

Oral Health Attitudes, Knowledge and Behaviour Among School Children

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Abstract:

Introduction: Due to their high prevalence and incidence, Oral diseases represent one of the main health problems of children. However, if properly prevented and treated early, these oral diseases like caries and periodontal diseases are treatable with health care gains.

Aims and objectives: To access oral health knowledge and practices among secondary school children.

Materials and methods: A cross-sectional study was conducted on 300, 11 to 14 years old secondary school going children from randomly selected 8 schools. It was carried out with the help of questionnaires. All the responses were recorded and analysed.

Results: On the basis of the data collected, children had a positive attitude towards oral hygiene practices. Yet, their parents' role was limited. The children also recognized the importance of oral health to the well-being of the body. Also, the children visited the dentist only when in pain.

Conclusion: Although the oral hygiene practices among children showed acceptable results, their attitude towards regular dental visits and their parents' supervision in oral hygiene practices should be improved.

Keywords: Oral health, attitudes, knowledge, Behaviour

I. INTRODUCTION

Oral health knowledge is considered to be an essential prerequisite for the health-related practice and better oral health. Healthy oral cavity is of great significance for an individual's overall health and wellbeing.

In India, the oral health system is in transitional developmental stage, and systematic data collection is needed to plan oral health care for public. Comprehensive preventive programs for the oral health care are still lacking in India, so more dental health education is needed to improve oral health standard among Indians. Little is known about the oral health attitude and behaviour of children from developing countries in comparison with those from developed countries. Although such knowledge is an indication of the efficacy of applied dental health education programs. This study provides data for future research and allows comparisons with children's oral health attitude in other nations.

Oral disease is a health problem of considerable burden which often leads to pain and more significantly tooth loss; a condition that affects appearance, quality of life, nutritional intake and consequently growth and development [1]. Dental caries and periodontal diseases are among the most widely spread oral conditions in the human population [3-5]. Frequent consumption of foodstuffs containing sticky and sugar materials and lack of fluorides are the two main factors for development of dental caries. Fortunately, many of them are preventable and their onset is reversible. Hygiene is the single most significant factor when it comes to prevention of oral health disease.

Childhood is the period of greatest change in life. It is widely recognized that good oral health practices are necessary from a young age group to ensure positive long term dental health and hygiene. The oral health of children is important towards their overall wellbeing. Dental care has been systematically organised to improve dental health attitude among children and the young groups.

According to the traditional behaviour change model if we are able to transmit knowledge into a communal environment it generally enhances the attitude and health related behaviour in masses. A group target approach is necessary in school going children as they are one of the most important cluster groups. Schools have a great and lifelong influence on a child's development and wellbeing. Children can be provided with knowledge that helps them in making better choices, adopting healthier lifestyles and to deal with conflicting ideas.

This study aims at determining the oral health awareness level, attitude, knowledge and behaviour. The pattern of dental health practice and consent to their dental treatment and their relationship with the socioeconomic status of the family among secondary school going children in Latur city, Maharashtra.

II. MATERIALS AND METHODS

A cross sectional questionnaire survey was conducted among 300 secondary school going students, in Latur, Maharashtra. A simple random sampling was done to select the students for the purpose of study and the duration of study was 6 months (June – December, 2022).

Informed consent was obtained from each participant before the administration of the questionnaire, explaining the need and purpose of the study.

The response format included multiple choice questions in which the students who agreed to participate were instructed to choose only one response from the provided list of options. The students were given instructions regarding filling the questionnaire. The students were asked to fill in the questionnaire without discussion with each other within half an hour.

Assessment of participant’s oral health related practice included questions on frequency, duration and time of cleaning, cleaning aids used, use of fluoridated toothpaste and amount of dentifrice used. Assessment of participant’s oral health related attitude included items on frequency of visit to dentist, reason for visiting and not going to the dental office. Assessment of participant’s oral health related knowledge included questions on the necessity of regular dental visit, the role of sugar in causing dental caries, importance of teeth in health of the body and importance of regular dental check-ups.

III. RESULTS

Approximately 98% of the study population used brush and toothpaste as cleaning aid. 61% of them brushed their teeth once daily with an adequate amount of toothpaste. Approximately half of them didn’t have any idea regarding fluoridation of toothpaste. Very few of them were using other cleaning aids such as dental floss, mouth wash or tongue cleaner for hygiene purposes. Detailed results are tabulated in table 1.

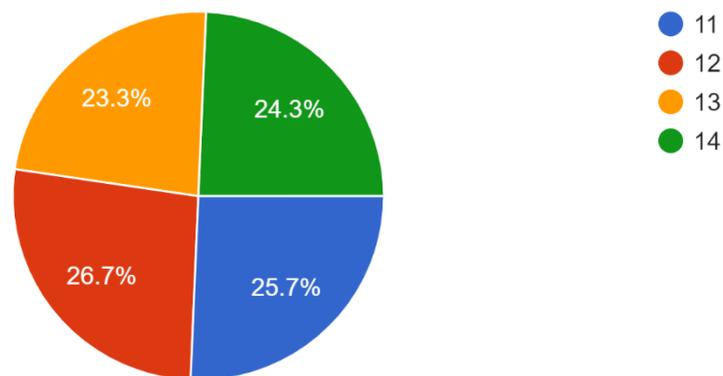
Parents’ role in daily oral care was reported to be mainly related to giving advice on the importance of brushing (52.6 percent). Only 28 % of the subjects reported being advised and watched by the parents during brushing. Approximately 19% of the study population reported that their parents never watched their brushing technique nor gave them advice on brushing.

Knowledge and awareness regarding oral and general health of the study population was also evaluated which stated that approximately 93% of study population was aware of effects of consumption of sweets and its impact on causation of dental caries. They also had knowledge regarding the correlation of dental and general health. Detailed results are tabulated in table 2.

Many subjects (63 percent) reported that they visited the dentist only when they felt pain. Only 30% of them visited the dentist regularly. Approximately 90 % of the study population was aware of the fact that dental treatment is necessary to maintain good oral health. Detailed results are tabulated in table 3.

Figure 1 and 2: Demographic information of the study population

Age
300 responses



Gender
300 responses

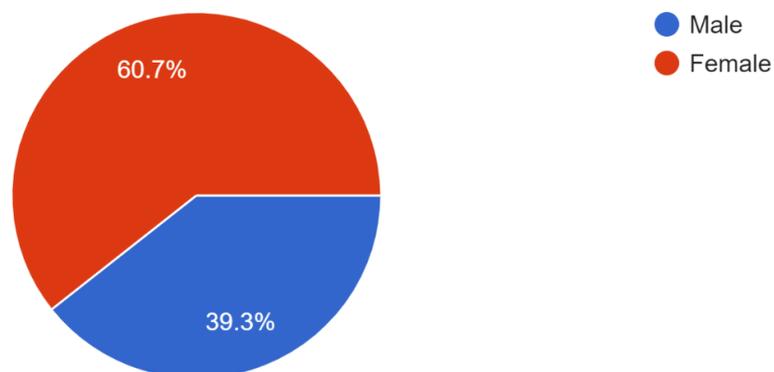


Table 1: Oral hygiene habits among the study population

	<i>Frequency</i>	<i>Percentage</i>
<i>Do you use brush and toothpaste as a cleaning aid?</i>		
No	4	1.33%
Yes	296	98.67%
<i>How many times do you brush your teeth?</i>		
Once	185	61.67%
Thrice	16	5.33%
Twice	95	31.67%
<i>How much quantity of toothpaste do you use?</i>		
Almond	241	80.33%
Pea	55	18.33%
<i>Do you use fluoridated toothpaste?</i>		
Don't know	150	50.00%
No	40	13.33%
Yes	110	36.67%
<i>For how long do you brush your teeth?</i>		
Less than one minute	99	33.00%
More than two minutes	52	17.33%
One minute	69	23.00%
Two minutes	76	25.33%
<i>Do you use tooth powder as cleaning aid?</i>		
No	289	96.33%
Yes	11	3.67%
<i>Do you use other cleaning aids?</i>		
Dental Floss	21	7.00%
More than one	12	4.00%
Mouth Wash	38	12.67%
No	176	58.67%
Tongue Cleaner	53	17.67%
<i>Role of your parents in your oral health and hygiene?</i>		
Never care	58	19.33%
Only advice	158	52.67%
Watch and advice	84	28.00%

Table 2: Knowledge and awareness of dental and general health among the study population

	<i>Frequency</i>	<i>Percentage</i>
<i>Do you think consuming sweets cause dental caries?</i>		
No	20	6.67%
Yes	280	93.33%
<i>Do you think brushing teeth prevent dental caries?</i>		
No	38	12.67%
Yes	262	87.33%
<i>Do you think dental health impacts body health?</i>		
No	116	38.67%
Yes	184	61.33%
<i>Do you think caries affect dental aesthetics?</i>		
No	75	25.00%
Yes	225	75.00%
<i>Do you think malaligned teeth need dental treatment?</i>		
Yes	299	99.67%
No	1	0.33%

Table 3: Attitudes towards professional dental care among the study population

	<i>Frequency</i>	<i>Percentage</i>
<i>How often do you visit the dentist?</i>		
Never	6	2.00%
Occasionally	12	4.00%
Regular	91	30.33%
When in pain	191	63.67%
<i>If you don't visit dentist, please select a reason</i>		
Can't say	34	1.00%
High cost	1	0.33%
No time	2	0.67%
<i>Do you think dental treatment is necessary to maintain oral health?</i>		
No	31	10.33%
Yes	269	89.67%

IV. DISCUSSION

This study presented an overview of the oral health behaviour, knowledge and attitudes of school children. This survey found that a high percentage of the children in this study brushed their teeth at least once daily although this effort was not fully supported by parents. Participants demonstrated high awareness of the link between oral health and systemic well being.

Parents' failure to organise or support their children's tooth brushing efforts coincided with the findings. The use of other recommended oral hygiene methods such as dental floss, mouthwash and tongue cleaner was found to be rare; this could be attributed to lack of oral health education.

V. CONCLUSION

Although the oral hygiene practices among children showed acceptable results, their attitude towards regular dental visits and their parents' supervision in oral hygiene practices should be improved. Rather than visiting the dentist only when they feel pain, children must opt for regular dental visits for better oral health and oral hygiene habits. Also, the role of parents in supervision while performing oral hygiene habits should be enhanced. The awareness of dental caries including its impact on the dentition, its causes and prevention is of utmost importance among the children. So, if the children attend dental clinics seeking treatment for it, they may receive more professional advice in this regard.

VI. ACKNOWLEDGMENT

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VII. DECLARATION OF CONFLICTING INTERESTS

The researchers declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

VIII. ETHICAL APPROVAL

Before starting the survey, ethical approval was obtained from the institutional ethical committee and official permission was obtained from the authorities of the school included in the study.

IX. INFORMED CONSENT

The participants were informed that their participation in the study's questionnaire was entirely on a voluntary basis before they responded. The formal informed consent was waived by the Institutional Ethics Committee.

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