

Awareness of Oral Hygiene among Dental Students-A Survey

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Abstract

Attitudes of dental students toward their own oral health affect their oral health habits and also have a possible influence on the improvement of the oral health of their patients and society. The aim of this survey is to create awareness among dental students on oral hygiene. A survey with 17 questions was prepared and sent via google forms to 100 dental students. The responses were collected and analysed. Most of the dentists are aware that oral health determines the overall health of an individual. Many among the population use mouthwash, rinsing with water etc to avoid bad odour. Aspects of a dental student's oral health attitude and behavior improved but this improvement was limited. Thus, the students should be motivated to become an example of oral health for the society, for which few steps to motivate them toward better oral health are proposed. This approach would also be helpful in disseminating positive oral health concepts to the general public.

Keywords: oral health; population; students; dental; hygiene

Introduction

The prevention of oral health disease is the most acknowledged and efficient method of ensuring oral health. Oral health is now renowned to be equally important in relation to general health. Dental student so oral health attitude reflects their understanding of the importance of the disease prevention and their commitment to improve their patient's oral health.⁷ People's oral health knowledge, behaviour and status are influenced by many factors including culture, environment and social customs.² In future, today's students of dentistry will provide dental services and will be responsible for public oral health education, thus it is important to investigate their knowledge, attitude and behaviour regarding oral

health.³ Numerous studies have found oral behaviour to vary from among people of different countries and communities. Oral health attitude also differs among gender.⁴

To improve oral health of the population, WHO has set the promotion of self care of as one of the goals for the year 2020. Recommended oral self care (ROSC) includes tooth brushing more than once in a day, lesser consumption of sugar containing snacks daily once or rarely or regular use of fluoride containing toothpaste. Since dentists are expected to be role models to their patients, evaluation of ROSC of dentists the self will provide an estimate of the extent to which that follow ROSC.⁵ In previous studies many industrialised countries have experienced a dramatic decline in dental caries prevalence among students. The reason for the improved oral health are complete but may involve a more sensible approach to sugar consumption, improved oral hygiene practice, topical Fluoride application, effective use of oral health services and preventive programmes.⁶ To keep the oral health hygienic aloe vera can also be used. It has also been used in dentistry for its beneficial properties

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in various conditions⁷. There is a need to provide oral health education for pregnant women since it is during the time of pregnancy that chances of infection increases and it may also affect the developing foetus.⁸

Compared to other studies, this survey covers only limited population. The dental institutions are an integral part of the oral health care system. They help train the future professionals and expand scientific knowledge through research. The oral hygiene attitude and behaviour of dental health professionals affect their oral self care habits along with their ability to motivate patients to undertake preventive oral health measures.⁹ This study was conducted to assess the oral health attitudes and behaviours among dental students. The study also creates awareness in having a good oral health.

Materials and Method

Study design, Area and study population:

A survey was conducted among various dental college students to assess the knowledge and awareness of good oral habits. The sample size of this survey is 100 dental students. Participants who were more than 16 years of age and below 29 years of age were included in the study. Participation in the study was voluntary and no incentives were provided to the participants. The study was conducted at the period of April 2020.

Survey instrument:

The study instrument which was a questionnaire was prepared after extensive review of the existing literature. 17 questions were prepared which was circulated among the 100 dental students via online-Google forms. The survey instrument was a structured questionnaire with both open and close ended questions.

It consists of brief introduction regarding the purpose of the study, questions pertaining to demographic data and questions regarding the research objective-knowledge, awareness etc.

Data Analysis

Only completely filled online forms were included in the study. The filled responses were verified and entered. The entered data was analysed using SPSS.^{10,11,12,13,14} Descriptive analysis was performed to calculate frequencies of categorical variables.

Results and Discussion

A total of 100 students participated in the survey. Of these participants 60.4% of them were females and 39.6% were male, the age group was between 16- 29 years.

73.3% were aware of what bad oral hygiene can cause. (pie chart 1) In the Chi square analysis between gender and the frequency of brushing each day, the p value was 0.416 which is >0.05 and therefore it is not statistically significant (figure 2). In the Chi square analysis between gender and smoking it was analysed that it was statistically significant as the p value was 0.012 which is <0.05 (figure 3). In the chi square analysis between gender and the frequency of visiting the dentist, the p value was found to be 0.262 due to which it is not statistically significant (figure 4). In Chi square analysis between gender and those who are aware that oral determines body health, the p value was found to be 0.320 and not statistically significant (figure 5). In the Chi square analysis between gender and the time taken to brush their teeth, the p value was found to be 0.513 and not statistically significant (figure 6).

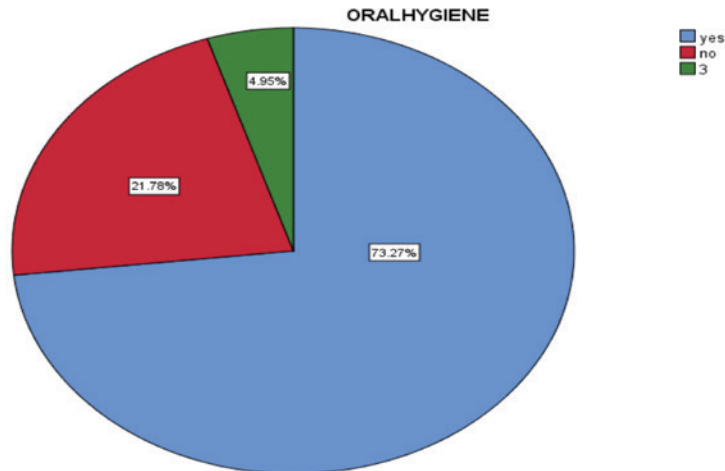


Figure 1: The pie chart showing response to the question- “Are you aware about the diseases caused if oral hygiene is not maintained? Majority of the respondents said yes(73.27%). Blue represents yes and red represents no and Green represents not sure.

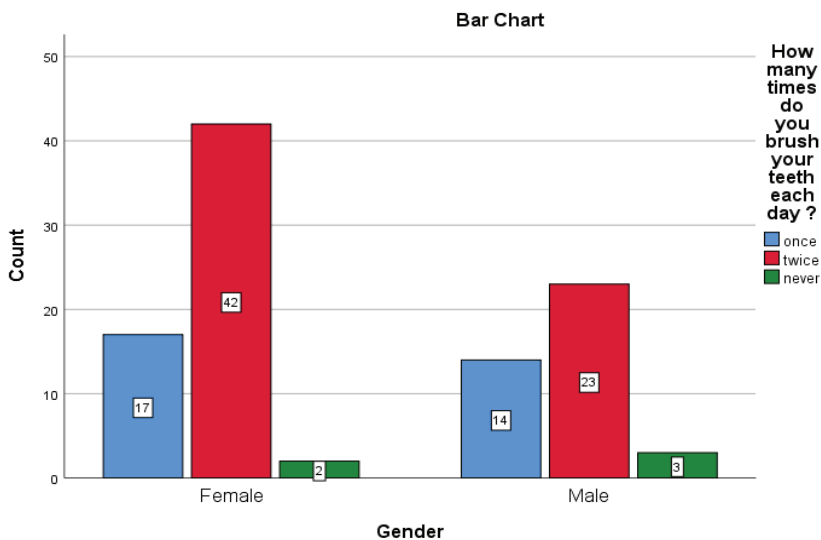


Figure 2: The bar graph represents the association between gender of the population and the frequency of brushing teeth every day. The X axis represents the gender of population and Y axis represents the number of participants responded .Blue represents once, red represents twice and green represents never. More number of females brushed twice a day compared to males, although this was found to be statistically not significant. Pearson Chi square test, p value = 0.416(>0.05) .

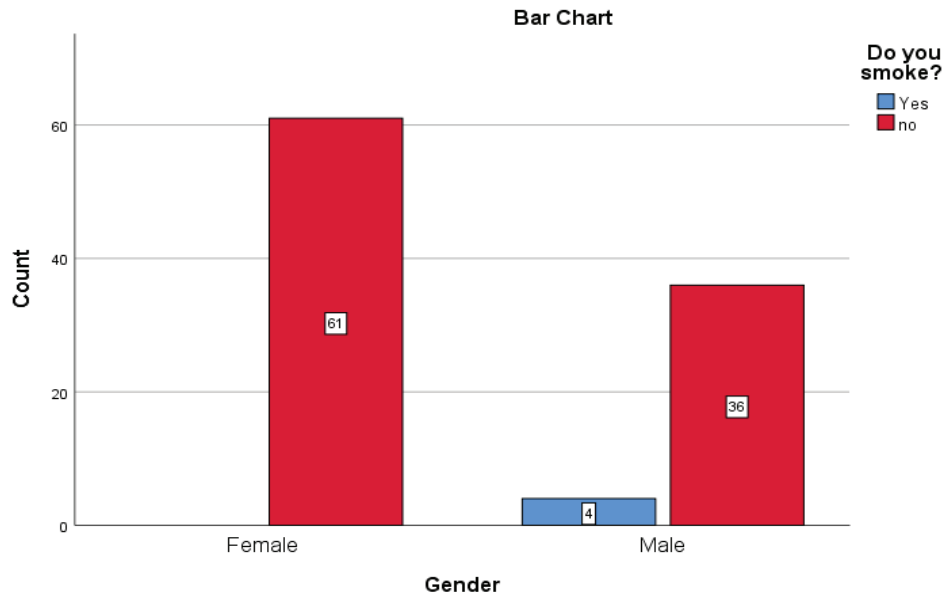


Figure 3:The bar graph represents the association between gender of the population and those who smoke. The X axis represents the gender of the population and Y axis represents the number of participants responded. Blue represents yes and red represents no. Females do not have the habit of smoking compared to males and this was found to be statistically significant. The Pearson Chi square, p value = 0.012(<0.05) .

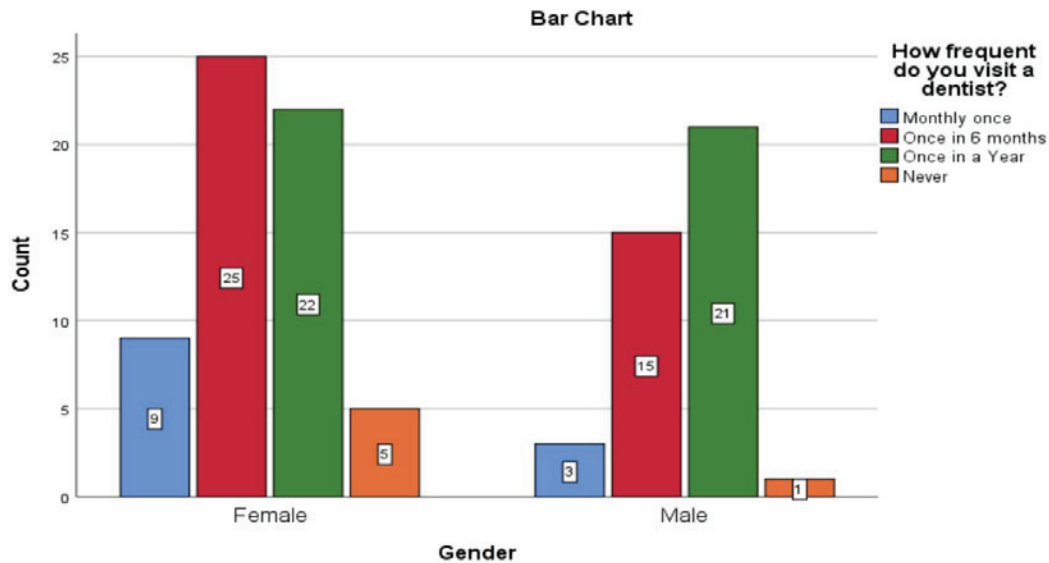


Figure 4:The bar graph represents the association between gender of the respondents and the frequency in visiting the dentist. The X axis represents the gender and Y axis represents the number of responses. Blue represents monthly once, red represents once in 6 months, green represents once in a year and orange represents never. Most of the females visited dentists once in 6 months whereas most of the males visited the dentist once in a year. There was no statistically significant difference in the frequency of dental visits between males and females. Pearson Chi square value was 3.996, df was 3, the p value was 0.262(>0.05).

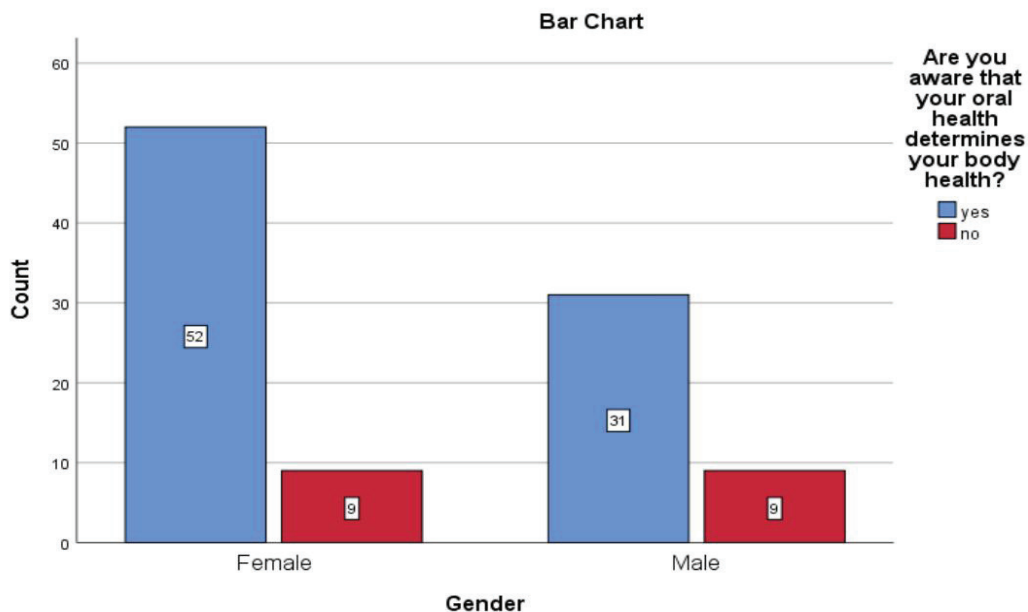


Figure 5: The bar graph represents the association between gender of the respondents and those who are aware that oral health determines body health. The X axis represents the gender and Y axis represents the number of participants responded. Blue represents yes and red represents no. Majority of the females are aware that oral health determines body health. There was no statistically significant difference between the genders on their awareness that oral health determines body health. Pearson Chi square test, p value = 0.320 (>0.05).

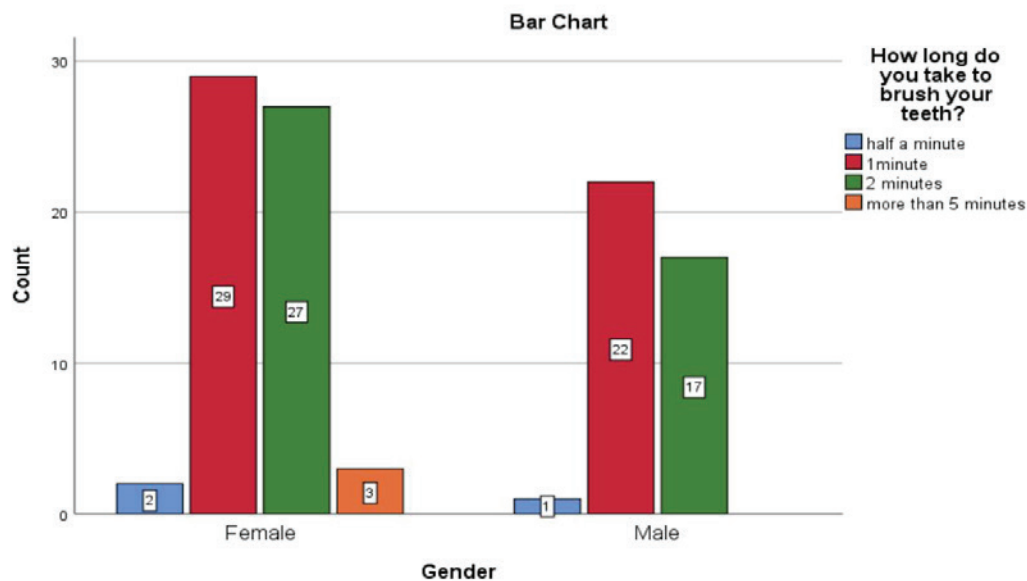


Figure 6: The bar graph represents the association between gender of the respondents and the time taken to brush their teeth. The X axis represents the gender and Y axis represents the number of participants responded. Blue represents half a minute, red represents 1 minute, green represents 2 minutes and orange represents more than 5 minutes. Most of them brush their teeth between 1-2 minutes. Majority females brush their teeth for 1-2 minutes compared to males. There was no statistically significant difference in the brushing time between males and females. Pearson Chi square, p value = 0.513 (>0.05)

Table 1: Questionnaire regarding the awareness of Oral Hygiene habits and the responses in %

S.No	Questions	Results in percentage	
		Aware	Not Aware
1.	Brushing twice per day is good for health	64%	36%
2.	It is advised to brush at least two minutes to brush your teeth	50%	50%
3.	Habit of using mouthwash is good for oral health	53.47%	46.53%
4.	Habit of using Dental Floss for maintaining good oral hygiene	26.73%	73.27%
5.	Habit of using toothpicks is not good for oral health	21.86%	78.24%
6.	Bad mouth odour is a sign of bad oral health	46%	54%
7.	Are you aware that oral health determines body health	82%	18%
8.	Frequently have bleeding gums?	17%	83.0%
9.	If you smoke, causes dental problems	96.04%	3.8%
10.	Do you have frequent deposits on your tongue	64%	36%
11.	Are you aware about the diseases caused if oral hygiene is not maintained?	73.27%	26.83%

Table 1 shows the responses in percentage about the awareness of oral hygiene habits among the participants. When asked for brushing habits to the respondents, the majority of the responses were brushing twice a day 64% and 36% once a day, this shows most of the people are aware that brushing twice is good for health, among them 50% of the participants brushes at least 2mins. 53.47 % has a habit of using mouthwash to maintain good oral health, but most of the respondents 78.24% do not use dental floss. When asked for Habit of using Dental Floss for maintaining good oral hygiene, 26.73% are aware of using dental floss and 73.27% are not aware of using dental floss. Responses for the question “Do you know the adverse effects of using toothpicks frequently?”.Majority of the respondents said no (78.24%). responses of the question- “Are you aware

that bad breath is a sign of bad oral health?”.Majority said no.(54%). The response to the question- “ Are you aware that oral health determines body health.” Majority of the respondents said yes(82%). Deposits on your tongue, can lead to bad odour, majority of the responses were yes (64%), smoking leads to dental problems, majority 96.04% were aware. 83% don’t have bleeding gums and 17% have bleeding gums during brushing. The response to the question- “Are you aware about the diseases caused if oral hygiene is not maintained? Majority of the respondents said yes(73.27%).

The present research has origins from the team of investigators where previous studies were done based on clinical reports,interventional studies like¹⁵¹⁶¹⁷,in vitro studies like¹⁴¹⁰¹¹,and systematic reviews¹⁸¹⁹²⁰²¹²².

Compared to previous studies, a total of 84% dental students and 72% medical students visited the dentists at least once in their lifetime²³. Whereas in this study 94.1% of dental students visited dentists at least once in their lifetime. This study's results of the previous results, as dentists are more aware of the causes and consequences of bad oral health.

In the previous study, only 31% revealed that they use dental floss on a daily basis.²⁴ whereas in this study 26% of them use dental floss on a daily basis which is similar to the previous study. Only limited population use dental floss as dental students are aware of the consequences.

34.9% of the students follow oral self health habits strictly.²⁵ whereas in this study 80% follow oral self health habits which is in contrast to the results of the previous study. This difference in result may be due to the population of the study. The sample size of the study is minimum and the homogenous group of study population are the limitations of the study.

Conclusion

This study provides an understanding of oral health knowledge, behaviour and status among dental students, which may help to promote and reform oral health education and establish a model for clinicians and dentists to work together for improving oral health, and also creates awareness among dental students. Therefore the awareness about good oral health has been created among undergraduate dental students.

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Ethical Clearance: Not Required

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