Knowledge on Brushing Pattern among Caregivers having Younger Children

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Abstract:

Background: Mother is the decision makers in matters of health-care for children; thus, they play an important role in achieving the best oral health outcomes for their young children. **Objective:** To assess knowledge on brushing pattern among caregivers was our ultimate goal.

Methodology: This was a cross sectional observational study. Non probability purposive sampling technique was used to collect data. Pretested structured questionnaire was used to take interview. Prior interview verbal consent was taken from every respondent.

Result: Mean±SD age was 27.16±6.45 year. More than half of the respondents (51.1%) got information on brushing pattern from TV. Besides 19.1%, 14.5% and 14.5% respondents got information from family members, textbook and dentist respectively. No significant association was found between occupation of respondents and knowledge on brushing pattern (P=0.068>0.05).

Conclusion: This study concluded that knowledge on brushing pattern was not satisfactory and need to be improved.

Key words: Brushing pattern, Caregivers, Children

Introduction

Dentists can play an important role in the primary prevention of dental problems in young children through preventive treatments, risk assessment, and anticipatory guidance for parents regarding oral development, caries prevention, and overall oral health.[1]

Recommendations for at-home preventive measures, including brushing infants' and young children's teeth and using fluoride toothpaste, are key elements of anticipatory guidance to be provided to parents by the child's dental home.[2] Children generally spend most of their time with their parents and guardians, especially mothers. It has been found that young children's oral health maintenance and outcomes are influenced by their mother's knowledge and beliefs. Poor diet, poor habits of food intake and inadequate tooth brushing habits during the first 2 years of life have been shown in several studies to be related to tooth decay in children.

Appropriate oral health knowledge of mother's could be prevented some cause like caries, tooth decay that affects the primary teeth infants and young children's, carious lesions even before they are able to develop good oral hygiene habits.[3] Mother have a key role in helping their children to develop a proper oral hygiene in the first years of their life. Mother should lead and supervise their children's tooth brushing approximately for the first 12 years, until motor and mental function allow the child to routinely perform tooth brushing technique alone. After brushing the teeth of their children for the first 2 years of life, mothers will have to use playful motivation to encourage their children to brush their own teeth from about 3 years onwards the time when children want to brush their teeth alone. At the age of around 6 years, children finished brushing, mother should re-brush the hard-to-clean this phase, mothers have to continue supervising the regular brushing efforts of their children.

Methodology

This was a descriptive cross-sectional study following the quantitative methods of data collection and analysis. This study was designed to grab more data in a short time, so that it can be used for assessing the level of knowledge or awareness of the respondents. Data were collected from three schools of Dhaka city (Shaheed Bir Uttum Lft Anwar Girls School & College, Dhaka cantonment, Bonoful School and College, mirpur-13 and Shaheed Police Sriti High school, mirpur-14. This study was conducted for a period of four month started from may 2014 to august 2014. Study population was mother having children age is 1 to 7 years old. Although the sample size was three hundred and eighty four, for the time and economical constraints it was taken as 131 mothers. Purposive sampling method was used to select sample population. Data were collected from the respondents through face-to-face interview. The questionnaire was used after verbal consent of the respondents and their voluntary participation was sought. The bangle questionnaire was used during interview. Oral health was checked thoroughly. After data collection, data were sent to the researcher, which was sorted, scrutinized by the researcher herself by the selection criteria and then data were analyzed by calculator and personal computer by SPSS version 12.0 program. The open ended questions were grouped and categorized. Data were analyzed by descriptive statistics and inferential statistics.

Result

Table 1. Socio-demographic characteristics (n=131)

Variables	Number	Percentage
Mean±SD age in years	27.16±6.45	
Education		

Illiterate	22	16.80
SSC	30	22.90
HSC	40	30.50
Graduation	36	27.50
Post-graduation	3	2.30
Occupation		
Housewife	107	81.7
Service	21	16.0
Business	2	1.5
Others	1	0.8
Monthly income(BDT)		
10000-19999	5	3.8
20000-29999	12	9.2
30000-39999	34	26.0
40000-49999	23	17.6
50000-59999	23	17.6
60000-69999	34	26.0

Results are expressed as number (%) and M±SD

Mean±SD age was 27.16±6.45 year. Besides 30.50%, 27.50%, 22.90% and 16.80% of respondents were HSC, graduate, SSC and illiterate respectively but post graduate were only 2.30%. Most of the respondents (81.7%) were housewife and rest was service holder and businessmen. Moreover 26%, 17.6%, 17.6% and 26% respondents had monthly income 30000-39999 BDT, 40000-49999 BDT and 60000-69999 BDT respectively.

Table2: Source of information on brushing pattern (n=131)

Source of information	Frequency	Percentage
Family	25	19.1
Textbook	19	14.5
TV	67	51.1
Dentist	19	14.5
Others	1	0.8
Total	131	100

Results were expressed as number and percentage

Table 2 shows that more than half of the respondents (51.1%) got information on brushing pattern from TV. Besides 19.1%, 14.5% and 14.5% respondents got information from family members, textbook and dentist respectively.

Table3. Association between occupation and knowledge on brushing pattern

Occupation	Knowledge on brushing pattern			χ^2	P value
	Poor knowledge	**Moderate knowledge**	**Good knowledge**		
	N (%)	N (%)	N (%)		
Housewife	10(7.6)	69(52.7)	28(21.4)	11.750	0.068
Service	0(0)	10(7.6)	11(8.4)		
Business	0(0)	0(0)	2(1.5)		
Others	0(0)	1(0.8)	0(0)		

Results were expressed as frequency percentage, χ^2 test was performed and $P<0.05$ was level

of significance.

Table 3 shows that no significant association was found between occupation of respondents and knowledge on brushing pattern (P=0.068>0.05).

Discussion

Mothers may lack knowledge of the professionally recommended routine for children's hygiene. In California, Adams and colleagues found that more than 40% of Latina mothers were not aware of the proper tooth brushing technique, such as brushing for two minutes, the need for parental assistance for children under age 6, and using a pea-size amount of fluoride toothpaste34. Cooperation of children during tooth brushing has also been found to be a significant factor in whether and how often children and parents brush teeth.[4] Two articles, available only in Japanese, report on the formation of tooth brushing habits in children aged 1 to 6 years. In Nagoya, Japan, Suzuki found 75.5% of children started tooth brushing before 18 months, and 88.3% had started by age 2 years.[5-6] Eruption of teeth was the most common reason (49.2%) for initiation of tooth brushing. Tooth brushing habit formation was influenced by the parent's motive for starting brushing, positive attitude towards tooth brushing, child cooperation, average daily frequency of brushing, guidance from the mother about tooth brushing, and guidance from the dentist or dental hygienist. The present study found that 51.1% got information on brushing pattern from TV. Besides 19.1%, 14.5% and 14.5% respondents got information from family members, textbook and dentist respectively. No significant association was found between occupation of respondents and knowledge on brushing pattern (P=0.068>0.05). Research shows that Mexican-American children have higher rates of decay than school children in the United States (U.S.) generally and in California specifically.[7-10] U.S.-born children of Mexican immigrants experience more decayed primary teeth than do Mexican-American children in general. Different populations have vastly different rates of tooth brushing for children[11], ranging from 25% of 1-year-olds in Brazil, 15 to 90% of 1-year-olds in southern England.[12] In the U.S., Douglass and colleagues investigated Arizona preschool children aged 6 to 36 months and found that 63% have their teeth brushed at least once a day.[13] Among Washington State children, 74% of 12–48 month-olds had their teeth brushed daily by an adult.[14]

Conclusion

The overall knowledge on brushing pattern among mothers need to be improved. Health education and health promotion programme can be instituted.

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