

How much do adolescent boys care about their oral hygiene?

Dr. Swapna S Kadam¹, Dr. B. S. Payghan², Jasvanth C³.

1. Professor 2. Professor & Head 3. Intern Department of Community Medicine,
Basaveshwara Medical College & Hospital, Chitradurga.

ABSTRACT: Over the past two decades, due to changing lifestyle oral hygiene practice is very low in our society, especially in children. It is often felt that, there is a great need to promote dental awareness amongst Indian children. Studies have found statistically significant association between increased knowledge & better oral health⁶. Present study was conducted with **objectives** to assess the knowledge, attitude and oral hygiene status of adolescent boys, to detect cases in need of treatment & to provide health education about oral health. **Study Methods-** This cross sectional study with purposive sampling was conducted in SJM Boy's school, Chitradurga. Total 150 students in the age group of 14-16 years participated in the study. A predesigned semi structured questionnaire in local language was applied to assess the knowledge and practices regarding oral health. All students were examined by dental interneer for assessment of oral health status. Grading of each student's oral health status was done with the standard scoring system. The data thus collected was compiled and analyzed by using Microsoft Excel software. **Results & Discussion-** The analysis of knowledge attitude and practices towards oral hygiene of adolescents between age group of 14-16 years showed satisfactory results. Overall knowledge about oral health was good but study results showed gap between knowledge & practices regarding oral health. **Conclusions & recommendations-** One of the means of preventing the problems is by dental health education which will hopefully motivate people to seek dental care. Dental health education has a great role to play in motivating people for preventive dental health problems. This study stresses role of health education & awareness in improving oral health in general.

Keywords: Adolescent, Dental health, Oral hygiene, Preventive dentistry.

I. INTRODUCTION

“All envy flawless and beautiful smile.” Hence mouth care is very much important. Oral hygiene is the practice of keeping the mouth clean & healthy by brushing and flossing to prevent tooth decay and gum disease.

“While the eyes are the windows to the soul, our mouth is a window to our body's health”. The state of oral health can offer lots of clues about overall health of an individual.

Oral health is defined as a standard of health of the oral and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and which contributes to general well being^{1,2}.

Dental caries is a multi-factorial, infectious disease of teeth that results in localized dissolution and destruction of the calcified tissue.

Gingivitis characterized by the presence of gingival inflammation without detectable loss of bone or clinical attachment is common in children^{2,3}.

Over the past two decades a marked decline in dental caries experience of children has been observed in many industrialized countries. Compared to this, increasing levels of dental caries have been found in some developing countries, where preventive programs have not been established. In Asia, the prevalence of dental caries in children is reported to be low to moderate⁴.

However, oral health behavior in school children has not been fully understood, and data on aspects such as oral condition (tooth decay) and oral hygiene habits (tooth brushing and flossing) are limited⁵.

Unfortunately oral hygiene practice is very low in our society. It is often felt that, there is a great need to promote dental awareness amongst Indian children. Studies have shown that there is an association between increased knowledge & better oral health⁶.

So present study was conducted to assess the knowledge, attitude and oral hygiene status of adolescent boys, to detect cases in need of treatment & to provide health education about oral health.

II. MATERIALS & METHODS

This cross sectional study with purposive sampling was conducted in SJM Boy's school, Chitradurga. Permission to carry out the study was obtained from concerned authorities. Students of class 9th and 10th were

selected for study. All the students present at the time of study were included in the study. Total 150 students in the age group of 14-16 years participated in the study. A predesigned semi structured questionnaire in local language was applied to assess the knowledge regarding oral hygiene.

All the respondents were examined by dental interneer & assessment of oral hygiene status was done through standard dental scores like Debris score and Calculus score. Then grading of each student's oral hygiene status was done with the standard scoring system as Good, Fair and poor. The students having some dental problems were identified & advised accordingly .A health education session on oral hygiene & prevention of dental problems was conducted for students. ⁴The data thus collected was compiled and analyzed by using Microsoft Excel software.

III. RESULTS

Out of 150 respondents, 87.9% were Hindus and 12% were Muslims. 53% of parents of the students were illiterate and 24% were literate .33.33% of students responded that they need teeth for chewing, 0.66% for speech, 6.66% for good appearance, 59% of them think for all the above.

For cleaning of the teeth 89.33% were using tooth brush and paste and 4.66% used figure and powder. Of all the respondents, 26% of the respondents brush once, 68% twice and 2% brush three times a day. Among them 36% use soft brush, 56% use medium and 8% using hard brush. The study showed that 53.33% change the brush when the bristles worn out, 11.33% when bristles fan out and 3.3% when brush breaks.

From the study it is evident that, those students whose parents are educated were used to brush teeth twice a day. A statistically significant association was found between literacy status of parents & brushing habit. (Table no1)Overall knowledge about oral health was found satisfactory in most of these students.(Table no 2) About 89.33% use tooth brush and paste for brushing and 92% of the students clean their tongue after brushing .The dental problems observed were decayed tooth (24.66%), space between teeth (24.66%), bleeding gums(10%),bad breath(8.66%).

Regarding the practices, most of them practice cleaning of tongue & rinsing mouth but only few of them did dental flossing (26.66%) & many of them have habit of eating between meals(70.66%). (Table no 3) .A statistically significant association was found between oral health status & brushing habits (Table no 4)

IV. TABLES

TableNo.1:-Number of times of brushing and the educational status of the head of the family.

Educational status		Brushing Once	Brushing twice	Brushing thrice or more
Literate	Number	35	97	7
	Percentage	25.17%	69.7%	0.5%
Illiterate	Number	6	5	0
	Percentage	54.5%	45.5%	0

P=0.0001

OR=10.82

Table No 2: - Knowledge about oral hygiene status among adolescents

Knowledge about oral hygiene	YES	NO
Knowledge about dentist	149 (99%)	1 (1%)
Knowledge about correct number of milk teeth	53 (34.98%)	97 (64.02%)
Knowledge about correct number of permanent teeth	103 (68.6%)	47 (31.33%)
Is it necessary to keep your mouth clean	146 (97.33%)	4 (2.66%)
Have you ever experienced tooth ache	65 (43.33%)	85 (56.66%)
Do you have decayed tooth	37 (24.66%)	113 (75.33%)
Is there space between your teeth	37 (24.66%)	113 (75.33%)
Have you experienced bleeding from gums	16 (10.66%)	134 (89.33%)
Do you have bad breath	13 (8.66%)	137 (91.33%)

Table No 3 - Practices about oral hygiene among adolescents

PRACTICES	YES	NO
Do you rinse your mouth after eating	100 (66.66%)	50 (33.33%)
Do you clean your tongue after brushing	138 (92%)	12 (8%)
Do you know about dental floss	40 (26.66%)	110 (73.33%)
Do you have the habit of eating snacks between the meals	106 (70.66%)	44 (29.33%)

Table No4- Association between Oral Health Status and number of Times of brushing

	Good OHS	Fair OHS	Total	Rate
Brushing once a day	25	17	42	59.52%
Brushing twice or more a day	54	54	108	40.48%
Total	79	71	150	100%

P<0.05

OR=1.47

V. DISCUSSION

The analysis of knowledge attitude and practices towards oral hygiene of adolescents between age group of 14-16 years showed satisfactory results. Out of 150 respondents, 87.9% were Hindus and 12% were Muslims. In the present study, for cleaning of the teeth 89.33% were using tooth brush and paste and 4.66% used finger and powder. Similar study conducted by Vakani. F et al⁷. showed that 93% of students were using tooth brush and paste for cleaning their teeth. Mehtha A et al⁸. in their study found that, around 71.44% of students were using tooth brush and paste, 8.6% were using tooth powder and finger. Baral. P et al⁹. found that only 25% used brush & tooth paste, 35% used brush and tooth powder and 30% used finger and tooth powder. The results were comparable with our study.

Of all the respondents of the present study 26% of the respondents brush once, 68% twice and 2% brush three times a day. Muttappillymyalil J et al¹⁰. In their study has shown that, 84.6% of the respondents claimed to brush their teeth twice daily. Baral P et al⁹. In their study found that 60% of students brush once a day and only 10% brushed twice a day. Sham M S et al¹¹. In their study observed that, 6.8% of them brush their teeth once a day, 51% brushed twice a day, 30.1%; three times a day and 12.1% were used to brush four times a day. In a study by Zaborskyte A et al¹². found that, 39.7% respondents were brushing twice daily and 16.6% brushed less than once in a week.

The present study showed that 53.33% change the brush when the bristles worn out, 11.33% when bristles fan out and 3.3% when brush breaks. In a study conducted by Vakani F et al⁷. found that, 72% of the children change their tooth brush once in three months while 22% changed when the bristles fray up. Frequent changing of tooth brush at least once in three months has shown to have good oral hygiene status.

In the present study, 92% Of the respondents used to clean their tongue after brushing which is more compared to the study conducted by Vakani F et al⁷. only 81% were used to clean their tongue in their study. Tongue cleaning is an important measure in maintaining proper oral hygiene.

The present study showed that out of the total students 10.66% experienced bleeding from gums. Similar study conducted by Zaborskyte A et al¹². showed more than half i.e.59.5% of children complained bleeding from gums, which is higher than our study which shows that educated children will maintain good oral hygiene.

The present study showed that, 66.66% of respondents rinse their mouth after eating meals. Similar results were seen in the study conducted by Vakani F et al⁷. Showing 66% of children rinsing their mouth after meals. Sham M S et al¹¹. in their study found that, a few respondents (6.4%) reported on almost daily rinsing and 65.7% never used an oral mouth rinse.

Of all the respondents in the present study only 26.66% knew about dental floss 73.33% had no knowledge about it. Zaborskyte A et al¹². Showed that, only 4.5% of the respondents were using dental floss and over 60% never used.

VI. CONCLUSIONS

Overall knowledge about oral health was found satisfactory in most of these adolescents. The maintenance of the dental health of a community to a large extent depends upon its knowledge, behaviour and attitude towards dental health. Incidence of dental diseases in children has been attributed to the lack of awareness in public at large. It is often felt that there is a great need to promote dental awareness amongst Indian children.

One of the means of preventing the problems is by dental health education which will hopefully motivate them to seek dental care. Dental health education has a great role to play in motivating people for preventive dental health problems.

VII. RECOMMENDATIONS

- Education about oral hygiene must be included in curriculum.
- The teachers and parents must be aware and take the child to dental check up if signs of teeth caries, bleeding gums are found.

- Regular dental checkups at least once in 6 months should be conducted in schools.
- Appropriate treatment and correction of dental caries must be done as early as possible.
- Importance of general hygiene must be stressed.

ACKNOWLEDGEMENTS

We are thankful to Teachers , Principal of SJM Boy's school & Principal, SJM Dental College for their support .Our sincere thanks to the dental internee Chengappa, Vinuta, Akkamma & Rajiv for their help.

REFERENCES

- [1]. Prasad A P, Shankar S , Sowmya J, Priyaa C V. Oral Health Knowledge Attitude Practice Of School students of KSR Matriculation School, Thiruchengode. Journal of IADS 2010; 1;Jan-Mar:5-10.
- [2]. Lateefat A S, I O Musa, Kamaldeen A, Buhari M A, A O Saka. Determinants Of Oral Hygiene Status Among Junior Secondary School Students in Ilorin West Local Government Area Of Nigeria.
- [3]. IOSR Journal of Pharmacy and Biological Sciences 2012; Vol 1(3):44-48.
- [4]. D R Patel, S M Parkar. Assessment Of Gingival And Dental Caries Status Among 12 And 15 Years Old School Going Children Of Ahmedabad City-A pilot study. The Journal of Ahmedabad Dental College and Hospital 2011; Vol 2 (1):17-21.
- [5]. Petersen E P, Hoerup N, Poomviset N, Prommajan J, Watanapa A. Oral health status and oral health behavior of urban and rural school children in southern Thailand. International dental journal 2001; Vol.51:95-102.
- [6]. Kawamura M, Takase N, Sasahara H, Okada M. Teenagers oral health attitudes and behavior in Japan: comparison by sex and age group. Journal of oral sciences, 2008; Vol.50(2):167-174.
- [7]. Park.K, Park's textbook of preventive and social medicine, 22st ed. Jabalpur, Banarasidas Bhanot Publishers, 2012; 536.
- [8]. Vakani, F. , Basaria, N. , Katpar, S.Oral Hygiene KAP Assessment and DMFT Scoring Among Children Aged 11-12 Years in an Urban School of Karachi. Journal of the College of Physicians and Surgeons Pakistan; Vol. 21(4): 223-226.
- [9]. Mehta A, Kaur G. Oral health-related knowledge, attitude, and practices among 12-year-old school children studying in rural areas of Panchakula, India. Indian Journal Of Dental research 2012; Vol. 23 (2).
- [10]. Baral P, Bhattarai C, Poudel PP, Banstola D, Roy S, et al. A study on oral hygiene practice among school children of Pokhara Municipality. Journal of CMC Nepal 2009; Vol.2 (2):37-38.
- [11]. Muttappillymyalil J, Divakaran B, Sreedharan J, K Salini, Sreedhar S. Oral health behavior among adolescents in Kerala, India. Italian Journal of Public Health 2009; Vol.6 (3): 218-224.
- [12]. Sham M S, Yusoff K M, Yaziz I M, Ramli F M, Abdullah Y M. PERCEIVED ORAL HYGIENE HABITS AMONGST 16-YEAR-OLD SCHOOLCHILDREN. Proceedings of Post-graduate Quolloquium Semester 1; 2009-2010.
- [13]. Zaborskyte A, Bendoraitiene E. Oral Hygiene Habits and Complaints of Gum Bleeding Among Schoolchildren in Lithuania. Stomatologia, 2003; Vol.5 (1):31-36.