

Original Research Article

Knowledge and Attitude of Dental Students towards their Oral Health Care in Kingdom of Saudi Arabia; A Comparison between Pre-clinical and Clinical Students

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Introduction: The behavior of oral health care providers and their attitudes towards their own oral health reflect not only their understanding of the importance of preventive dental procedures but also helps in improving the oral health of their patients.

Materials and methods: A total of 794 dental students from different cities participated in the online as well as paper format questionnaire. Selection of the sample was done randomly keeping in view that both clinical as well as pre-clinical students should be included. **Results:** When inquired about gum bleeding, 64% of pre-clinical students reported that they ignore gum bleeding, whereas only 22% of clinical students ignored the bleeding. When asked about their attitude towards frequency of visits to the dentists, 67% of pre-clinical students reported to have ignored their routine dental visits, whereas 42% of clinical students ignored their regular dental checkups.

Keywords: Dental students' attitude, Oral health knowledge, Preventive techniques.

INTRODUCTION

The prevention of oral disease is the most accepted and efficient method for ensuring oral health, Oral health is now recognized to be equally important in relation to general health. It is widely believed that better oral health leads to lesser general health problems. The behavior of oral health care providers and their attitudes towards their own oral health reflect not only their understanding of the importance of preventive dental procedures but also helps in improving the oral health of their patients (Al-Omari & Hamasha, 2005). Since male and females have different physiological and psychological behaviors, it is possible their oral health behavior might be different as well. Females have been reported to be much more concerned about their dental health as compared to the males (Peker & Meryem, 2009)

Dental students are believed to be the role model among their families and friends and their better oral health is directly related to a community with an improved oral health status. It is important to know the level of knowledge among dental students in order to assess the need to take further actions in

regard to the increasing of preventive programs (Dagli et al, 2008). Senior dental students are expected to have a better knowledge about the prevention of oral diseases (Rong et al, 2006). Another study was conducted in Udaipur, India to assess the oral health-related knowledge and beliefs of dental students. The results indicated that the students' behavior linked with the prevention of their oral diseases was lacking, therefore needs an improvement (Sharda & Shetty, 2008). Comparison among dental students belonging to different cultural background can be beneficial as well. Similar study done to compare the oral health-related knowledge among dental students of Japan, Hong Kong and West China, which revealed that there was marked difference in the attitudes of same level students differentiated only on the basis of culture (Kawamura et al, 2001).

Various studies have been done on dental students regarding the attitude towards their own oral health in many countries but there hasn't been a study which would target more than one city in the same country.

Table 1: Gender variation among participants

	Frequency	Percentage
Males	144	19%
Females	650	81%

Table 2: Different levels of participating dental students

	Frequency	Percentage
Clinical	369	46%
Pre-clinical	426	54%

Table 3: Do the participants ignore gum bleeding while brushing?

Response	Frequency	Percentage
Strongly agree	36	4%
Agree	116	13%
Undecided	84	9%
Disagree	314	35%
Strongly disagree	243	27%

Table 4: Are the participants concerned about calculus on their teeth?

Response	Frequency	Percentage
Strongly agree	268	29%
Agree	325	36%
Undecided	103	11%
Disagree	56	7%
Strongly Disagree	41	5%

This study is designed in such a way that it would focus dental students from various cities of Saudi Arabia.

MATERIALS AND METHODS

A closed-ended questionnaire was used to determine the attitude of dental students throughout the Kingdom of Saudi Arabia. A total of 794 dental students from different cities participated in the online as well as paper format questionnaire. Selection of the sample was done randomly keeping in view that both clinical as well as pre-clinical students should be included. The results were analyzed by the help of SPSS v. 16. Duration of research was 3 months.

RESULTS

The data collected from questionnaires was subjected to statistical analysis and the results are expressed in tabular as well as graphical form. A total of 794 students were involved in the completion of this research. A total of 144 male and 650 female dental students took part belonging to various dental schools of Riyadh, Jeddah, Abha and Dammam (Table 1 and Figure 1). Surveys were collected from 369 clinical as well as 426 pre-clinical students in order to compare their attitudes towards oral health (Table 2)

Frequencies were taken for all the responses submitted by the participants. When asked about the attitude towards bleeding gums while brushing, 17% strongly agreed/agreed that they ignore any bleeding, whereas 62% strongly disagreed/disagreed that they ignore bleeding (Table 3). Dental students were inquired if they believe they would wear

dentures in future; 24% strongly agreed/agreed, 23% remained undecided and 38% strongly disagreed/disagreed in this regard (Figure 2).

The most important part of the research is the comparison between pre-clinical and clinical students about their attitude towards prevention of oral diseases. When inquired about gum bleeding, 64% of pre-clinical students reported that they ignore gum bleeding, whereas only 22% of clinical students ignored the bleeding. When asked about their attitude towards frequency of visits to the dentists, 67% of pre-clinical students reported to have ignored their routine dental visits, whereas 42% of clinical students ignored their regular dental checkups.

DISCUSSION

Dental students are expected to take more care of their oral health as compared to non-dental communities. We decided to conduct a research, focusing on pre-clinical as well as clinical dental students from various dental schools throughout the Kingdom of Saudi Arabia. Previously, a number of studies have taken place comparing the attitudes and awareness of clinical and pre-clinical dental students in different countries. We conducted this research in Riyadh, Jeddah, Abha and Dammam.

The aim of this research was to know about the attitude of dental students about various preventive oral health issues and then comparing between pre-clinical and clinical students. In the previous studies, some researchers did the comparison in a few countries but no one did it in Saudi Arabia. We used online as well as paper-based questionnaires to assess and compare the knowledge and attitude.

Table 5: Spending too much time would damage the teeth?

Response	Frequency	Percentage
Strongly agree	150	17%
Agree	308	34%
Undecided	137	15%
Disagree	142	16%
Strongly disagree	52	6%

Table 6: Brushing alone cannot prevent gum disease

Response	Frequency	Percentage
Strongly agree	174	19%
Agree	271	30%
Undecided	148	17%
Disagree	153	17%
Strongly disagree	47	5%

Table 7: Comparison between Pre-clinical and Clinical dental students regarding oral behaviors

ATTITUDE	PRE CLINICAL	CLINICAL
Gum bleeding after brushing	64 % ignored gum bleeding	22% ignored gum bleeding
Duration of tooth brushing	43% preferred prolonged brushing	31% preferred prolonged brushing
Bad breath	62% were worried about bad breath	76% were worried about bad breath
Dental visits	67% ignored routine dental visits	42% ignored routine dental visits
Calculus presence	52% worried about calculus in their oral cavity	71% worried about calculus in their oral cavity

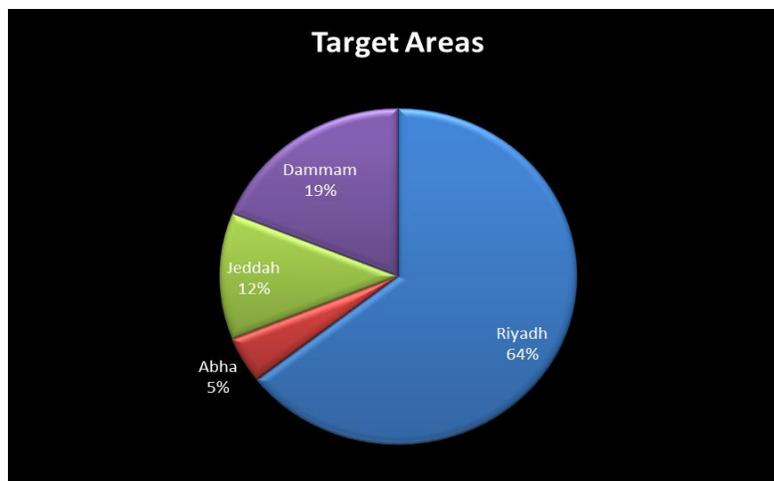


Figure 1: Participation from different cities of KSA

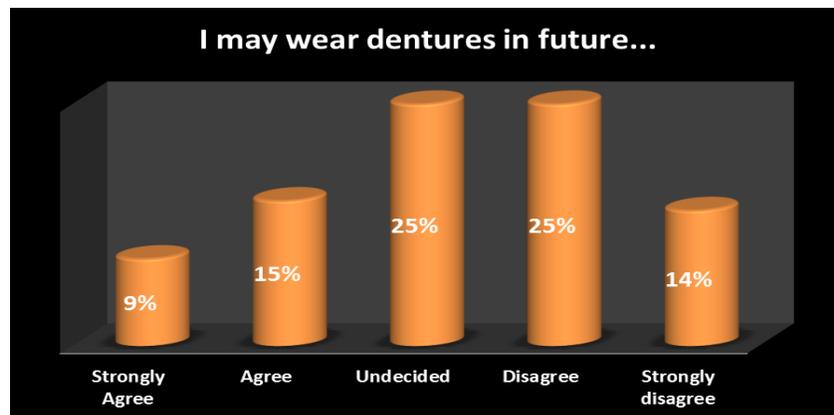


Figure 2: Dental students who think they might wear dentures in future

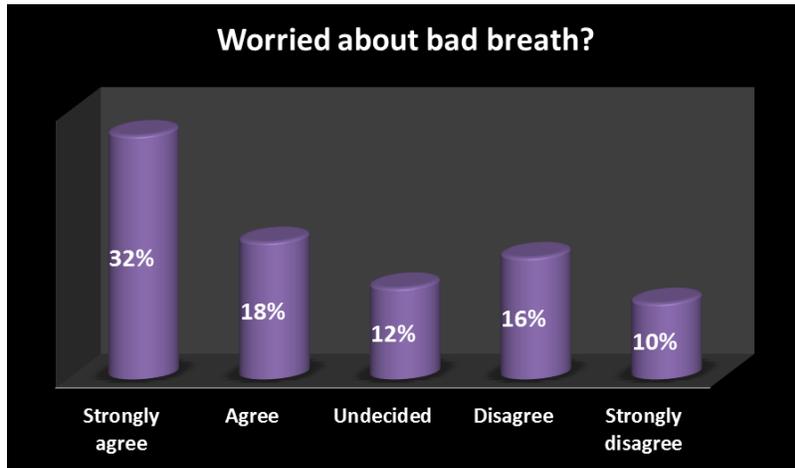


Figure 3: Percentage of participants bothered having bad breath

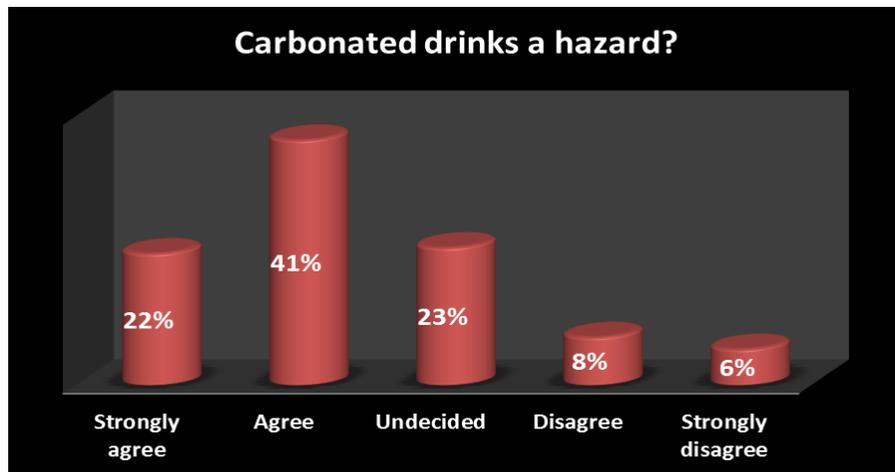


Figure 4: Will carbonated drinks have a negative affect on the teeth?

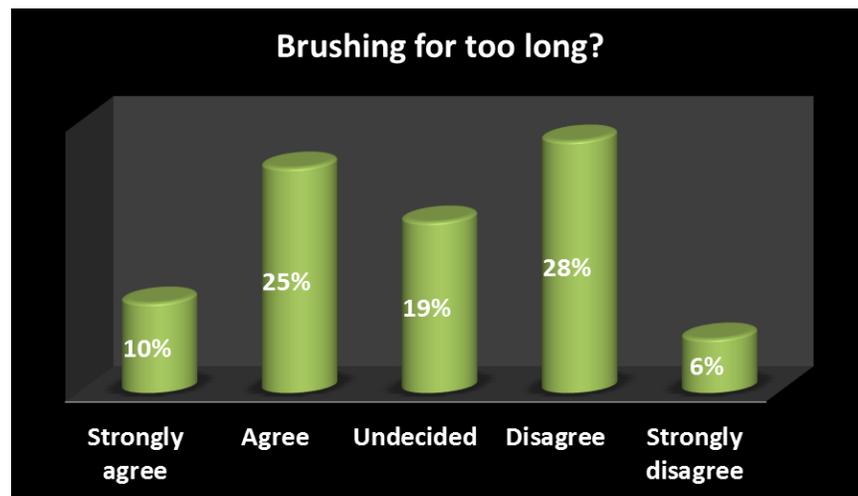


Figure 5: Participants think they are brushing for too long?

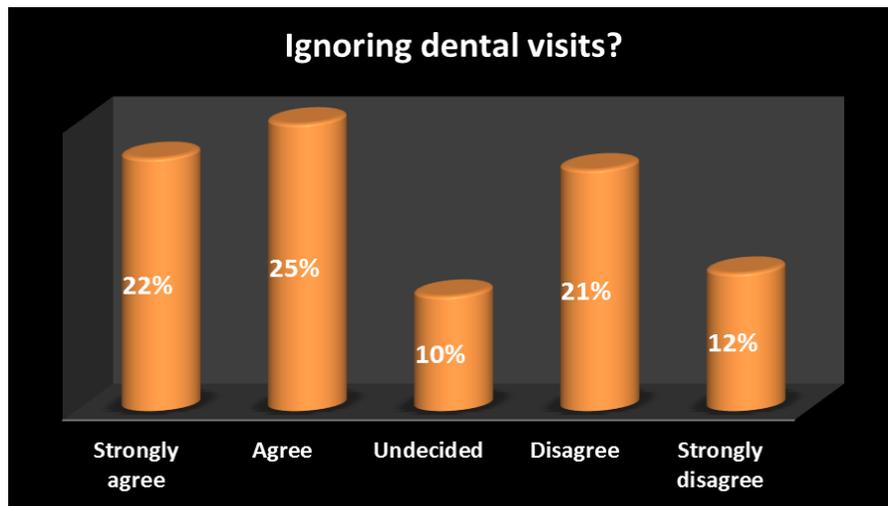


Figure 6: Do the participants ignore dental visits for regular check up?

It is believed that every person should visit the dentist semi-annually. Results showed that majority of the dental students ignored their oral health by skipping routine dental visits unless they had a problem for which they had to visit the dentist at any cost.

When inquired about their concern regarding bad breath, presence of calculus and prolonged brushing; majority of the respondents agreed that they are worried about the above mentioned dental issues. On the other hand, there is a concern that 20-30 percent of dental students tend to ignore these serious dental issues. We are hopeful that once this research is published and read by the stakeholders of dental schools, the above mentioned statistics may step towards improvement.

Our focus was mainly directed towards the comparison between clinical and pre-clinical students regarding their attitude towards oral health. Before collecting the data, we

expected the clinical dental students to have more knowledge and a better attitude towards their oral health as compared to pre-clinical students. The above mentioned results clearly support our hypothesis and emphasize on the need of improving the level of knowledge of pre-clinical students.

CONCLUSION

Clinical students exhibited higher concern about their oral health as compared with pre-clinical dental students.

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