

## A DESCRIPTIVE STUDY TO ASSESS THE ORAL HYGIENE PRACTICES AMONG HIGHER SECONDARY SCHOOL STUDENTS AT KELAMBAKKAM, KANCHIPURAM DISTRICT, TAMILNADU, INDIA

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### ABSTRACT

This paper study was conducted with the aim to determine the oral hygiene practices among higher secondary school students and to assess the association between the oral hygiene practices with selected demographic variables. A total of 169 sample belongs to 16 -18 years were selected by using simple random sampling technique. The collected data were tabulated, analyzed and interpreted by using descriptive statistics such as percentage, mean were used and inferential statistics chi-square test used to test the significant. Among 169 samples (79.28 %) of the subjects have dental carries, (9.46 %) have complaints of foul smell, (0.59 %) of the subjects had bleeding gums and (8.87 %) have dental pain. (52.66%) of them has lack of time to go for dental check-up. (66.68%) of the subjects received the information on oral health through media. The study shows a significant association between dental carries with student's habit of carbonated drinks and there is no significance association on dental problems with other selected demographic variables. The study reveals that the oral hygiene practices are lacking among higher secondary school students. Therefore Investigator recommended that a better way in preventing dental carries by organizing Dental screening programme and provide oral health education by the Health Care Professionals at school where they can do mass screening.

**KEYWORDS:** Descriptive Method, Assess, Oral Hygiene Practices, Higher Secondary

Health and hygiene as a subject can't be taught but it can be learnt as a way of life. Oral health as an essential aspect of general health can be 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" (Inamdar et. al., 2013). Oral Diseases are a major public health problem owing to their higher prevalence and their effects on the individual's quality of life (Butt et. al., 2009). According to the World Health Organization (WHO), "Promotion of oral health is a cost-effective strategy to reduce the burden of oral disease and maintain oral health (WHO, 2006) 60-80% of children have Dental Carries which is a major public health problem in India (Damle SG., 2002 & Gupta PC., 1999). The most leading etiological factors to these oral health problems are poor oral hygiene (Parveen et. al., 2011).

Teacher, dentist, School Health Nurse and sibling can be a powerful tool in changing the behaviour of the children. As children spend much time in school, teachers can assist with dental health education programs. Oral health education, dental knowledge and attitudes of children could help to cultivate healthy oral practice and result in significant improvement in oral health. School screening has a clear role in identifying children with untreated disease and encouraging them to seek dental care by

informing them about their dental needs (Mehajabeen et. al., 2015).

### MATERIALS AND METHODS

A descriptive study was conducted in selected higher secondary school at kelambakkam, kanchipuram district. Sample Size was calculated under the Kevin M. Sullivan formula, Emory University based on code from John C. Pezzullo. A planned study was carried out by using pre validated self administered questionnaire. The questionnaires divided into two sections. Section A consisted of demographic variables and section B consisted of oral hygiene practices that speak about tooth paste, tooth brush, method of brushing, mouth wash, dental floss, odor of mouth and overall health of the teeth and gums. In a total of 169 subjects aged 16 to 18 years both male and female who fulfilled the inclusion criteria were selected through simple random sampling method. This study was approved by the Institutional Human Ethics committee, and informed consent was obtained from the each subject after a through explanation about the purpose of the study. The collected data were tabulated and analyzed with the use descriptive and inferential statistics.

### RESULTS

Results showed that related to demographic variables among 169 samples, (87.57 %) of students were

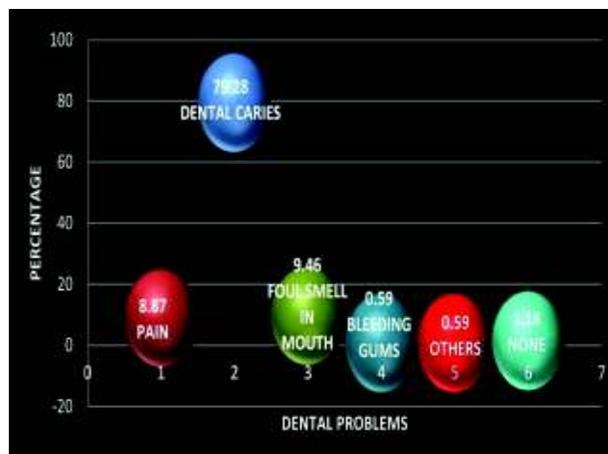
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belong to 16 years and most of the students (75.73 %) were living in rural area. Figure 4 representing (23.66 %) of the student’s the habits of taking carbonated drinks 3-4 times a week and (63.90 %) drinking occasionally. Figure 1 show nearly half of the children (79.28%) had the complaint of dental carries, (8.87%) had dental pain and (9.46%) had foul smell in mouth. Figure 2 illustrates subjects reported that (52.66%) were unable to take time off from School to get the proper Dental care.

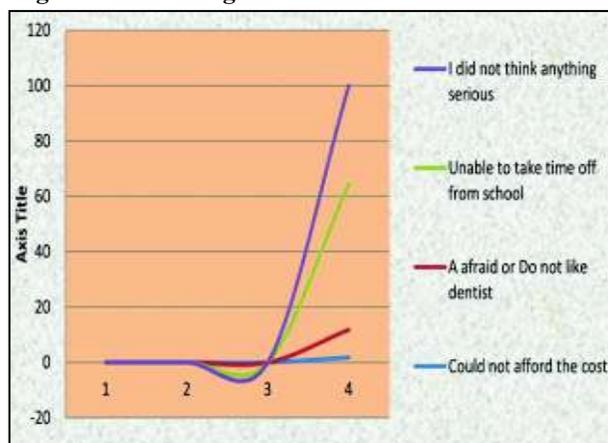
Regarding the oral hygiene practices, (59.75 %) were using salted tooth paste and (21.3 %) were using fluoride paste, (60.35 %) full length of the bristles, (31.95 %) half length of bristles were used to keep the tooth paste for brushing. (96.44 %) of students were using tooth brush and (1.18 %) were using Neem stick for brushing. Majority of the students (77.51 %) used medium tufted tooth brush the rest (14.2 %) used soft tooth brush and (8.28 %) used hard tooth brush for brushing. (64.49 %) of students said that they change their brush every month and (27.81 %) renewal the tooth brush every two months once. Students (33.3%) were brushing their teeth for 3 to 5 minutes (28.99 %) were brushing the teeth for 1 to 2 minutes. Table 1 shows about the frequency of brushing the teeth the (53.25 %) of students had the habits of brushing once a day and (39.05 %) of brushing twice a day the rest of the (5.91 %) brushing before food. (50.2 %) of the students were following up & down technique, (18.34 %) following roll technique, (23.66%) didn’t follow any direction and only few (7.69 %) following horizontal technique. (62.13 %) of students said they don’t have the habit of using the mouth wash. Figure 3 shows majority of the students (64.49 %) were using the tooth picks, (13.01 %) used inter dental floss and few of the students (6.5 %) used dental floss for cleaning their teeth. Most of the students (94.08 %) said they clean their tongue. (12.42 %) of subjects were having smell in their mouth. (72.78 %) of students said they have good tooth and gums.

**Table 1: Percentage Distribution of Frequency of Brushing**

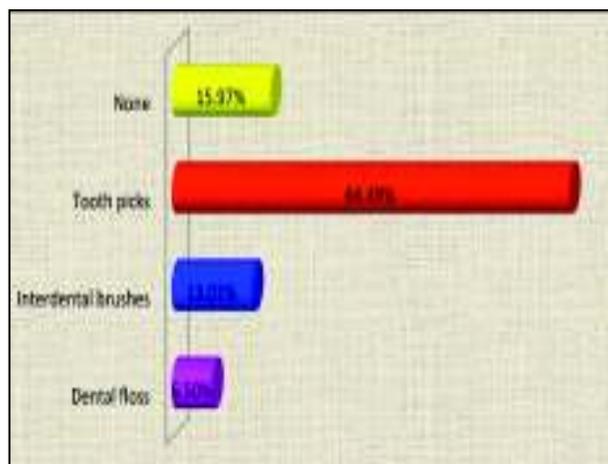
Characters	Categories	Frequency	Percentage
Frequency of brushing	Once a day	90	53.25 %
	Twice a day	33	39.05 %
	Before food	13	5.91 %



**Figure 1: Percentage Distribution of Dental Problems**



**Figure 2: Percentage Distribution of Reason That Could Not Get the Dental Care**



**Figure 3: Percentage Distribution of Using of Other Tooth Cleaning Materials**



**Figure 4: Percentage Distribution of Frequency of Taking Carbonated Drinks**

## DISCUSSION

This study was carried out with aim to assess the oral hygiene practices among higher secondary school students in selected school at kelambakkam, Kanchipuram District, because oral health is an essential and integral component throughout the life and hence affects the total well being. The findings were discussed as follows.

Recommended oral hygiene practice of brushing the teeth twice a day, that is in morning and bedtime at night (Chowdhury G.R., 2016) But in this study, only (38.05%) students brushed their teeth twice a day while (53.25%) of the children have the practice of one time in a day brushing the teeth and brushed their teeth before breakfast (5.91%). This poor oral hygiene practice will leads a problem of callus formation and later dental carries this statistics was supported by peng et al. on oral health behaviour among school children in china, where only 40.0% brushed their teeth twice or more per day (Gadekar and Hattarki, 2016).

There is significant association between dental carries with student's habit of carbonated drinks and there is no significance association on dental problems with other selected demographic variables.

## CONCLUSION

The study aimed to assess oral hygiene practices among selected school students. The result found there is significant association between dental carries with student's habit of carbonated drinks and there is no significance association on dental problems with other selected demographic variables. Therefore investigator concluded

that the oral hygiene practices among higher secondary school students are not following correctly because of lack of time to go for dental check-up. Further, like to suggest a better way in prevention of dental carries and to enhance the Oral Hygiene Practices of the children by organizing dental screening programme for the school children by the Health Care Professionals where they can reach a higher number of students and do mass screening.

## CLINICAL SIGNIFICANCE

A descriptive study draw out the significance of oral hygiene practices and it shows the importance of oral health education as well as elicit the magnitude of periodical screening in school to improve the oral health of the children.

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## REFERENCES

- Inamdar I.F., Mohammed U., Saleem H.T., Doibale M.K. and Aswar N.R., 2013. Study of oral health among adolescents in the field practice area of urban health training centre, Nanded, India. *IOSR Journal of Dental and Medical Sciences*, **8**(6):26-30. Available at: <http://www.iosrjournals.org/iosr-jdms/papers/Vol8-issue 6/F0862630.pdf>.
- Butt A.M., Ahmed B., Praveen N. and Yazdanie N., 2009. Oral health related quality of life in complete dentures. *Pak. Oral Dent. J.*, **29**:397-402.
- WHO Health, 2006. Action plan for promotion and integrated disease prevention. New York: World Health Organization.
- Damle S.G., 2002. Paediatric dentistry. New Delhi: Arya Publishing House. Epidemiology of dental caries in India, pp. 75-96.
- Gupta P.C., 1999. Mouth cancer in India: A new epidemic? *J. Indian Med. Assoc.*, **97**:370-3.
- Parveen M., Ahmed B., Bari A. and Butt A.M., 2011. Oro Dental Health: Awareness and Practices. *J. Univ. Med. Dent. Coll.*, **2**:5-11.

- Mehajabeen R., Sudha P., Kulkarni S.S. and Anegundi R., 2015. Dental caries prevalence among preschool children of Hubli. *J. Indian Soc. Pedod Prev Dent.*, pp.19-22.
- Chowdhury G.R., 2016. A Study to Assess the Oral Health Status and Identify Oral Health Problems of Primary School Children with a view to develop planned teaching programme regarding Oral Health and Evaluate its effectiveness in selected Government schools of south Delhi. *International Journal of Health Care Sciences*, **4**(1):301-304.
- Gadekar K and Hattarki S., 2016. Assessment of Oral Health Status among Dental Students of a Teaching Institute in Belgaun, Karnataka-A Questionnaire Study, *World Journals of Pharmaceutical and Medical Research*, **2**(4):105-107.