

**ORAL HEALTH KNOWLEDGE, ATTITUDE AND PRACTICE AMONG SCHOOL CHILDREN**Tasneem S. Ain<sup>1</sup>, Saima Sultan<sup>2</sup>, Owais Gowhar<sup>3</sup><sup>1</sup>Assistant Professor, Department of Preventive Dentistry, King Khalid University College of Dentistry; Abha, Kingdom of Saudi Arabia.<sup>2</sup>Senior Lecturer, Department of Pedodontics and Preventive Dentistry, Kothiwal Dental College, Moradabad, Uttar Pradesh, India.<sup>3</sup>Government Dental Surgeon, Department of Dentistry, J & K Health and Family Welfare Department, Kashmir, India.**ABSTRACT****BACKGROUND**

To organize community-oriented oral health promotion programs, systematic analysis of the oral health situation would be needed, including information on oral health knowledge, attitudes and practices (KAP). We wanted to assess knowledge, attitude, and practice (KAP) of 7- to 12-year-old school children of various govt. and private schools of Srinagar, Kashmir, towards oral health.

**METHODS**

A cross-sectional study was carried out among 7- to 12-year-old school children of various govt. and private schools of Srinagar, Kashmir. A convenient sample of 600 students was selected for the study. A 14-item pre-formed, self-administered validated questionnaire was distributed among the study subjects. Confidentiality of the responses to the questionnaire was assured to the participants. The questionnaire included the questions regarding the basic oral health knowledge, and also those related to attitude and practice towards oral health. The duly filled questionnaires were collected the same day from the respondents so as to avoid the influence of parents on the responses of the students.

**RESULTS**

About 31% of the respondents acquired information regarding the oral health from their parents; 20.75% from the dentists; around 18% from friends; 16.6% gain information from teachers while as the rest acquired their information from relatives, television and radio. Majority (77.35%) of the children were scared of visiting the dentist thinking that the dental treatment causes pain. Majority (79.05%) of the students brushed their teeth once; 18.1% children brushed their teeth twice; 1.88% brushed their teeth sometimes; and 0.94% did not brush their teeth at all.

**CONCLUSIONS**

Knowledge among children with regard to oral health was poor and needs to be improved.

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**BACKGROUND**

Oral diseases are considered to be major public health problems due to their high prevalence and incidence. Oral health is fundamental to general health and well-being. A healthy person can lead a socially healthy life as he/she can communicate well, smile, eat and socialize without experiencing discomfort or embarrassment. Oral health knowledge is an essential requirement for health-related behavior.<sup>1</sup> It has been reported that Indian children have low level of oral health awareness and practice as compared to their western counterparts.<sup>2</sup> About 90% of school children world-wide and most adults have experienced caries, with the disease being most prevalent in Asian and Latin American countries.<sup>3</sup> More than 50 million school hours are

lost annually due to oral health problems, which affect children's performance at school and success in later life.<sup>4</sup> Behavioural modelling by authority figures in a child's life such as a teacher, dentist, auxiliary or sibling can be a powerful tool.<sup>5</sup> As children spend much time in school, teachers can assist with dental health education programs.<sup>6</sup> The change to healthy attitude and practice can be brought about by giving adequate information, motivation and practice to the subjects. In order to create such health education, the assessment of knowledge, attitude and practice is essential. Hence, a study was conducted among school children in Kashmir, India to assess the knowledge, attitude and practice towards oral health.

**METHODS**

A cross-sectional study was carried out among 7 to 12 year old school children of various govt. and private schools of Srinagar, Kashmir. A convenient sample of 600 students was selected for the study. All the students willing to participate were included in the study. One day prior to the conduct of the study, permission was taken from the Principals of the respective schools and they were briefed with the purpose of the study. Then after obtaining the permission from the school heads; the 14-item pre-formed, self-administered

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validated questionnaire (Appendix 1) was distributed among the study subjects. The confidentiality of the responses to the questionnaire was assured to the participants. The questionnaire included the questions regarding the basic oral health knowledge and also those related to attitude and practice towards oral health. One of the investigators was available to clarify their doubts about any point during the course of completing the questionnaire. The duly filled questionnaires were collected the same day from the respondents so as to avoid the influence of parents on the responses of the students. Among 600 participants, 530 completely gave their responses; so a final sample of 530 questionnaires were included in the descriptive statistical analysis.

## RESULTS

### Q1. Where do you acquire information about oral health?

- a) Friends b) Relatives c) Teacher d) Television e) Parents  
f) Radio g) Dentists
- A. About 31% of the respondents acquired information regarding the oral health from their parents; 20.75% from the dentists; around 18% from friends; 16.6% gain information from teachers while as the rest attained their information from relatives, television and radio.

### Q2. Tooth decay makes me look ugly.

- A. 60.37% of the children believed that tooth decay makes them look ugly while 39.62% of children disagreed for the same.

### Q3. Keeping natural teeth is not that important.

- A. 50.94% believed that maintaining their natural teeth was not that important while as 49.05% gave importance to the maintenance of their natural teeth.

### Q4. I am scared of going to a dentist as it may be painful.

- A. Majority (77.35%) of the children were scared of visiting the dentist thinking that the dental treatment causes pain.

### Q5. Regular visits to the dentist are not so important.

- A. Many (62.26%) of the respondents did not consider regular visit to dentist as important whereas 37.73% thought it to be important.

### Q6. Brushing teeth can improve my oral health.

- A. About 54% of the respondents believed that brushing can improve their oral health and 46.22% did not agree for the same.

### Q7. Eating sweets does not cause tooth decay.

- A. More than half (52.83%) of the children thought that eating sweets does not cause tooth decay while as 47.16% believed the other way.

### Q8. How often do you brush your teeth?

- a) Once b) Twice c) Sometimes d) Nil
- A. Majority (79.05%) of the students brushed their teeth once; 18.1% children brushed their teeth twice; 1.88% brushed their teeth sometimes; and 0.94% did not brush their teeth at all.

### Q9. Do you use fluoride containing tooth paste?

- A. Most of the respondents (80.75%) did not use fluoride containing tooth paste while small portion (19.24%) used the fluoride containing tooth paste.

### Q10. Did u miss your classes due to tooth problem during past 1 year?

- A. 74.71% of the subjects missed their classes due to tooth problem while the rest (25.28%) did not miss their classes due to the same.

### Q11. When did you last visit the dentist?

- a) 1 year before b) 2 years before  
c) 6 months before d) Never
- A. 41.5% visited the dentist before 1 year; 27.54% visited 2 years before; 25.09% went to the dentist 6 months before; while as 5.84% never visited any dentist.

### Q12. Do you eat fresh fruits?

- A. 56.03% of children did not eat fresh fruits whereas 43.96% ate fresh fruits.

### Q13. Do you take soft drinks?

- A. Around 56% of the children were used to have soft drinks whereas 42.45% were not used to taking soft drinks.

### Q14. Do you avoid smiling because of your teeth?

- A. 53.96% avoided smiling in front of others due to their teeth while as 46.03% did not avoid doing so.

## DISCUSSION

In the present study, about 31% of the respondents acquired information regarding the oral health from their parents; 20.75% from the dentists; around 18% from friends; 16.6% gain information from teachers while as the rest attained their information from relatives, television and radio. This finding was in accordance with previous study conducted by Sohail Chand and Muhammad Arfan,<sup>7</sup> wherein the role of parents was found very important in developing healthy habits among the young children. Also, in a previous study by Varenne et al.<sup>8</sup> many children living in urban areas received oral health information from their parents; while as in contrast to these finding participants in a study by Harikiran AG et al.<sup>9</sup> received information regarding oral health mainly from television. The difference in the findings of various studies might be due to different levels of education of parents and also due to discrepancy in the levels of awareness regarding oral health among parents.

In the present study, many (62.26%) of the respondents did not consider regular visit to dentist as important whereas 37.73% thought it to be important. 50.94% believed that maintaining their natural teeth was not that important while as 49.05% gave importance to the maintenance of their natural teeth. These findings were similar to the previous study where majority of children in urban areas reported that tooth cleaning and regular dental visits may prevent oral disease.<sup>8</sup>

Majority (79.05%) of the students brushed their teeth once; 18.1% children brushed their teeth twice; 1.88% brushed their teeth sometimes; and 0.94% did not brush their teeth at all. Most of the respondents (80.75%) did not use fluoride containing tooth paste while small portion (19.24%) used the fluoride containing tooth paste. These results were in accordance with earlier surveys wherein few participants reported tooth brushing at least twice daily and very few were using fluoridated toothpaste.<sup>10</sup> Lack of both parental and child oral health education might also explain these findings.

Fear of pain is one of the important factors that prevent patients from visiting the dentist. In spite of numerous advances in the field of dentistry, phobia of pain during treatment still persists among a large number of populations acting as an obstacle in the path of dental treatment.<sup>11</sup> This finding points out toward the fact that fallacies related to dental treatment are still prevalent among the people obstructing them to take the apt decision regarding dental treatment. This finding was evident in the present study wherein majority (77.35%) of the children were scared of visiting the dentist thinking that the dental treatment causes pain. The reason might be unawareness about the facts related to dental problems and their solution among the parents which directly have an influence on the behaviour and attitude of their children.

In the present study, around 56% of the children were used to have soft drinks whereas 42.45% were not used to taking soft drinks. More than half (52.83%) of the children thought that eating sweets does not cause tooth decay while as 47.16% believed the other way. This was similar to the findings of previous study wherein a high proportion of study participants reported having hidden sugar every day: soft drinks (32.1%), milk with sugar (65.9%), and tea with sugar (56.1%).<sup>9</sup> This shows the lack of knowledge among the children regarding the harmful effects of unsuitable dietary habits on oral health.

In the present study, many (62.26%) of the respondents did not consider regular visit to dentist as important whereas 37.73% thought it to be important. It might be due to the high cost and poor accessibility to oral health care services, which act as barrier to oral health utilization.<sup>12</sup> The significance of regular visits to the dentist needs to be emphasized, and dental consultation made more affordable to the people.

**CONCLUSIONS**

It was concluded that oral health knowledge among children was poor and needs to be improved. Therefore, there is an

urgent need to educate and motivate children as well as the community as a whole about oral health and related problems.

**Recommendations**

Systematic community oriented oral health promotion programs are needed to target lifestyles and the needs of school children. Also, information regarding oral health should be included on wider basis in the school curriculum in an attempt to prevent and control dental diseases. In this background, an oral health promotion program has to involve partnership of school authorities, parents, and dental-care providers such as dental colleges or public health department and funding agencies. Comprehensive oral health educational programs for both children and their parents are required to achieve this goal. Moreover, Oral health education programs could be included in the school curriculum for the children to emphasise positive attitude towards oral health.

Appendix 1			
Questionnaire Regarding Oral Health			
1. Where do you acquire information about oral health?			
a) Friends	b) Relatives	c) Teachers	
d) Television	e) Parents	f) Radio	
g) Dentists			
2. Tooth decay makes me look ugly.		Y	N
3. Keeping natural teeth is not that important.		Y	N
4. I am scared of going to a dentist as it may be painful.		Y	N
5. Regular visits to the dentist are not so important.		Y	N
6. Brushing teeth can improve my oral health.		Y	N
7. Eating sweets does not cause tooth decay.		Y	N
8. How often do you brush your teeth?			
a) Once	b) Twice	c) Sometimes	d) Nil
9. Do you use fluoride containing tooth paste?		Y	N
10. Did u miss your classes due to tooth problem during past 1 year?			
11. When did you last visit the dentist?			
a) 1 year before			
b) 2 years before			
c) 6 months before			
d) Never			
12. Do you eat fresh fruits?			
13. Do you take soft drinks?			
14. Do you avoid smiling because of your teeth?			

**REFERENCES**

- [1] Al-Ansari J, Honkala E, Honkala S. Oral health knowledge and behavior among male health sciences college students in Kuwait. BMC Oral Health 2003;3(1):2.
- [2] Grewal N, Kaur M. Status of oral health awareness in Indian children as compared to Western children: a thought provoking situation (a pilot study). J Indian Soc Pedod Prev Dent 2007;25(1):15-19.
- [3] Petersen PE, Bourgeois D, Ogawa H, et al. The global burden of oral diseases and risks to oral health. Bull World Health Organ 2005;83(9):661-669.
- [4] Gift HC, Reisine ST, Larach DC. The social impact of dental problems and visits. Am J Public Health 1992;82(12):1663-1668.
- [5] Harn SD, Dunning DG. Using a children’s dental health carnival as a primary vehicle to educate

- children about oral health. *ASDC J Dent Child* 1996;63(4):281-284.
- [6] Kay EJ, Millar K, Blinkhorn AS, et al. The prevention of dental disease: changing your patients' behaviour. *Dent Update* 1991;18(6):245-248.
- [7] Chand S, Hadyait MA. Oral health-related knowledge, attitude, and practice among school children from rural and urban areas of district Sheikhpura, Pakistan. *Pakistan Oral & Dental Journal* 2014;34(1):109-112.
- [8] Varenne B, Petersen PE, Ouattara S. Oral health behaviour of children and adults in urban and rural areas of Burkina Faso, Africa. *Int Dent J* 2006;56(2):61-70.
- [9] Harikiran AG, Pallavi SK, Hariprakash S, et al. Oral health-related KAP among 11- to 12-year-old school children in a government-aided missionary school of Bangalore city. *Indian J Dent Res* 2008;19(3):236-242.
- [10] Gao J, Ruan J, Zhao L, et al. Oral health status and oral health knowledge, attitudes and behavior among rural children in Shaanxi, western China: a cross-sectional survey. *BMC Oral Health* 2014;14:144.
- [11] Singh A, Gambhir RS, Singh S, et al. Oral health: how much do you know? - A study on knowledge, attitude and practices of patients visiting a North Indian dental school. *Eur J Dent* 2014;8(1):63-67.
- [12] Ajayi DM, Arigbede AO. Barriers to oral health care utilization in Ibadan, South West Nigeria. *Afr Health Sci* 2012;12(4):507-513.