



ATTITUDE OF DENTAL AND MEDICAL STUDENTS TO ORAL HEALTH BEHAVIOR OF PATNA

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ABSTRACT

The Hiroshima University Dental Behaviors Inventory (HU-DBI) was used to assess the attitudes towards oral health behavior of the medical and dental college students at Patna. HU-DBI consists of 15 items primarily associated with tooth brushing behavior. All of the items have a agree/disagree response format. A quantitative estimate of oral health attitude and behavior is provided by the total appropriate agree/disagree responses. A total of 114 students participated in the survey with a response rate of 71%. There was a significant difference ($p=0.0001$) between dental and medical college students for oral health attitudes with dental students presenting a mean HU-DBI score of 6.65 in contrast to 4.74 among medical students. Significantly greater percentage of medical students (83.9%) reported that they don't worry much about visiting the dentist than the dental students (53.8%). Nearly three-fourths of medical students believed that their teeth was getting worse despite of daily brushing and significantly more medical students were worried about bad breath Dental college students reported better attitudes to oral health behavior than students of medical.

KEYWORDS: Attitude, dental students, medical students, oral health behavior.

INTRODUCTION

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. 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]

Knowledge and Attitude 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.

There is no data regarding the oral health attitudes and behavior of the present study population from this region of Patna. Hence, the present study was initiated to assess the attitudes towards oral health behavior of dental and medical students at colleges of Patna.

MATERIALS AND METHODS

The target population for the present cross-sectional survey comprised of 160 students, divided equally from dental and medical student. No sampling technique was used and the participation was voluntary. As a result, only a sample of 114 students, students of Dentistry (n=52) and the students of Medical (n=62) participated in the present survey. All the students present on the days of the survey were considered for inclusion and the questionnaires that were unfilled or partly filled constituted the exclusion criteria. However, none of the questionnaires were incomplete. All of the participants were provided with a full explanation of the purpose of

the study and Hiroshima University-Dental Behavior Inventory (HU-DBI) questionnaires.^[4] The questionnaire consisted of 15 items that were primarily associated with oral health behavior. Data collected were entered into spreadsheets, and statistical analysis was performed by SPSS (version 15.0). Discrete data were analyzed by the Fisher's exact test, Independent samples *t*-test analysed the significance of difference between the HU-DBI scores from the dental and medical students. A *p*-value of < 0.05 was considered significant.

RESULTS

The response rates among dental and medical students were 65% (52 of 80) and 77.5% (62 of 80) respectively. Dental students presented a HU-DBI score of 6.65 in comparison to 4.74 among medical students and the difference was significant which suggests that the dental students had better attitudes towards oral health behavior than their medical counterparts (Table 1).

Table 1: Mean HU-DBI scores among the study population in relation to course.

Student	Mean	Std. Deviation	Mean difference	<i>t</i> -statistic	Degree of freedom	P value
Dental	6.65	1.648	1.912	4.299	55	0.0001
Medical	4.74	1.692	1.912	-	-	-

Table 2 denotes that significantly greater number of medical students (83.9%) than the dental students (53.8%) were not bothered about visiting the dentist. Similarly, approximately three fourths (74.2%) of the medical students in contrast to 46.1% dental students felt that their teeth are getting worse despite brushing daily. It is evident from Table 2 that 88.4% and 67.7% of the dental and medical students respectively reported that they checked their teeth in a mirror after brushing. More

than one third (34.6%) of the dental students disagreed that it is impossible to prevent gum disease with tooth brushing alone in contrast to 3.3% of medical students. It was interesting to note that 90.3% of the medical students worried about having bad breath in comparison to 65.3% of dental students. Approximately, four-fifths (80.6%) of the medical students informed that they don't visit a dentist until they have a toothache in contrast to 42.3% dental students.

Table 2: Questionnaire and percentage of 'agree' and 'disagree' responses by course of study. *Fisher's exact test, *p*<0.05.

S no.	Statement	Dental		Medical	
		Agree n(%)	Disagree n(%)	Agree n(%)	Disagree n(%)
1	I don't worry much about visiting the dentist*	28(53.8)	24(46.2)	52(83.9)	10(16.1)
2	My gums tend to bleed when I brush my teeth	32 (61.5)	20(38.5)	52(83.9)	10(16.1)
3	I have noticed some white sticky deposits on my teeth	18 (34.5)	34(65.5)	30(48.4)	32(51.6)
4	I think that I cannot help having false teeth when I am old	18(34.8)	34(65.2)	32(51.6)	30(48.4)
5	I am bothered by the color of my gums	26(50.0)	26(50)	32(51.6)	30(48.4)
6	I think my teeth are getting worse despite my daily brushing*	24(46.1)	28(63.9)	46(74.2)	16(25.8)
8	I think I can clean my teeth well without using tooth paste	22(42.3)	30(57.7)	22(35.5)	40(64.5)
9	I often check my teeth in a mirror after brushing*	46(88.4)	6(11.6)	42(67.7)	20(32.3)
10	I worry about having bad breath*	34(65.3)	18(34.6)	56(90.3)	6(9.7)
11	It is impossible to prevent gum disease with tooth brushing alone*	34(65.3)	16(34.6)	58(96.7)	2(3.3)
12	I have used a dye to see how clean my teeth are*	30(57.5)	22(42.5)	4(6.5)	58(93.5)
13	I use a tooth brush that has hard bristles*	12(23)	40(77)	34(54.8)	28(45.2)
14	I don't feel I've brushed unless I brush with strong strokes*	20(38.5)	36(61.5)	44(71)	18(29)
15	I have had my dentist tell me that I brush very well	34(65.4)	18(34.6)	34(54.8)	28(45.2)

It was observed that significantly double the number of medical students reported of using hard bristles toothbrush and brushing with strong strokes to clean their teeth. In addition, only 6.5% of medical students

used a dye to see how clean their teeth are in contrast to 57.5% of the dental students.

DISCUSSION

Dental students presented a HU-DBI score of 6.65 in comparison to 4.74 among medical students and the difference was significant which suggests that the dental students had better attitudes towards oral health behavior than their medical counterparts. Such difference between the medical and dental students could be due to the extra knowledge and experience dental students had gained from their basic dental subjects. In accordance, two previous studies among Indian students observed similar results done by Doshi *et al*^[5] they found medical and dental students to have better attitudes towards oral health behavior than their engineering counterparts. Furthermore, Kumar Tadakamadla *et al*^[6] also reported that dental students exhibited better HU-DBI scores than students from other streams. A proportion of 64.9% of the whole population informed that they put off visiting a dentist until they have a toothache, in accordance Kawamura *et al*^[7] who observed a similar figure of more than 60% among dental hygiene and nursing students. In agreement with the present study, Al-Hussaini *et al*^[8] reported that the main reason for visiting a dentist was toothache in 70% of the Health Sciences students of Kuwait. However, in contrast to the present findings where 80.6% and 42.3% of the medical and dental students respectively informed that they don't visit a dentist until they have a toothache the corresponding figures among medical and dental students of Emirates were found to be 46% and 20% respectively (Al Kawas *et al*^[9]). It was noticed that more dental students used mirror to check their teeth after brushing than their medical counterparts. In addition, a greater number of medical students worried about having bad breath and believed that their teeth are getting worse despite brushing daily. Studying dentistry would predispose dental students to receive dental health related information routinely and thus aid in adopting positive attitudes and oral health behavior. Approximately, four-fifths (80.6%) of the medical students informed that they don't visit a dentist until they have a toothache in contrast to 45.8% dental students. This is in accordance with a study in India (Usman *et al*^[10]) which observed that 86% of paramedical students and more than half the dental students (69%) put off visiting the dentist till they encountered a dental problem ($p < 0.001$). Rong *et al*^[11] compared the oral health behavior of dental students with medical students and found that 60% of dental students used dye in contrast to 11.9% medical students to see how clean their teeth, this is in concordance with the present study where significantly greater number of dental students used dye than their medical counterparts. Although the present study has yielded some preliminary findings on the oral health behavior of dental and medical students of Patna, it is not free of limitations. The main limitations are as follows; only male students were included, students from other paramedical professions were not considered.

CONCLUSION

Dental college students reported better attitude to oral health behavior than students of medical. Furthermore, future studies on dental students in clinical years would aid in assessing the influence of clinical experience on oral health knowledge, attitudes and behavior.

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