**Original Article** 

# Oral Hygiene Habits Among 6-12 Year Religious School Students

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#### **ABSTRACT**

**Objective:** To assess the knowledge, attitude and practices for oral hygiene habits among 6-12 years religious school students

Study Design: Cross sectional study.

**Place and Duration of Study:** This study was carried out at the Department of Community Dentistry, LUMHS, Jamshoro from 15<sup>th</sup> July to 10<sup>th</sup> August 2014.

Materials and Methods: Cross sectional research was conducted among the religious students of Madarsa Jamia Ghousia Taheria Matiari (Rural Area) and Mumtaz ul Madaris Hirabad Hyderabad (Urban Area). Madrasas were selected on convenient bases. Religious students between age group 6-12 year male only were included in the study. All the students were asked the questions from self-administered questionnaire and were ticked the answers. Data were analyzed in statistical package for social sciences (SPSS) version 16.

**Results:** Majority of religious students from rural and urban areas were cleaning their teeth once a day. 36% from rural and 28% from urban areas reported for miswak (chewing stick) followed by tooth brush and tooth powder, no one was using dental floss. 59% reported for occasionally usage of miswak at the time of ablution (wadoo). Only 10% religious students were rinsing their mouth after meal. 65% religious students were complaining of bad smell.

**Conclusion:** it is concluded that oral health knowledge, attitude and practices (KAP) among study participants were poor and needs to be improved.

Key Words: Oral health, Knowledge, Attitude, Religious chool children.

# **INTRODUCTION**

Good oral hygiene is the foundation for a healthy mouth and prevents 80% of all dental problems. Oral hygiene levels show an inverse relationship with dental caries, especially when using fluoridated bothpastes<sup>3-6</sup>. Dentists play an important role in the improvement of the public's oral health education. Therefore, acquiring knowledge and attitudes related to dental health and the prevention of oral diseases is very important during the future dentists' training period<sup>7</sup>. One of the main objectives of dental education is to train students who can motivate patients and communities to adopt good oral hygiene<sup>8, 9</sup>.

The systematic community-oriented oral health promotion programs are needed to target lifestyles and the needs of children, particularly for those living in rural areas. A prevention-oriented oral health care policy would seem more advantageous than the present curative approach 10. Literature shows that oral health is affected by urbanization, gender and important aspects of tooth brushing e.g. frequency, time spent on and method of tooth brushing. Several socio-economic and socio-cultural factors such as religious affiliation, material living conditions and participation in a social network were significantly associated with the use of oral health care services 11-15. It is recommended by

World Health Organization that programs focusing awareness of oral health among school children should be planned for prevention and control of oral diseases<sup>7</sup>. The aim of this study was to assess knowledge, attitude and practices (KAP) of oral health among the 6-12 year religious school students. This study provides baseline information about children's knowledge attitudes and practice about oral health. The results of this study are aimed to give a wakeup call to stakeholders and to design an effective programme which will help to educate the children of madrasas to maintain their oral hygiene.

#### MATERIALS AND METHODS

Cross sectional study was done from 15<sup>th</sup> July to 10<sup>th</sup> August 2014 among the religious students of Madarsa Jamia Ghousia Taheria Matiari (Rural Area) and Mumtaz ul Madaris Hirabad Hyderabad (Urban Area). The permission was obtained from the administrators of Madarsas and from the Ethical committee of University. Madrasas were selected on convenient bases. Administrators were informed about the aims and objectives of the study. Religious students between age group 6-12 year male only were included in the study. Students who were not living in madarsas (day scholars) were excluded from the study. All the

students were asked the questions from self-administered questionnaire and were ticked the answers.

Data were analyzed in statistical package for social sciences (SPSS) version 16. Quantitative variables like type of madarsas, teeth cleaning timings, devices used for cleaning teeth, miswak used at the time of ablution (Wadoo), rinsing of mouth, complain of bad smell are presented in frequencies and percentages.

#### **RESULTS**

This study was conducted on rural and urban religious students of madrsas. 54.5% students from rural area and 45.4% were from urban area. Majority of religious students from rural and urban areas were cleaning their teeth once a day (Table-1). When asked about the device used for cleaning teeth; 36% from rural and 28% from urban areas reported for miswak (chewing stick) followed by tooth brush and tooth powder, no one was using dental floss. (Table-2)

When asked about use of miswak at the time of ablution (wadoo) 59% reported for occasionally usage of miswak (Table-3)

**Table No.1: Percentage Distribution of Teeth Cleaning Habits** 

| Choice         | Rural    | Urban     | Total     |
|----------------|----------|-----------|-----------|
|                | n (%)    | n(%)      | n(%)      |
| Once a day     | 51(53.1) | 54(67.5)  | 105(59.6) |
| Twice a day    | 16(16.6) | 11(13.75) | 27(15.3)  |
| Infrequently   | 02(02,1) | 02(02.5)  | 04(02.2)  |
| Weekly but not | 27(28.1) | 13(16.2)  | 40(27.7)  |
| regular        |          |           |           |

Table No.2: Percentage Distribution of Device used for Cleaning Teeth

| -01 0100111119 -00011 |           | _ A . V   |          |
|-----------------------|-----------|-----------|----------|
| Choices               | Rural     | Urban     | Total    |
|                       | n (%)     | n(%)      | n(%)     |
| Tooth brush           | 11 (11.4) | 17(21.25) | 28(15.9) |
| Miswak(chewing        | 35(36.45) | 23(28.7)  | 58(32.9) |
| stick)                |           |           |          |
| Both tooth brush      | 02(2.0)   | 05(6.5)   | 7(3.9)   |
| & Miswak              |           |           |          |
| Tooth powder          | 00(00)    | 01(1.25)  | 1(0.5)   |
| (Manjan)              |           |           |          |
| None                  | 48 (50)   | 34(42.5)  | 82(46.5) |

Table No.3: Percentage distribution of Miswak used at the time of ablution (Wudoo)

| at the time of ablation (11 ados) |          |          |          |
|-----------------------------------|----------|----------|----------|
|                                   | Rural    | Urban    | Total    |
|                                   | n (%)    | n(%)     | n(%)     |
| Always                            | 16(16.6) | 09(11.2) | 25(14.2) |
| Occasionally                      | 56(58.3) | 48(60)   | 104(59)  |
| Never                             | 24(25)   | 23(28.7) | 47(26.7) |

There were few religious students who were always rinsing their mouth after meal. (Table-4)

When asked about the self-perceived bad smell;

majority of students were complaining of bad smell. (Table-5)

Table No.4: Percentage distribution of rinsing of mouth of water

|           | Rural n(%) | Urban     | n(%)      |
|-----------|------------|-----------|-----------|
|           |            | n (%)     |           |
| No        | 81(64.3)   | 48(60)    | 129(73.2) |
| Some time | 10(10.4)   | 19(23.7)  | 29(16.4)  |
| Always    | 5(5.2)     | 13 (16.2) | 18(10.2)  |

Table No.5: Percentage distribution of complain of self-perceived bad smell

|       | Rural n(%) | Urban n(%) | Total     |
|-------|------------|------------|-----------|
|       |            |            | n(%)      |
| Yes   | 68(70.8)   | 46(57.5)   | 114(64.7) |
| No    | 20(20.8)   | 28(35)     | 48(27.2)  |
| Don't | 08(8.3)    | 06(7.5)    | 14(7.9)   |
| Know  |            |            |           |

#### DISCUSSION

The present study was conducted to look into aspects of oral hygiene habits among religious school students. Religious School children were selected in this study because of the ease of accessibility, deprived and less aware community. This is embedded by the fact that since the beginning of the modern day dentistry, a strong emphasis has been placed on the importance of the hygiene and cleaning of teeth<sup>16</sup>.

A recent consensus statement on oral hygiene concluded that bacterial plaque plays an important role in the etiology of gingivitis and periodontitis that effective removal of dental plaque can result in the prevention or reduction of these diseases. It has been established that mechanical cleaning procedures are reliable means of controlling plaque, provided cleaning is sufficiently through and performed at regular intervals. Oral hygiene is directly linked with teeth cleaning habit. A quite big proportion of our study i.e. 59.6% of the respondents reported that they clean their teeth only once daily while another 22.7% reported irregular habit of teeth cleaning. The prevalence of oral hygiene habits was interesting as 28.1% of rural and 16.25% of urban students in schools never brushed their teeth that shows the increase in neglecting oral hygiene. In contrast to this, one of the studies aimed at knowing the oral hygiene habits among school children in Lithuania. Children from urban areas reported a regular tooth brushing more often than children from rural areas 17.

Miswak (chewing stick) was commonly used by religious students but tooth brush and pastewas less commonly used. In Pakistan, the miswak is used more among the rural than the urban population. In contrast to this, one of the researches aimed at knowing the use of miswak versus toothbrushes in Jordan. The majority of the respondents (72%) use the toothbrush and 20.5%

use toothbrush-plus-miswak. <sup>18</sup> another study conducted to knowing the oral health status in Pakistan reveals that tooth brush was used by majority (51.3%). Miswak was the second most common (43.1%), while tooth powder was used by very few (5.5%) <sup>19</sup>.

The factor associated with oral hygiene habits, especially with teeth brushing, was living environment. Children from rural areas reported higher percentage of inadequate oral hygiene than children from urban areas. This result indicates need of health education efforts at schools located in rural areas. Most of the students of this study do not rinse the mouth after meal with water. Only 10.2% of students always rinse the mouth after meal, this reflects the lack of knowledge about oral hygiene. 65% students of this study complained of self-perceived bad breath which is not in agreement with the study conducted in Thai school children<sup>20</sup>; it might be due to the different study area and sample size.

#### **CONCLUSION**

In the light of limitation of this study it is concluded that the results of this study suggest that oral health knowledge, attitude and practices (KAP) among study participants were poor and needs to be improved. Based upon these findings, 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. Comprehensive oral health educational programs for both children and their parents are required to achieve this goal.

### **REFERENCES**

- 1. Bjertness, E. The importance of oral hygiene on variation in dental caries in adult. Acta Odontol Scand 1991; 39:257-65.
- Smyth E, Caamano F, Riveiro PF. Oral health knowledge, attitudes and practice in 12-year-old school children. Med Oral Patol Oral Cir Bucal 2007;12(8): E614-20.
- Kawamura M, Iwamoto Y. The Assessment of Oral Health Status by Factor Analysis. Int Dent J 2005; 55:231-41.
- Moss. Daily frequency of fluoride dentifrice as a correlate of caries experience in a fluoridated community. Caries Res 1987; 21:190.
- Rahman B, Kawas SA. The relationship between dental health behavior, oral hygiene and gingival status of dental students in the United Arab Emirates. Eur J Dent 2013;7(1):22-7.
- Vanobbergen J, Declerck D, Mwalili S, Martens L.
   The effectiveness of a 6-year oral health education programme for primary schoolchildren.
   Community Dent Oral Epidemiol 2004;32:173–82.
- Bakdash, B. Current patterns of oral hygiene product use and practices. Periodontol 2000;8:11-14.

- Mirza BAQ, Syed A, Izhar F, Khan AI. Oral Health Attitudes, Knowledge and behavior amongst high and low socioeconomic school going children in Lahore. Pak Oral Dent J 2011;31: 396-401.
- 9. TS Barbosa, MBD Gaviao. Oral health-related quality of life in children: Part II. Effects of clinical oral health status. A systematic review. J Internat Dent Hygi 2008;6:100–107.
- Jamjoum, H., Preventive Oral Health Knowledge, Practice and Behavior in Jeddah, Saudi Arabia. Odonto-Stomatologie Tropicale 1997;13-18.
- 11. Almas K, Al-Hawish A, Al-Khamis W. Oral Hygiene Practices, Smoking Habits, and Self-Perceived Oral Malodor Among Dental Students. J Contemp Dent Pract 2003;15(4):77-90.
- Kawamura, M., Iwamoto, Y. The Assessment of Oral Health Status by Factor Analysis..Int Dent J 2005;55: 231-41.
- 13. Farsi J, Farghaly MM, Farsi NJ. Oral health knowledge, attitude and behaviors among Saudi school students in Jeddah city. J Dent 2004;32(1): 47-53.
- 14. Zhu L, Petersen PE, Wang H, Bian J, Zhang B. Oral health knowledge, attitudes and behaviour of children and adolescents in China. Int Dent J 2003; 53:26.
- 53:26598.
  15. V atemne B, Petersen PE, Fournet F, Msellati P, Gary J, Ouattara S, et al. Illness-related behaviour and utilization of oral health services among adult city-dwellers in Burkina Faso: evidence from a household survey. BMC Health Services Research 2006;6:164. Available from: http://www.biomed.central.com/1472-6963/6/164.
- Smyth E, Caamano F, Riveiro PF. Oral health knowledge, attitudes and practice in 12-year-old school children. Med Oral Patol Oral Cir Bucal 2007;12(8): E614-20.
- 17. Zaborskyte A, Bendoraitiene E. Oral Hygiene Habits and Complaints of Gum BleedingAmong Schoolchildren in Lithuania. Stomatologija 2003; 5:31-36.
- 18. RS Tubaishat, ML Darby, DB Bauman, CE Box, Use of miswak versus toothbrushes, oral health beliefs and behavior among a sample of Jordanian adults, Intl J Dent Hygiene 2005;3:126.
- Pervaiz MI. Oral Health Status; very low income strata of population. Profess Med J 2006;13(2); 220-224.
- 20. Gherunpong S, Tsakos G, Sheiham A. The prevalence and severity of oral impacts on daily performances in Thai primary school children. Health Qual Life Outcomes 2004 Oct 12;2:57.

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