker, 2015). It has following dimensions

Perceived susceptibility*:* Assessment of the severity of a health problem and its potential consequences (Solhi *et al*., 2010).

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Perceived susceptibility: Assessment of risk of developing a health problem (Solhi M, Zadeh, 2010).

Perceived benefits: Assessment about the advantages of doing the preventive behaviour (Solhi M, Zadeh, 2010).

Perceived barriers- Each healthy behaviour and practice may encounter some barriers and problems (Solhi M, Zadeh, 2010).

There is limited understanding of children's oral hygiene decision-making process. Thus the purpose of the study is to identify factors that may motivate children to practice good oral hygiene.

METHODS

The study was conducted in department of pedodontics and preventive dentistry of Bharati Vidyapeeth dental college and hospital. The study reviewed and approved by the Institute Ethics Committee. A cross-sectional survey was conducted among 150 school going children between the age group of 10-11 years in Pune city. The study was conducted in schools. Informed consent and demographic sheet for name, address, parent's education and monthly income was distributed to children.

The children were divided into three categories depending upon socioeconomic status according to BG Prasad socioeconomic classification (Mangal *et al*., 2015).

Group 1 – Lower class – family income is less than Rs 8110 per month

Group 2 – Middle class – family income is between Rs. 8112 to Rs. 53560 per month

Group 3 – Upper class – family income is more than Rs. 53561 and above.

After obtaining prior permission from their parents the children were asked to answer a questionnaire. All answers were kept confidential. The Oral hygiene index (OHI) and 'D' Decayed component of Decayed, Missing and Filled teeth index (DMFT) were calculated of children according to the Who specifications. The answers of questionnaire were evaluated.

Statistical Analysis

Statistical analysis of the DMFT and OHIS scored were done using ANOVA test using SPSS software 20

RESULTS

The answers to the questionnaire were evaluated. The questionnaire was designed according to health belief model to understand about children's knowledge about oral health and preventive measures, their understanding about benefits of brushing, what are the barriers for not brushing and their perception about risk of caries.

SECTION 1- KNOWLEDGE AND OPINIONS

Most of the children could not explain what oral meant. Some children thought it meant to have white clean teeth or taking care of teeth or to protect teeth from germs For children oral hygiene was good when the teeth were white, no smell from mouth or no black teeth. 93% children (N=140) use tooth brush and toothpaste for brushing. Children from the group 1 used toothpowder and finger for brushing. It was seen that small number of children from Group 3 used powered toothbrushes.

However children did not know how long brushing should be done. Most children (N= 78) brushed their teeth only once. Many of them knew what a mouthwash is and its use. Children from group 1 and 2 had not used mouthwash. Most children did not know about the use of floss.

SECTION 2 – SELF-EFFICACY

Children from all groups thought that brushing was easy. They thought that toothbrush and toothpaste made brushing easy. Most children thought that they brush their teeth properly.

SECTION 3 – PERCIEVED BENEFITS

Most common reason for brushing was to have white teeth and prevent teeth from turning brown. Many thought that they felt fresh after brushing. Few children had experienced toothache and so they brushed their teeth to prevent toothache.

SECTION 4 – PERCIEVED BARRIERS

The most common barriers to brushing were a perceived lack of time, being 'too tired' especially at night, and a dislike of brushing. It was seen that most children did not brush at night. The reasons for not brushing in morning were if they were late to school or during exams. Children perceived a lack of time at night due to multiple reasons, such as having too much homework and too many activities. It was seen that children from group 1 did not brush teeth even once sometimes.

SECTION 5 - SUSCEPTIBILITY/ VULNERABILITY

For knowing the susceptibility and vulnerability two questions were asked: (1) what is the Worst thing that can happen to your oral health, and when is this likely to happen? (2) when can your teeth start to get bad? The most common response was teeth will start moving and fall and they will have difficulty in eating. Most children thought that they will they will get bad teeth after they grow old.

The Decayed teeth and OHIS scores were evaluated statistically.

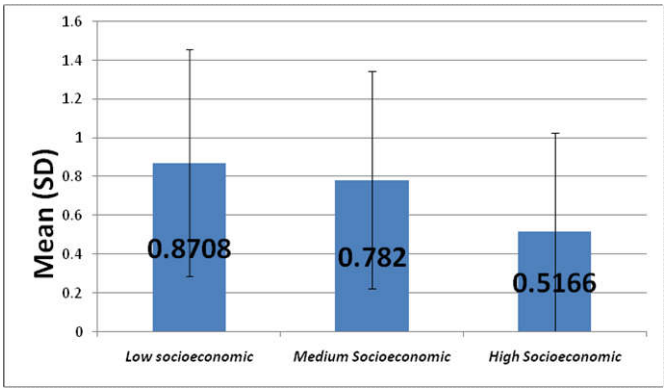

Figure 1. Comparison of OHIS scores in terms of {Mean (SD)} among the 3 groups using ANOVA test

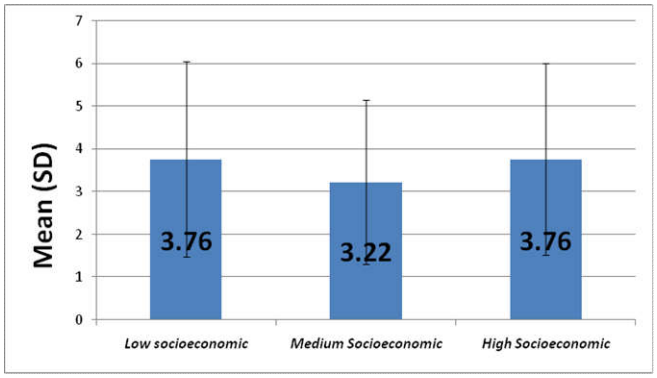

Figure 2. Comparison of decayed teeth in terms of {Mean (SD)} among the 3 groups using ANOVA test

DISCUSSION

Children's beliefs about oral heath can lead to their compliance or noncompliance with oral hygiene practices. Thus its children's beliefs that motivate them to maintain good oral health. Yet there is not much research that has been done to understand the oral health beliefs and motivation for tooth brushing. Piaget's developmental stages of learning places 7 to 11 year-olds at the concrete operational stage of reasoning.

This stage is marked by an ability to begin thinking logically, although reasoning in a children develops through experience. Hence this study was done on 10-11 year old children (Ginsburg, 1969). The number decayed teeth and the oral hygiene index was calculated to co-relate children's knowledge and the oral findings. It is been seen that the value of OHI-S in group 1 was poor as compared to other groups. However the number of decayed were almost same in low and high socioeconomic group. It is seen that children from high socioeconomic status are more aware about oral hygiene practises and are motivated to utilize them. Education and the acquisition of knowledge is recognized as an integral public health interventional component (Rychetnik *et al*., 2002). The importance of education was illustrated with the finding that most of the children believed they could prevent tooth loss if they knew all the facts concerning dental disease. The children did not know about optimal brushing duration or about various other oral hygiene measures like floss or mouthwash. This suggests that these are areas about which awareness needs to created among children. The primary motivator for children for toothbrushing was to have good esthetics. Most of them brushed their teeth to have white teeth. This suggests that good esthetics can be used as a motivator for improving oral hygiene practices in this young age group in addition to caries prevention. From the study it was seen that children have some of the common beliefs like toothpaste and Colgate are synomous. Children believe that oral problems begin in old age. For them white teeth equates to good oral hygiene. Many children did not know what a floss is. Most children believe that they know how to brush their teeth correctly. They can expect lesser teeth related problems if they brush their teeth properly. There is an easy way to prevent tooth decay. The top three reasons for brushing were to have good teeth, to prevent cavities and not to have bad breath.

Conclusion

To motivate children in this age range emphasis should be placed on the positive aspects of maintaining good oral hygiene for its contribution to appearance. Also implication of poor oral hygiene needs to be told to children. For this various educational programmes need to be conducted to educate children.

REFERENCES

Ginsburg H, Opper S. 1969. Piaget's Theory of Intellectual Development. Upper Saddle River, N.J.: Prentice Hall.

Mahboubi M, Motlagh MI, MirzaeiAlavijeh M, Jalilian F, Gharibnavaz H, Fattahi M. 2017. Determinants of Tooth Brushing among Primary School Students. World Family Medicine/Middle East Journal of Family Medicine, 15(7):157-61

Mangal A, Kumar V, Panesar S, Talwar R, Raut D, Singh S. 2015. Updated BG Prasad socioeconomic classification, 2014: A commentary. *Indian J Public Health.,* 59:42-4

Ryan RM, Patrick H, Deci, EL, *et al*. 2008. Facilitating health behaviour change and its maintenance: interventions based on Self-Determination Theory. Eur Health Psychol 10:2-5

Rychetnik L, Frommer M, Hawe P, *et al*. 2002. Criteria for evaluating evidence on public health interventions. *J Epidemiol Community Health.,* 56:119-27

Solhi M, Zadeh DS, Seraj B, *et al*. 2010. The application of the Health Belief Model in oral health education. Iran J Public Health, 39:114-19.

Walker K, Jackson R. 2015. The health belief model and determinants of oral hygiene practices and beliefs in preteen children: a pilot study. Pediatric dentistry. 37(1):40-5.

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