

## A Survey About Awareness Of Oral Hygiene Practices Among The Students Of Professional Colleges In The Pethapur Village

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**Abstract:** Background and Aim: Oral hygiene is most important factor for prevention of oral diseases. With educated people concept of prevention and well-being could be more easily understood, irrespective of their course of study. So, present study was conducted to assess oral health knowledge, attitude, and behavior in professional college students. Present study was performed with an objective to compare the oral health awareness among the students of dental, nursing and ayurveda and to compare oral hygiene awareness among male and female students. Material and Methods: Survey performa was prepared with help of a self administered structured questionnaire written in English to assess oral health knowledge, attitude and behavior of students. 500 students who voluntarily agreed to participate in the survey were selected. SPSS, Version 20.0 was utilized for statistical analysis. The Chi-square test was performed for comparison of responses obtained from males and females. Results: Oral health awareness was high among the Dental students compared to Nursing and Ayurveda students. Females showed better oral health behavior than male students. Conclusion: There was lack of exposure in ayurveda and nursing students about oral health in their education. Hence, provision for oral health education must be implemented in professional courses. [Parmar M Natl J Integr Res Med, 2019; 10(5):82-85]

**Key Words:** Knowledge, Oral health education, Oral hygiene, Students

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**Introduction:** Oral health is equally important in relation to general health. Various factors like nutritional status, tobacco, smoking, alcohol, hygiene, stress, are linked to a wide range of oral diseases forming the fundamental basis of the common risk factor approach (WHO, 2000) to prevent the oral diseases.<sup>1</sup> Recently, researchers have found that bidirectional relationship between systemic diseases and periodontal diseases.<sup>2,3</sup> Oral diseases can be prevent by proper tooth brushing, use of interdental aids, flossing and regular visit to dentist.<sup>1</sup> Dental health is different concept which is affected by individual's socioeconomical status, environment and culture. To maintain oral hygiene is proved to be an effective preventive measure for good oral health as a part of general health. "Public health is the coalition of professions united by their shared mission" (Institute of Medicine Committee for the study of the future public health, Division of Health Care Services, 1988).

The phrase "coalition of professions" stresses that the achievement of better public health requires more than the participation of the various health professions: public health individuals and groups bind together to achieve a common goal.<sup>2</sup> The present study was conducted to assess the oral health knowledge, attitude, behavior, the periodontal status in professional college students. This survey was therefore

initiated with a prime focus to determine the oral health awareness levels among the Dental, Ayurveda and Nursing students in Pethapur village. Present study was performed with an objective to compare the oral health awareness among the students of dental, nursing and ayurveda and to compare oral hygiene awareness among male and female students.

**Materials and Methods:** Present cross-sectional study was conducted from September to November 2018 professional among colleges in Pethapur village. Ethical approval was taken from hospital's research ethics committee and written informed consent was taken from the study participants.

Inclusion criteria : Undergraduate students having age of above 17 years.

Exclusion criteria: Postgraduate students. 2- Age more than 24 years.

**Sampling design:** Simple random sampling method was used to select three professional colleges in Pethapur village. From the total number of students pursuing the undergraduate course, 500 students who voluntarily agreed to participate in the survey were selected.

The purpose of the study was informed and explained to the students. Participants were

asked to respond each question according to the given format provided in the questionnaire. The students took an average of 15 minutes to complete the procedure.

Survey performa: The survey performa was prepared with the help of a self administered structured questionnaire written in English to assess the objectives. The performa consisted of 2 parts. The first part includes general information like age, gender, and profession of students. The second part included 20 questions in which question number 1-11 were related to the awareness about the oral hygiene, question number 12 -16 were related to knowledge about periodontal diseases and question number 17-20 designed to evaluate the oral health attitude and behavior of the students.

Statistical analysis : The recorded data was compiled and entered in a spreadsheet computer program (Microsoft Excel 2007) and then exported to data editor page of SPSS version 15 (SPSS Inc., Chicago, Illinois, USA). Descriptive statistics included computation of percentages, means and standard deviations. For all tests, confidence level and level of significance were set at 95% and 5% respectively. The Chi-square test was performed for comparison of responses obtained from males and females. The level of statistical significance was set at  $P < 0.05$ .

**Results :** Out of 500 participants, 369 (73.8%) were male, 131 (26.2%) were female students and 340 (68.0%) were Dental, 124 (24.8%) were Ayurveda 36 (7.2%) were Nursing students.

Brushing is important step for maintenance of oral hygiene and prevention of oral disease. This study result shows 210 (71.7%) Dental, 69 (23.5%) Ayurved and 14 (4.8%) Nursing students were having twice a day brushing frequency. (Table-1). This result show more awareness in dental compared to other students. 206 (73.6%) Dental, 61 (21.8%) Ayurveda and 13 (4.6%) Nursing students were having frequency of changing toothbrush in 3 months. Table -1 result showed that Dental students had more knowledge about oral hygiene awareness in compared to ayurveda and nursing students. Mean oral health awareness score was high among dental ( $9.45 \pm 1.82$ ) followed by Ayurveda ( $8.97 \pm 1.65$ ) and Nursing students ( $8.22$

$\pm 1.67$ ). Statistically, significant difference was present in awareness among various professions.

**Table 1: Percentage of students of dental, ayurveda, nursing having a knowledge about oral hygiene awareness**

Questions	Dental	Ayurveda	Nursing	Total
Brushing teeth daily	340 (68.1%)	123 (24.6%)	36 (7.2%)	499 (100%)
Frequency of brushing twice daily	210 (71.7%)	69 (23.5%)	14 (4.8%)	293 (100%)
Frequency of changing toothbrush in 3 months	206 (73.6%)	61 (21.8%)	13 (4.6%)	280 (100%)
Knowledge about dental floss	70 (66%)	20 (18.9%)	16 (15.1%)	106 (100%)
Knowledge about mouthwash	156 (71.2%)	49 (22.4%)	14 (6.4%)	219 (100%)
Clean your tongue	319 (67.2%)	120 (25.3%)	36 (7.8%)	475 (100%)
Dental visit for oral hygiene	180 (76.3%)	45 (19.1%)	11 (4.7%)	236 (100%)
Frequency of visiting a dentist in one year	180 (77.5%)	43 (18.6%)	9 (3.8%)	232 (100%)

In comparison of awareness about periodontal diseases 57 (55.3%) Dental, 36 (35%) Ayurveda and 10 (9.7%) Nursing students were having bleeding gum that show Dental student have a more awareness compared to Ayurveda and Nursing students. 4 (50%) Dental, 3 (37.5%) Ayurveda and 1 (12.5%) Nursing students were having bad breath. 3 (75%) Dental, 1 (25%) Ayurveda and 0 (0%) Nursing students were taken treatment for bad breath. Mean awareness about periodontal was high among Dental ( $2.85 \pm 0.55$ ) followed by Nursing ( $2.67 \pm 0.67$ ) and Ayurveda students ( $2.61 \pm 0.64$ ). (Table-2)

**Table 2: Percentage of students having awareness about periodontal diseases**

Questions	Dental	Ayurveda	Nursing	Total
Students having a bad breath	4 (50%)	3 (37.5%)	1 (12.5%)	8 (100%)
Students taken any	3 (75%)	1 (25%)	0 (0%)	4 (100%)

treatment for bad breath				
Bad breath affecting social life	46 (73%)	10 (15.9%)	7 (11.1%)	63 (100%)
Students having a bleeding gum	57 (55.3%)	36 (35%)	10 (9.7%)	103 (100%)
Students having knowledge about effect of poor oral hygiene on general health	302(69.6%)	104 (24%)	28 (6.5%)	434 (100%)

score	1.89	±1.39	1.76
P ≤ 0.05 S			

**Discussion:** Oral hygiene is mostly neglected by people because most of people are oblivious about the relationship between oral hygiene and their effect on systemic diseases like cardiovascular disease, diabetes. Oral health knowledge is considered to be an essential for health related behavior.<sup>3</sup>In this survey we studied the status of awareness in that section of society which is considered to have a better knowledge and awareness than general population. As was expected, in this present study the dental students had the highest knowledge, attitude and behavior scores because it is an important content in their professional education, and they need this knowledge to educate patients and community when they start working in health care system.

Mean awareness about periodontal disease was high among female (2.81 ± 0.59) than male students (2.69 ± 0.57). Details are shown in table 4 and 5.

**Table 4: Percentage of male and female student having a awareness about oral hygiene.**

Questions	Female	Male	Total
Brushing teeth daily	368 (73.7%)	131 (26.3%)	499 (100%)
Frequency of brushing twice daily	219 (74.7%)	74 (25.3%)	293 (100%)
Frequency of changing toothbrush in 3months	208 (74.3%)	72 (25.7%)	280 (100%)
Knowledge about dental floss	91 (85.8%)	15 (14.2%)	106 (100%)
Knowledge about mouthwash	172 (78.5%)	47 (21.5%)	219 (100%)
Clean your tongue	349 (73.5%)	126 (26.5%)	475 (100%)
Dental visit for oral hygiene maintenance	170 (72%)	66 (28%)	236 (100%)
Frequency of visiting a dentist in one year	171 (73.7%)	61 (26.3%)	232 (100%)

**Table 5: Awareness among gender**

Score	Female	Male	Total
Mean	8.43 ±	7.97	8.31 ±

There is a positive link between dental education experiences, oral health attitudes, behavior, and improvement of personal oral health of dental students.<sup>4</sup>The present study shows 71.7% dental students brushed twice daily, which in accordance with study of Neeraja et al. in 2011,<sup>5</sup> and Rahman and Kawas in 2013.<sup>6</sup>The present study reported that the 75% females showed better oral health behavior than 25.3% male students regarding brushing twice daily which is in accordance with the studies of Rahman and Kawas 2013.<sup>6</sup> and Polychronopoulou et al.(2002)<sup>7</sup>,Fukai et al., 1995<sup>8</sup>, Ostberg et al., 1999.<sup>9</sup>In the present study, response to the awareness to the bleeding gums have been seen more in dental students as compared to ayurveda and nursing students (55.3% of dental students as compared with 35% ayurveda and 9.7% nursing students ).The findings were found to be similar to that of study done by Laxman Singh et al.<sup>10</sup>

**Conclusion :** The present study shows that lack of oral health awareness and there is need to educate and spread of knowledge of proper dental care and dental diseases through dentists. Dental education start early stage in life, be delivered by trained personnel and also included in general health.

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