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## Attitude of Dental Students towards Their Oral Health Care

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### ABSTRACT

Dental students have a major role in dental health promotion not only through their skills but also as a role model for the general population. Therefore, this study intended to evaluate the attitude of undergraduate dental students towards their self oral care. This study also intended to find out the difference in attitude between the genders and between the students in the preclinical and clinical year. This is a questionnaire based study conducted in four colleges in Bangalore. The study was conducted using a modified version of HU-DBI questionnaire. The participants gave their responses according to five point Likert scale. High scores denoted the strength of positivity of the attitude. The data was analyzed using SPSS. Student t-test was used to find the significance level. Questionnaire was distributed to 430 students, out of which 421 students answered, that included consisted of 191 females (45.4%) and 230 males (54.6%). Among 421 participants, 199 participants (47.2%) belong to preclinical year of study and 222 (52.7%) from clinical year of study. Mean per question was higher in clinical year students when compared to preclinical year students, indicating the improvement in the attitude with the progress in the academic years. There was no significant difference in attitude between the genders towards the oral care. The current study shows that dental students show better attitude towards their dental care and they may form a better role model for the general population and patients.

**Keywords:** Oral health care, Dental students

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## INTRODUCTION

Oral health is defined as the oral condition that is free from any kind of disorder which affects the oral cavity and mouth [1]. Generally it is a part of the overall health. Lifestyle and food habit play a crucial role in ones oral health [2]. Also, there are identified factors that deteriorate the oral health, these include intake of high sugar, carbonated drinks, tobacco and smoking [3]. In India a large number of populations are affected with dental caries and oral cancer. The majority of the factors those are responsible for oral problems are preventable by creating awareness [1]. The dental professionals are the authoritative for educating the general population on oral health, for which they themselves should be role models.

Knowledge, Attitude and Practice (KAP) studies on the students not only yield the cross sectional data on the current situation of the topic in question but also yield the education system of that particular course from which the students are selected. Thus the issues in the curriculum can be addressed.

In this context this KAP study intended to evaluate the attitude of undergraduate dental students towards their self oral care. This study also intended to find out the difference in attitude between the genders and between the students of the clinical and pre-clinical courses.

## METHODOLOGY

This questionnaire based study and was conducted in four colleges in Bangalore. This study was conducted during a teaching session to maximize the number of participants. Ethical approval was obtained from the “independent ethics committee of ICRI”. The study was conducted using a modified version of Hiroshima University - Dental Behavioural Inventory (HU-DBI) questionnaire. Since the questionnaire prepared was in accordance to a study conducted by Dr Rushabh Dagli [4], permission was obtained to adopt it. Final questionnaire that was prepared was used only after the approval from the authority in the field. The questionnaire is shown in Table 1. Study year and gender were used as background variables. Selection of participants was based on inclusion and exclusion criteria. An inclusion criterion was to include all the undergraduate students belonging to four academic years. Students’ willingness ‘not to participate’ was the only exclusion criteria. A written consent was obtained from the prospective subjects. Then the questionnaire was administered. In order to avoid the bias only one person was allotted to all the participants for the queries regarding the questionnaire. Any kind of personnel and academic information was not collected. This questionnaire took approximately 15-20 minutes to complete. The participants gave their responses according to five point Likert scale. High scores indicated the strength of the positivity in the attitude. The data was analyzed using SPSS. The opinions were compared gender wise and between their academic levels (clinical vs preclinical). Student t-test was used to find the significance level.

**Table 1: Questionnaire**

SL NO.	Items	Strongly agree	Agree	Undecided	Disagree	Strongly Disagree
1	I do not worry much about visiting the dentist	6(1.4)	19( 4.5)	7 (1.7)	363(86.2)	26(6.2)
2	I do not worry if my gums bleed during brushing	2(0.5)	5(1.2)	1(0.2)	353(83.8)	60(14.3)
3	I worry about the color of the teeth	74(17.6)	339(80.5)	3(0.7)	5(1.2)	--
4	I am concerned about sticky deposits on my teeth	46(10.9)	369(87.6)	3(0.7)	2(0.5)	1(0.2)
5	Using of child- sized tooth brush is improper	59(14.0)	315(74.8)	24(5.7)	21(5.0)	2(0.5)
6	I think that I cannot help having false teeth when I am old	6(1.4)	35(8.3)	154(36.6)	201(47.7)	25(5.9)
7	I am bothered by the color of my gums	43(10.2)	357(84.8)	6(1.4)	14(3.3)	1(0.2)
8	I am worried that my teeth are getting worse despite my daily brushing	14(3.3)	34(8.1)	12(2.9)	311(73.9)	50(11.9)
9	Spending too much time on brushing will damage the tooth structure	43(10.2)	233(55.3)	4(1.0)	135(32.1)	6(1.4)
10	It is necessary to teach the correct brushing procedure	103(24.5)	316(75.1)	--	2(0.5)	--
11	I think I can clean my teeth well without using toothpaste	390(92.6)	20(4.8)	6(1.4)	5(1.2)	--
12	I often check my teeth in a mirror after brushing	18(4.3)	385(91.4)	10(2.4)	7(1.7)	1(0.2)
13	I am bothered having bad breath	388(92.2)	24(5.7)	2(0.5)	3(0.7)	4(1.0)
14	It is impossible to prevent gum disease with tooth brushing alone	48(11.4)	227(53.9)	7(1.7)	133(31.6)	6(1.4)
15	It is not necessary to visit a dentist until I get a tooth ache	2(0.5)	12(2.9)	2(0.5)	354(84.1)	51(12.1)
16	Use of dye will clean the teeth	93(22.1)	183(43.5)	72(17.1)	72(17.1)	1(0.2)
17	Use of tooth brush with hard bristles will damage the gums	84(20.0)	186(44.2)	26(6.2)	125(29.7)	--
18	brushing of teeth with strong strokes is not ideal	80(19.0)	179(42.5)	10(2.4)	149(35.4)	3(0.7)
19	I feel sometimes I take too much time to brush my teeth	3(0.7)	206(48.9)	37(8.8)	155(36.8)	20(4.8)
20	I have had my dentist tell me that I brush very well	7(1.7)	392(93.1)	15(3.6)	6(1.4)	1(0.2)
21	Brushing the teeth more than once is ideal	33(7.8)	381(90.5)	3(0.7)	3(0.7)	1(0.2)
22	Eating sweets leads to poor oral hygiene	369(87.6)	13(3.1)	9(2.1)	24(5.7)	6(1.4)
23	Dental floss should be used regularly	39(9.3)	271(64.4)	87(20.7)	24(5.7)	--
24	Mouth wash should be used regularly	43(10.2)	326(77.4)	25(5.9)	27(6.4)	--
25	I am worried of taking carbonated drinks very frequently	38(9.0)	262(62.2)	23(5.5)	85(20.2)	13(3.1)
26	I am satisfied with the appearance of my teeth	382(90.7)	27(6.4)	2(0.5)	9(2.1)	1(0.2)
27	I am not bothered about chewing tobacco	1(0.2)	2(0.5)	4(1.0)	24(5.7)	390(92.6)
28	I am not concerned about the ill effects of smoking	1(0.2)	--	10(2.4)	30(7.1)	380(90.3)
29	I am bothered about attending oral health camp	27(6.4)	315(74.8)	66(15.7)	11(2.6)	2(0.5)
30	It is necessary to create awareness of dental problems among family member/peer groups	109(25.9)	312(74.1)	--	--	--

Percentage in parenthesis

### RESULTS

Questionnaire was distributed to 430 students, out of which 421 students answered, and 9 students who submitted incomplete questionnaire were excluded from the study. Among 421 students, 191 were females (45.4%) and 230 were males (54.6%). Students belonging to pre-clinical were 199 (47.2%) and clinical were 222 (52.7%). The responses are shown in Table 1. Questions 22, 25, 27 and 28 were related to attitude. A total of 87.6% of students agreed “eating sweets leads to poor oral hygiene” (Q.22); 62.2% of students accepted for “worry of taking carbonated drinks very frequently” (Q.25). 92.6% and 90.3% of students strongly agreed the ill effects of tobacco and smoking (Q.27 & Q.28). Regarding the creating the awareness in

general population, 74.8% of students preferred the 'camping' method and 74.1% of students accepted the need for creating the awareness of dental problems among family member/peer groups (Q.30). Comparison of scores was made between the clinical and pre-clinical students (Table 2). Clinical students scored better scoring which was highly significant ( $p < 0.01$ ). Comparison was also made between the genders and it was found that there was no significance difference in the scorings ( $p = 0.616$ ) (Table 3).

**Table 2: Comparison of the scoring between the clinical and pre-clinical students**

Year of study	Mean $\pm$ SD (per question)	P value
Preclinical (n=199)	1.43 $\pm$ 0.497	<0.001
Clinical (n=222)	3.47 $\pm$ 0.500	

Student 't' test

**Table 3: Comparison of the scoring between the genders**

Gender	Mean $\pm$ SD (per question)	P value
Female (n=230)	4.12 $\pm$ 0.41	>0.616
Male (n= 191)	4.14 $\pm$ 0.36	

Student 't' test

## DISCUSSION

The importance of maintenance and promotion of oral health is emphasized not only among general population people but also with the risk categories. The risk categories include not only the people with habits like smoking, alcohol consumption, tobacco use, carbonated drink consumption but also with diseases like diabetes [3,5]. Recently, there is a paradigm shift from a "surgical approach" to a "medical prevention strategy." in the management of preventable oral problems. In this context, educating and motivating the patients gain the importance, for which care providers form the role models. This study intended to evaluate the oral health behavior and its determinants among the dental students who are the future dentists. Evaluating the students, gives the assessment of the curriculum which can be modified for the current scientific knowledge and requirement of society.

This study revealed the improvement in knowledge and attitude with the academic years which was shown by the high scores in the clinical students compared to pre-clinical. Also, there was no gender bias with respect to oral health. The study also revealed that the majority of the dental students are aware of the ill effects of the smoking, alcoholism, tobacco and carbonated drinks on the oral health. The results are promising, current curriculum and teachers satisfy the need of the current scientific knowledge.

## CONCLUSION



The current study shows that dental students exhibit positive attitude towards their dental care and they can form a better role model for the general population and patients. Also, the current curriculum is appropriate for current scientific knowledge.

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