

Research Article

A Survey on Oral Health Attitude, Awareness and Behaviour of Dental Students and Faculty Members in Dental Colleges of Navi Mumbai

Dr Rahul Nagda, Dr Manan Doshi*, Dr Riddhi Shah

Department of Periodontology, Dr GD POL Foundation's Yerala Medical Trust's Dental College & Hospital, Maharashtra India

***Corresponding author**

Dr Manan Doshi

Email: manandoshi08@gmail.com

Abstract: In-order to improve the oral hygiene of general population, dentist are role playing as models to which people can look up to. To evaluate and compare the difference in attitude, awareness and behaviour towards oral health amongst dental students and faculty members of Dental Colleges of Navi Mumbai, Maharashtra, India. A descriptive cross-sectional study using English language version of Hiroshima University-Dental Behavioural Inventory (HU-DBI) which was modified to 27 questions and was distributed to 2023 participants out of whom 1409 replied. Responses were given in Likert scale. Data was analysed statistically. Higher proportions of pre-clinical students did not visit dentist regularly (42.2%). Almost half of pre-clinical students agreed that they were never taught brushing professionally (45.9%). Regular use of floss was significantly low amongst the participants. Faculty members and post-graduate students agreed more when asked if they were least bothered about the ill effects of smoking and chewing tobacco compared to pre-clinical and clinical year students. In order to be a good role model for general population, there should be an improvement in attitude and behaviour of dental students as well as faculty members towards oral health.

Keywords: Dental students; Faculty, Role playing, oral health.

INTRODUCTION

In India, general health is not given that much importance, hence oral hygiene awareness of the people becomes a distant dream. Good oral hygiene is a key to good general health and plays a fundamental role in improving quality of life[1]. Dentist plays an important role in promoting oral health care. To instil positive oral hygiene practices amongst people, dentist themselves have to be role model for their patients, family and society[2]. Dental professionals cannot assist in developing well informed patients if they themselves remain uninformed and negligent[3].

Dental schools are building blocks for a future dentist. It is therefore necessary to nurture students towards positive oral health attitude at an early stage. Oral health attitude and behaviour of dental students varies in different countries[4,5]. There are various oral health awareness programs which help people develop good oral hygiene but little attention is given towards developing better dental behaviour among dental students which can make them leaders of good oral health care.

The aim of our study was to evaluate and compare the difference in attitude, awareness and behaviour towards oral health amongst dental students

and faculty members of all Dental Colleges of Navi Mumbai, Maharashtra, India. It is one of a kind study which assesses attitude towards self-care and adverse habits of faculty members which teach the dental students in the dental colleges. This is critical as the dental students hold the promise for future awareness in the society.

MATERIALS AND METHODS

Source of data

The study was conducted in five Dental Colleges located in Navi Mumbai, Maharashtra, India. The modified English-language version of HU-DBI Questionnaire consisting of 27 questions was prepared and was distributed amongst 4 groups; Group 1: preclinical year students, Group 2: clinical year students, Group 3: post graduate students and Group 4: faculty members of the five Colleges. Study was conducted in-between lectures to maximize participation. Approval from ethical committee, permission to conduct the study from the dean of the respective colleges and a written consent from the participants was taken and no personal information of the participants was collected.

Sample Size

HU-DBI Questionnaire was distributed amongst 2023 people out of whom 1409 replied. The participants were distributed under four groups; Group 1 (Preclinical), Group 2 (Clinical), Group 3 (Post graduates), Group 4 (Faculty). The participants gave their response in a 5 point Likert scale. Selection of participants was based on inclusion and exclusion criteria.

Inclusion criteria included all the undergraduate students, post graduate students and faculty members willing to participate in the study and complete the questionnaire and Exclusion Criteria included those who did not wish to participate in the study or complete the questionnaire. Only one person was allotted for any queries regarding the filling up of questionnaire. Only completely filled questionnaires were taken into consideration. All the data was systematically compiled and then sent for statistical analysis to the statistician.

RESULTS

The SPSS version 20 was used for statistical analysis of the data collected. Difference in responses was assessed using chi-square test. The level of significance was set at $p \leq 0.05$.

Questionnaire was distributed to 2023 people out of whom 1409 answered. Participants were divided into four groups. Group 1 (Preclinical): 519 participants, Group 2 (Clinical): 620 participants, Group 3 (Post graduates): 130 participants, Group 4 (Faculty): 90 participants. The responses of the participants to the questionnaire are shown in Table 1 and Fig-1.

Questions related to attitude towards good oral health:

Majority of participants were worried if their gums would bleed during brushing (85.9%) (Q 2) and about colour of their teeth (86.3%) (Q 3) and gums (67.5%). (Q 5) Most of the participants were concerned about calculus formation on their teeth (90.5%), but significantly less number of participants visited dentist for their check-up regularly (51.4%) (Q 4) and preclinical students were the least amongst the other groups (42.2 %). (Q 13) Less number of participants (63.4%) disagreed to "eating sweets does not affect oral hygiene" (Q 19) and 84% gave affirmative response for "ill effects of carbonated drinks on oral health". (Q 22)

Questions related to self-awareness of oral health:

It was seen 45.9% of pre-clinical students agreed they were never taught how to brush teeth professionally (Q 8). It was seen 47.3% agreed when asked if their dentist said that they brush very well (Q 17) and preclinical students were least amongst all (39.7%) when compared with clinical students (48.6%). Only 34.3% participants used dental floss regularly. (Q

20) 61.1% participants agreed that mouth wash should be used daily. (Q 21)

Questions related to behaviour regarding ill effects of adverse habits:

Though the overall percentage was less amongst participants; Post-graduate students agreed the most (16.2%) when asked if they didn't care about chewing tobacco compared to Clinical students (10.2%) (Q 24) Again Post-graduate students agreed the most (11.6%) when asked if they were least bothered about the ill effects of smoking (Q 25) while 7.7% were undecided, Pre-clinical students agreed the least (4%).

DISCUSSION

As quoted by Mahatma Gandhi 'Be the change you wish to see to world', application of this in dentistry is also very important. Patient look up to dentist as their role model and so it is necessary that dentist themselves have a right attitude towards their oral hygiene. Dental students as well as faculty members were included in the study as the faculty members of the dental colleges are the ones who impart knowledge about oral health to all the students in the dental college and the students are the future who will spread this awareness of oral health in the society. As the level education increases change is seen in thought process of an individual and improvement in oral hygiene awareness is seen.⁶ So the participants of the dental colleges were distributed into four groups to assess the role of knowledge gained and also awareness in every stage of dental career.

The participants replied to different types of questions regarding oral health attitude, self-awareness of oral health and awareness of ill effects of adverse habits in the questionnaire which consisted of a total of 27 Questions.

Regular dental check-ups are necessary not only for patients but also for oral health care providers, but when compared in between groups, maximum from pre-clinical year students 44.2% gave affirmative response to they do worry much about visiting the dentist. Most of the participants showed positive attitude towards oral health, majority of them worried about bleeding gums during brushing, calculus formation, and change in colour of teeth. 84.9 % checked their teeth in mirror after brushing. Results were in accordance to the study conducted by Singh et al, [3].

If-awareness of one's own oral hygiene is also equally important; almost half of the Preclinical students (45.9%) in our study agreed that they were never been taught professionally how to brush their teeth which was consistent with the study conducted by Dagli et al [7] and Alam et al [8].

Table 1- Modified Hiroshima University-Dental Behavioural Inventory (HU-DBI) Questionnaire

Sr No	Questionnaire	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	I do not worry much about visiting the dentist	141(10)	386(27.4)	159(11.3)	539(38.3)	184(13.1)
2	I do not worry if my gums bleed during brushing	26(1.8)	124(8.8)	49(3.5)	702(49.8)	508(36.1)
3	I worry about the colour of the teeth	449(31.9)	766(54.4)	62(4.4)	83(5.9)	49(3.5)
4	I am concerned about sticky deposits on my teeth	512(36.3)	764(54.2)	54(3.8)	58(4.1)	21(1.5)
5	I am bothered by the colour of my gums	230(16.3)	722(51.2)	228(16.2)	176(12.5)	53(3.8)
6	I am worried that my teeth are getting worse despite my daily brushing	203(14.4)	498(35.3)	188(13.5)	412(29.2)	108(7.7)
7	Spending too much time on brushing will damage the tooth structure	206(14.6)	538(41.7)	191(13.6)	317(22.5)	107(7.6)
8	I have never been taught professionally how to brush	81(5.7)	363(25.8)	81(5.7)	580(41.2)	304(21.6)
9	I think I can clean my teeth well without using toothpaste	45(3.2)	90(6.4)	51(3.6)	503(35.7)	720(51.1)
10	I often check my teeth in a mirror after brushing	460(32.6)	737(52.3)	79(5.6)	97(6.9)	36(2.6)
11	I am bothered about having bad breath	563(40.0)	570(40.5)	92(6.5)	127(9.0)	57(4.0)
12	It is impossible to prevent gum disease with tooth brushing alone	183(13.0)	617(43.8)	235(16.7)	281(19.9)	93(6.6)
13	It is not necessary to visit a dentist until I get a tooth ache	70(5.0)	220(15.6)	126(8.9)	598(42.4)	395(28.0)
14	Use of tooth brush with hard bristles will damage the gums	330(23.4)	839(59.5)	180(8.5)	88(6.2)	32(2.3)
15	Brushing of teeth with strong strokes is not ideal	275(19.5)	820(58.2)	118(13.3)	102(7.2)	24(1.7)
16	I feel sometimes I take too much time to brush my teeth	94(6.7)	387(27.5)	258(18.3)	594(42.2)	76(5.4)
17	I have had my dentist tell me that I brush very well	162(11.5)	505(35.8)	348(24.7)	225(23.1)	69(4.9)
18	Brushing the teeth twice daily is ideal	614(43.6)	596(42.3)	62(4.4)	91(6.5)	46(3.3)
19	Eating sweets does not affect oral hygiene	82(5.8)	266(18.9)	168(11.9)	627(44.5)	266(18.9)
20	I use dental floss regularly	105(7.5)	377(26.8)	190(13.5)	586(41.6)	151(10.7)
21	Mouth wash should be used daily	218(15.5)	642(45.6)	214(15.2)	290(20.6)	45(3.2)
22	Frequent drinking of carbonated drinks has ill effects on oral hygiene	557(39.5)	627(44.5)	87(6.2)	88(6.2)	50(3.5)
23	I am satisfied with the appearance of my teeth	157(11.1)	670(47.6)	182(12.9)	301(21.4)	99(7.0)
24	I am least bothered about chewing tobacco	75(5.3)	83(5.9)	37(2.6)	305(21.6)	909(64.5)
25	I am least concerned about the ill effects of smoking	46(3.3)	48(3.4)	39(2.8)	330(23.4)	946(67.1)
26	I attend oral health camps regularly	79(5.6)	300(21.3)	414(29.4)	508(36.1)	108(7.6)
27	Is it necessary to create awareness of dental problems amongst people	1040(73.8)	324(23.0)	22(1.6)	18(1.3)	5(0.4)

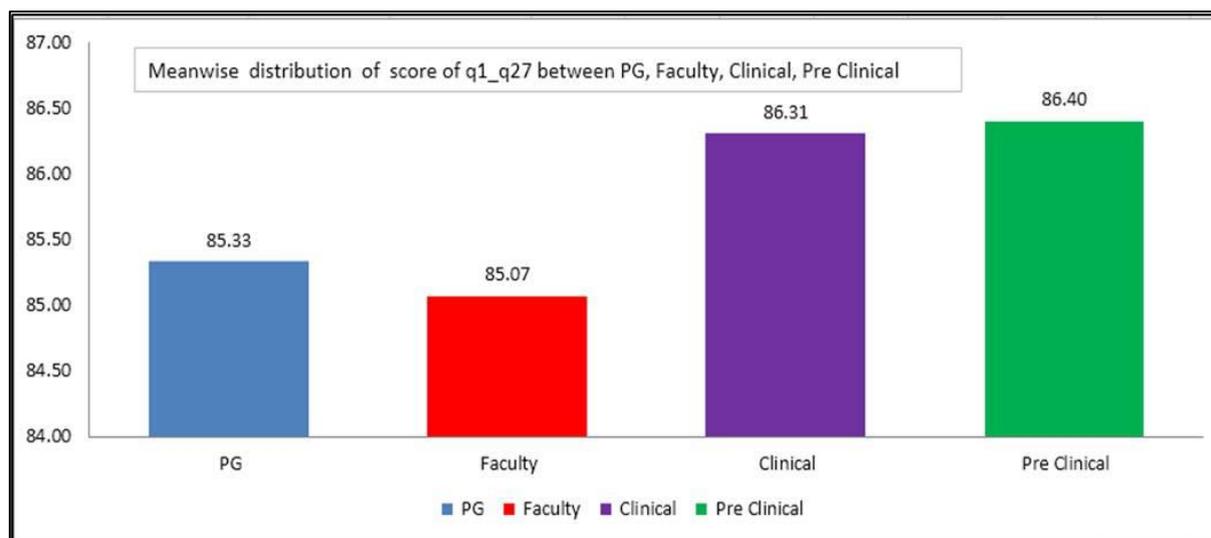


Fig-1: Mean wise distribution of scores within the groups in all questions

Almost half of the participants 47.3% in our study agreed when asked whether their dentist had told them they brush properly. Similar results were observed in study conducted by Kateeb E [9] and Jaramillo et al [10].

Floss is required for complete oral hygiene maintenance and is essential for removing plaque in interproximal areas. Being well aware of importance of floss only 34.3% used floss regularly. Similar results were shown in Iranian students [11] and Turkish students [12].

Around 26% of preclinical students deferred dental visits until they had a toothache compared to 17.6% of clinical year students. Similar results were seen in Romanian students [13].

Few percentages of dental students and faculty didn't care about ill effects of smoking (6.7%) as well as tobacco (11.2%). Similar results were seen in other studies [14]; this question can have a biased response. Overall percentage is less. Post graduate students and faculty were more than the undergraduate students.

CONCLUSION

Clinical year students were found to have a better attitude and awareness towards oral hygiene than preclinical year dental students which may be attributed to their increased knowledge and clinical experience. Therefore, knowledge about preventive oral health care should be included in pre-clinical year dental curriculum. Dentists are expected to be role models for creating oral hygiene awareness; however, the results of this study show that in order to be a good role model for general population, there should be an improvement in attitude and behaviour of dental students as well as faculty members towards oral health. Students look up to their faculty for guidance, so faculty too should make efforts to shape the future role models.

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