



IJCRR

Vol 06 issue 10

Section: Healthcare

Category: Research

Received on: 09/04/14

Revised on: 27/04/14

Accepted on: 12/05/14

## ORAL HEALTH KNOWLEDGE AND PRACTICES AMONG THE SCHOOL STUDENTS IN RURAL AREA OF JALGAON DISTRICT OF MAHARASHTRA

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### ABSTRACT

**Background:** Improving oral health in the rural children is still a dream come true in a developing countries like India. The children especially from these countries are most susceptible to dental diseases due to social, economic and demographic factors like lack of awareness, lack of transportation, limited access to professional dental care, lack of perceived need for dental care.

**Objective:** to assess the oral health knowledge and practices among the school students in rural area of Jalgaon District of Maharashtra.

**Material and Methods:** A cross sectional survey was performed across one of the randomly selected primary schools in Jalgaon District of Maharashtra State. A total of 101 children belonging to 3rd and 4th class were included as study participants. A pre-tested questionnaire consisting of 15 questions in local language was used to collect information about oral health knowledge and practices among the students. Entire information was entered in Microsoft Office Excel Sheet and data was analyzed.

**Results:** Out of total 101 school students from 3rd and 4th class, there were 58 females while the other 43 were males. The age bracket of all participants was between 9-10 years. Forty percent participants had fear of dental treatment. Only 1.98% of the participants said that they cleaned their teeth more than once in a day.

**Conclusion:** The present study reported low level of oral health awareness among school children in Jalgaon District of Maharashtra., India.

**Keywords:** knowledge, oral health, rural area, school students

### INTRODUCTION

Oral health is an essential aspect of general health and well being of an individual. The American Academy of Pediatric Dentistry has also given recommendation i.e. 'first visit by first birthday and then at intervals' in order to ensure oral health and hygiene.<sup>1</sup>

A study in the 'Journal Pediatrics' showed that children who have their first dental visit before age one have 40% lower dental costs in their 5 years than children who do not, due to the cost of dental

and medical procedures that may be necessary as a result of poor oral health.<sup>1</sup>

Even though the past fifty years have witnessed a reduction in the severity and prevalence of oral disease among the population of the developing Countries,<sup>2-4</sup> improvement in oral health of rural children is still a dream come true in a developing country like India.<sup>5</sup>

The children especially from developing countries like India are more susceptible to dental diseases due to social, economic and demographic factors

like lack of awareness, lack of transportation, limited access to professional dental care, lack of perceived need for dental care.<sup>4</sup>

Therefore there is a need to impart education about oral health especially in high-risk communities and population groups in such countries. Several studies have shown that the proportion of children aged 5 to 10 years with any known dental decay was higher among low social class in countries like India.

A very few studies have been conducted so far in rural areas of Maharashtra State to assess the knowledge and practices about oral health amongst school children. The present study was undertaken to assess the awareness levels about oral health among school students in rural area of Maharashtra.

## OBJECTIVE

To assess the oral health knowledge and practices among the school students in rural area of Jalgaon District of Maharashtra.

## MATERIAL AND METHODS

A cross sectional survey was performed across one of the randomly selected primary schools in Jalgaon District of Maharashtra State. Written

informed consent was obtained from the school authorities before commencement of the study.

A total of 101 children belonging to 3<sup>rd</sup> and 4<sup>th</sup> class were included as study participants. A pre-tested questionnaire consisting of 15 questions in local language was used to collect information about oral health knowledge and practices among the students.

A questionnaire was divided into four sections namely personal information, practice of oral hygiene, pattern of practices for dental treatment and knowledge and awareness of oral health.

The surveys were conducted personally with one to one interaction with students by trained teachers of respective school. Entire information was entered in Microsoft Office Excel Sheet and data was analyzed.

## RESULTS

In present study, there were a total of 101 participants from 3<sup>rd</sup> and 4<sup>th</sup> Class. Out of these 101 participants, 58 were females while the other 43 were males. The age bracket of all participants was between 9-10 years.

**Table 1: Knowledge of dental health problems among the study participants (n=101).**

	Frequency	Percentage (%)
<b>Common problems associated with mouth &amp; teeth</b>		
Gum disease	26	25.74
Bad smell	21	20.79
Mouth ulcers	17	16.83
Pain	02	1.98
Stained teeth	06	5.94
Tooth decay	29	28.71
<b>How can you prevent dental problems</b>		
Brushing of teeth once	46	45.54
Avoiding sweets & chocolates	38	37.62
Brushing twice a day	06	5.94
Tobacco consumption	05	4.95
Gargling after eating	06	5.94
<b>Is there any bad effect of excess fluoride on teeth</b>		
Yes	06	5.94
No	91	90.09
Don't know	04	3.96

<b>Treatment of toothache is as important as any organ in the body</b>		
Yes	56	55.44
No	43	42.57
Don't know	02	1.98

**Table 2: Oral hygiene practices among the study participants (n=101)**

Question	Frequency	Percentage (%)
<b>How do you generally clean your teeth</b>		
Toothbrush	100	99
Finger	01	0.99
<b>Brushing intervals</b>		
Once	99	98.01
Twice	02	1.98
<b>Materials used to clean teeth</b>		
Toothpaste	99	98.01
Toothpowder	01	0.99
Misri	01	0.99
<b>Frequency of change of brush</b>		
Every 6 months	11	10.89
When it wears out	47	46.53
Every 3 months	36	35.64
Others	07	6.93
<b>Mouth rinsing after eating</b>		
Always	96	95.04
Sometimes	04	3.96
Never	01	0.99

**Table 3: Pattern of practices for Dental Treatment among the study participants (n=101).**

Practices	Frequency	Percentage (%)
<b>Teeth problems faced in past 1-year</b>		
Yes	29	28.71
No	71	70.29
Don't know	01	0.99
<b>If yes, do you consult the dentist (n=29)</b>		
Yes	24	82.75
No	05	17.24
<b>Reasons for not consulting dentist (n=5 )</b>		
No pain	01	20
Parents did not take	02	40
Fear of dental treatment	02	40

## DISCUSSION

The present study explored a comprehensive overview about awareness levels and practices of primary school students regarding oral health.

Table 1 presents the knowledge of participants about dental health problems. Most of the participants (28.71%) Stated 'tooth decay' is common problem associated with mouth and disease.

In present study, 40% participants had fear of dental treatment; this corroborates with study findings among school children in North Jordan <sup>6</sup> where 48.8% of children had fear to visit dentist to seek dental treatment. This may be attributed to the lack of proper oral health education programs for school children.

Only 1.98% of the participants said that they cleaned their teeth more than once in a day.

However Mehta A and Kaur G <sup>7</sup> reported in their study that 25% of school children were cleaning teeth more than once a day.

Majority of participants i.e. 99% used toothbrush while only one participant used finger as a tool to clean his teeth. This study finding is comparable with the study conducted by Amrita Mehta *et al.* <sup>8</sup> where only 62.96% of students were brushing their teeth with brushes.

The awareness amongst the participants in present study about the preventive ways of dental problem was found to be poor as only 6 (5.94%) participants stated that dental problems can be prevented by brushing twice a day. Forty six (45.54%) participants said 'brushing of teeth once' and 38 (37.62%) said 'avoiding chocolates and sweets' as a preventive way for dental problems. The present study revealed poor knowledge of participants about effect of fluoride on teeth. Only 6 (5.94%) participants rightly reported that excess fluoride is lethal to teeth. A study conducted by Archana J. Sharda *et al.* <sup>9</sup> reported that only 12.6% of students were aware about the effect of fluoride on teeth. However, high level of knowledge was reported in the study by Al Omiri *et al.* <sup>6</sup> where 77% of students had knowledge about fluoride and teeth.

## CONCLUSION AND RECOMMENDATIONS

The present study reported low level of oral health awareness among school children in Jalgaon District of Maharashtra., India. It emphasizes the need for the oral health education of the school children in order to improve the oral health knowledge and sustained and effective implementation of school oral health promotion programs.

## ACKNOWLEDGEMENTS

We are thankful to Dr. Lalit Sarode and Dr. Rahul Raj for their valuable help in conduction of this study. Authors acknowledge the immense help received from scholars whose articles are cited and included in references of this manuscript. The

authors are also grateful to authors/editors/publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed.

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