

Awareness About Dental Caries in Parents of School Going Children: A Study in a Tertiary Care Hospital

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ABSTRACT

Objective: To assess the awareness about dental caries in parents of school going children attending a tertiary care hospital at Hyderabad.

Study design: Prospective and qualitative study.

Place and duration: Operative dentistry department, Liaquat University of Medical and Health Sciences, Hyderabad from Aug 2014 to Jan 2015.

Material & Methods: Children of class 2 -4 were screened for presence of caries, out of 417 children screened, 250 were having caries therefore 250 parents were included in the study, they were divided into two groups according to educational status. Group A comprising of parents with a university degree and Group B with a lower qualification, the questionnaire was filled in by the parents during parent teacher meeting, the questionnaire included questions regarding food items leading to caries, number of times children brush teeth, importance of fluoride in preventing caries how often brush was changed and about dental check up. SPSS13 was used for data analysis.

Result: Group A comprised of 137 parents and group B included 113. The awareness regarding sweets predisposing to caries was 66.4% in A and 45.1 % in group B. Importance of fluoride in prevention of caries was 40.1% and 31.9% in A and B groups respectively. With regards to assistance during brushing the answer was positive in 55.5% in Group A and 31.0% in B group. Monitoring during brushing was 19.7% in A group and 13.3 % in group B. Awareness of brushing twice was 63.5% in group A and 25.7% in group B. Change of brush every 3 months was 55.5% and 27.4 % in group A and B respectively. Caries experience of parents was 43.8% and 61.1 % in group A and B respectively. Visit of the child for dental check-up was 18.2 % in group A and 10.6 % in group B.

Conclusion: Our study showed better knowledge and attitude of educated parents as compared to those who were less educated. Twice a year regular dental check up can have a way for healthy teeth and healthy life.

Key Words: Dental caries, Oral health awareness, Parents, School children

INTRODUCTION

Dental caries is a most prevalent problem during childhood¹. In the Third world countries the changing life styles and dietary patterns are increasing caries incidence².

School going children need guidance for healthy teeth and maintenance³.

It has been documented that about 90% of school children worldwide and most adults have experienced caries, with the disease being most prevalent in Asian and Latin American countries and least prevalent in African countries⁵. Dental caries is very common cause that leads to pain and suffering. This dental decay in children can also produce sleeping problems; eating disorders and behavioural disorders⁶. Carbohydrates are common dietary items predisposing to caries⁷. The rate of carious teeth is high in school children.

Educational status of parents has some role in decreasing the incidence but the general misconceptions have played a deleterious role⁸, the myth that milky teeth need not be brushed or visit

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to a dentist is not a necessity and are visited in case of painful tooth, milk teeth would shed and they are least important⁹.

So a study was conducted to assess the awareness of parents of school going children in relation to dental caries.

MATERIALS & METHODS:

The current prospective study was carried out from Aug 2014 to Feb 2015 at the operative dentistry department, Liaquat University of Medical and Health Sciences, Hyderabad, to assess the knowledge of parents of school going children having dental caries. All participants were clearly explained about the objective of the study and consent was taken from school authorities and parents of children.

The study was approved by the ethical committee. A pilot study was carried out initially in private school to find out the presence of dental caries among children. The children were examined in classroom in ordinary chair and bright light. The demographic details and oral health status was filled as per proforma provided by WHO for programmes. Decayed missing filled teeth were noted and data regarding caries status was entered.

Then the parents of children having caries were selected and divided into two groups according to their educational status. Parents were interviewed during parent teacher meeting session, a questionnaire was made, and the questionnaire included questions regarding food items leading to caries, number of times children brushes the teeth, monitoring by parents during brushing, how often the brush was changed and about visit to dental surgeon. The questionnaire was filled in by the parents. The data obtained was analysed.

Inclusion criteria:

School children 6-10 years.
Children of both genders.
Parents either mother or father

Exclusion criteria:

Children suffering from systemic disease.
Children with orthodontic braces.
Unwilling parents.

Data Analysis:

The data was analysed using SPSS version 13; p value and chi square were calculated.

RESULTS:

Children of class 2-4 screened for the presence of caries, out of 417 students 250 were found to have caries or tooth decay. Therefore 250 parents were included in the study. They were divided into 2 groups according to their educational status. Group A comprising of parents with a university degree and Group B with a SSC or H.S.C

Age range was 25-40 years and a mean age was 28 ± 27 years. 137(54.8%) parents were in Group A, and 113(45.2%) in group B. In group A the awareness regarding sweets predisposing to caries was 66.4% and that in B was 45.1% (Table1).

Knowledge about Importance of fluoride in prevention of caries was 40.1% and 31.9% in A and B groups respectively.

With regards to assistance during brushing the answer was positive in 55.5% in Group A and 31.0% in B group. Monitoring during brushing was 19.7%.in A group and 13.3% in group B. Awareness of brushing twice was 63.5 % in group A and 25.7% in group B. Change of brush every 3 months was 55.5% and 27.4 % in group A and B respectively. Caries experience of parents was 43.8% and 61.1% in group A and B respectively. Visit of the child for dental check-up was 18.2% in group A and 10.6% in group B.

DISCUSSION:

In our study parents having a higher qualification were more aware of the causative factors for caries such as sweets and sugary drinks i.e. 66.4 percent as compared to less educated parents(45.1 percent) p value $<.0001$, this is in accordance with study of Begum¹⁰, who reported that caries are directly proportional to high sugar intake. Where as in our study the knowledge about importance of fluoride in prevention was 40.1 percent and 31.9 percent in group A and B respectively and hence increase incidence in our children.

Although there is decline in dental caries in several developed countries mainly USA and several European countries^{11,12}. Fluoride has been recognised as one of the most influential factor responsible for the decline of caries among children and adults of these countries.

Assistance during brushing was also better in Group A than in B, this is also reported by Bhavneet kumar¹³, his study in 2007 as educated

Table-1: Results from Analysis between Awareness of Dental Caries in Relation to Risk Factors

RISK FACTORS	GROUP A 137n		% of Group A	GROUP B 113n		% of Group B	P.VALUE
	YES	NO		YES	NO		
DOES SWEETENED FOOD CAUSE CARIES	YES	91	66.4%	YES	51	45.1%	<0.0001
	NO	46	33.6%	NO	62	54.9%	
IMPORTANCE OF FLOURIDE	YES	55	40.1%	YES	36	31.9%	0.000
	NO	82	59.9%	NO	77	68.1%	
ASSISTANCE DURING BRUSHING	YES	76	55.5%	YES	35	31.0%	0.000
	NO	61	44.1%	NO	78	69.0%	
MONITORING CHILD DURING BRUSHING	YES	27	19.7%	YES	25	13.3%	1.000
	NO	110	80.3%	NO	98	86.7%	
AWARENESS OF BRUSHING TWICE	YES	87	63.5%	YES	29	25.7%	0.000
	NO	50	36.5%	NO	84	74.3%	
CHANGE OF TOOTH BRUSH EVERY 3 MONTHS	YES	76	55.5%	YES	31	27.4%	1.000
	NO	61	44.5%	NO	82	72.6%	
CARIES EXPERIENCES OF PARENTS	YES	60	43.8%	YES	69	61.1%	0.000
	NO	77	56.2%	NO	44	38.9%	
VISIT OF CHILD FOR DENTAL CHECKUP	YES	25	18.2%	YES	12	16.6%	0.001
	NO	112	81.8%	NO	101	89.4%	

parents show interest in health and up keep of their children

Awareness about brushing twice shown by 63.5 percent of group A and 25.7 of group B, this is again dependent on low level of education in group B, as stated by various studies that most children brush their teeth once¹⁴.

The visit to dental surgeon for regular check up was poor in both group A and B i.e. 18.2% and 10.6 % respectively. Improper utilization of Dental services could be poor accessibility or the thinking that dental check up is only required in case of emergency dental care. Similar findings were noted by other workers as in another study in

Bangalore India it was reported that 35 percent of parents take their child for regular dental check up¹⁵.

The measures for the improvement of oral health requires understanding of individuals knowledge & perception about oral health educated parents can thus guide the child for good dental health.

CONCLUSION

A better knowledge and attitude of educated parents was noted as compared to those who were less educated, but the awareness about dental caries was poor in all of the parents.

Frequent pedodontic camps are recommended to be organized where the compulsory presence of the parents and active participants of the school be a necessity. During the camps the parents and children should be taught about the method of brushing the teeth, brushing twice must be a routine, avoiding chocolates, candies, soft drinks and sugary fruit juices, or gargling after such intakes.

Twice a year regular dental checkups can have a way for healthy teeth and a healthier life.

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