

KNOWLEDGE, ATTITUDE, AND PRACTICE OF ORAL HEALTH BEHAVIOUR OF 12 YEAR OLD SCHOOL GOING CHILDREN IN PURBAMEDINIPUR CITY, WEST BENGAL

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Abstract

Aim- To assess oral health behaviour of 12 year old school going children in Purba Medinipur City, West Bengal.

Materials and Methods- 840 students were selected from 8 private and 8 government schools. Data were collected in a specially designed proforma, analysis done by chi-square test.

Results- 618 (73.6%) school children used to brush their teeth once a day. 780 (92.9%) school children used to clean their teeth with toothbrush while 59 (7.0%) used finger. 388(100%) in private schools used tooth paste; however, 395(87.2%) of govt. school children used tooth paste. Both school children 86.9% didn't visit a dentist during the last 12 months.

Conclusion- The levels of oral health knowledge and attitudes were predominantly low in government school children than private school children.

Key Words Dental Caries, School children.

INTRODUCTION

Health is a common theme in most cultures. In fact, all communities have their concepts of health, as part of their culture. During the past decades, there has been a reawakening that health is a fundamental human right and a world- wide social goal; that it is essential to the satisfaction of basic human needs and to an improved quality of life; and it is to be attained by all people.¹ Oral health is an integral part of the general health, rather oral cavity can rightly be called gateway of the body. Oral health is essential for general health and well being throughout life and is a symbol for overall health status. Poor oral health has a detrimental effect on children's performance in school and their success in later life.² Oral health education focus on informing and developing with in the population a hygienic and health oriented behaviour, designed to protect both general and dental –periodontal health. Since oral health is a component of general health, accurate community information is a must and it follows the current world-wide movement of awareness raising related to one's own health.³ Thus a cross sectional study was conducted to assess the oral health behaviour of 12 year old school going children in Purba Medinipur City, West Bengal.

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TABLE 1: Distribution of school children according to frequency of brushing habits in relation to school type and gender.

Frequency of brushing	Total		Govt.		Private		Statistical significance (Govt. vs Private)	
	No.	%	No.	%	No.	%	c ²	P
Total								
Once	618	73.6	407	90.0	211	54.4	136.57	<0.001
Twice	222	26.4	45	10.0	177	45.6		
Males								
Once	349	70.5	218	87.9	131	53.0	72.34	<0.001
Twice	146	29.5	30	12.1	116	47.0		
Females								
Once	269	78.0	189	92.6	80	56.7	62.59	<0.001
Twice	76	22.0	15	7.4	61	43.3		
Males vs Females								
Overall			Government			Private		
c ²	p		c ²	P		c ²	P	
5.828	0.016		2.810	0.094		0.496	0.481	

TABLE 2: Distribution of study population according to method of cleaning, school type and gender.

Method	Total		Govt.		Private		Statistical significance (Govt. vs Private)	
	No.	%	No.	%	No.	%	c ²	P
Total								
Toothbrush	780	92.9	392	86.7	388	100.0	55.47	<0.001
Finger	59	7.0	59	13.1	0	0.0		
Others	1	0.1	1	0.2	0	0.0		
Males								
Toothbrush	479	96.8	232	93.5	247	100.0	16.47	<0.001
Finger	16	3.2	16	6.5	0	0.0		
Others								
Females								
Toothbrush	301	87.2	160	78.4	141	100.0	34.86	<0.001
Finger	43	12.5	43	21.1	0	0.0		
Others	1	0.3	1	0.5	0	0.0		
Males vs Females								
Overall			Government			Private		
c ²	P		c ²	p		c ²	P	
28.09	<0.001		22.51	<0.001		-	-	

TABLE 3: Distribution of study population and material used for cleaning teeth according to school type and gender.

Material	Total		Govt.		Private		Statistical significance (Govt. vs Private)	
	No.	%	No.	%	No.	%	c ²	P
Total								
Toothpaste	782	93.1	394	87.2	388	100.0	53.48	<0.001
Toothpowder	58	6.9	58	12.8	0	0.0		
Males								
Toothpaste	480	97.0	233	94.0	247	100.0	15.41	<0.001
Toothpowder	15	3.0	15	6.0	0	0.0		
Females								
Toothpaste	302	87.5	161	78.9	141	100.0	33.95	<0.001
Toothpowder	43	12.5	43	21.1	0	0.0		
Males vs Females								
Overall			Government			Private		
c ²	p		c ²	p		c ²		P
28.146	<0.001		22.61	<0.001		0		1

TABLE 4: Distribution of school children according to number of visits to dentist in last 12 months.

SL. No	No. of visits	No. of children	Percentage
1.	No visit	730	86.9%
2.	1 visit	101	12.0%
3.	= 2 visits	9	1.1%
	Total	840	100

Chi square test was used.

MATERIALS AND METHODS

A Cross sectional study was conducted to assess the knowledge attitude of oral health among 12 year old school going children. Ethical clearance was taken from Institutional Ethics Committee, Kothiwal Dental College and Research Centre, Moradabad. A specially designed proforma was used to record the demographic data and clinical data like oral hygiene, knowledge, attitude and practices. Oral hygiene practice includes number of visits to the dentist; material and mode of tooth cleaning and tooth cleaning frequency were the oral hygiene practices recorded. To compare school and gender characteristic

TABLE 1: Overall 618 (73.6%) school children used to brush their teeth once a day. There were 222 (26.4%) school children who brush their teeth twice a day. The number of male brushing once a day was more in govt. school 87.9% as compare to private school children 53%. Female children brushing once a day was 92.6% in government school which was higher than the private school 56.7%. Male children brushing twice were more in private schools 47% as compared to government schools 12.1% while in females it was higher in private schools 43.3% than government schools 7.4%. Frequency of brushing

between male and female in both the schools statistically significant difference was found ($p=0.016$). On comparing the frequency of tooth brushing between two genders, proportion of males brushing their teeth twice a day was higher as compared to females for both types of school children as well as for overall assessment. However, the difference between two genders was significant statistically only for overall assessment ($p<0.001$).

TABLE 2: 780 (92.9%) school children used to clean their teeth with toothbrush while 59 (7.0%) used finger. There was only 1 (0.1%) government school child who used other methods in government school. In private schools, all the children used toothbrush whereas in govt. schools, only 13.3% children used finger and other methods for cleaning. The difference between both the type of the school children was found to be statistically significant ($p<0.001$). The use of tooth brush among private and government school, it was higher in private school than the government school and the difference was statistically significant.

TABLE 3: All the school children 388(100%) in private schools used tooth paste; however, 395 (87.2%) of govt. school children used tooth paste. This difference was statistically significant ($p<0.001$). Among the government school children 58(12.8%) were using toothpowder out of which 15(6%) were male and 43(21.1%) female, while in private school none of the subject use tooth powder. This proportion was significant statistically ($p<0.001$) for both the genders. Overall all the school children used either toothpaste or toothpowder. There was no subject who used other materials to clean their teeth.

TABLE 4: Majority of school children ($n=730$; 86.9%) didn't visit a dentist during the last 12 months. There were 101 (12%) school children who had visited a dentist only once and 9 (1.1%) children who visited ≥ 2 times during last 12 months.

DISCUSSION

Overall 618 (73.6%) school children brushed their teeth once a day which was similar to the findings of Shailee et al⁴ (2012) 64% of the children brushed their teeth once a day. Seyyed Ali Fazeli⁵ (2005) found that 80.7% of school children brushed their teeth once a day. In the present study habit of brushing twice a day was more common in private school children (45.6%) as compared to government school children (10.0%) which were similar to the findings of the study done by Malvania et al⁶ and

Shailee et al⁴. Hence, clearly shows that a large number of children are lagging their oral hygiene practices in government school. The present study number of males (59.1%) brushing their teeth twice a day was higher as compared to females (50.7%) for both types of schools. This is in accordance with a study done by Malvania et al⁶ (2014) found higher percentage of male with a habit of cleaning their teeth twice day. The contradictory result were found in Seyyed Ali Fazelistudy⁵ (2005), where girls tendency to observe the dental hygiene was more than boys. In contrast to the girls 3.6% of them never brushed while 16.4% of boys did not brush their teeth. Also, the count of girls who brushed three times a day (18.0%) was more than their counterpart boys' (11.9%). Collectively, 86.2% of the girls and (75.0%) of boys brushed at least once a day. The present study showed that majority of private school children brush their teeth regularly with a toothbrush and tooth paste. Similar results were found in Shailee et al⁴ in 2012. They showed 97% of school children used tooth brush and tooth paste. Malvania et al⁶ (2014) stated that all the subjects (912) used tooth paste and tooth brush. In the present study, another method of cleaning the teeth was finger, which was found more common in government school children than in private school. One of the reason might be due to unaffordable condition for Government school children as most of them they belonged to low socioeconomic status families. Majority of children ($n=730$; 86.9%) did not visit a dentist during the last 12 months. This finding was similar to the reports in Davangere⁷ India (2012), where 81% of the study population did not visit a dentist during last one year. Possible reason may be lack of awareness or affordability of dental visits thus only children who have problems with their teeth seek dental care. Another reason may be due to lack of availability of dental care, postponement of treatment because of cost considerations, under utilization of available facilities and the lack of awareness regarding the importance of timely dental care⁴.

CONCLUSION

The levels of oral health knowledge and attitudes were predominantly low in government school children. Substantial proportions of private schoolchildren of the Purba Medinipur city, performed regular oral hygiene; while as oral hygiene practices were infrequent in government school children. So the study clearly shows that a large number of populations in this district were lagging behind as far as their oral health consciousness is concerned. They need appropriate dental health education and oral hygiene maintenance program. It is one of the effective methods to increase parents' awareness in the field of their child's oral health.

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