
**A COMPARATIVE STUDY OF KNOWLEDGE AND PRACTICES ABOUT PLAQUE CONTROL
METHODS AMONG MEDICAL AND DENTAL STUDENTS OF GANDHARA UNIVERSITY
PESHAWAR**

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ABSTRACT

Back ground:

Plaque control methods are one of the most important tools in promoting and improving oral health of an individual. Plaque can lead to the most prevalent oral diseases that are dental caries and gingivitis². The available data on prevalence of dental caries show that Pakistan is a low caries country whereas there is persistently high level of periodontal diseases³. Improvement of oral health by healthcare professional is a vital aspect of preventive dentistry¹.

Objectives:

The aim of the study was to assess and compare the knowledge and practices of medical and dental students of Gandhara University Peshawar about plaque control methods.

Materials and methods:

In a cross sectional study a total of 386 students were surveyed by using self administered structured questionnaires which covered student's knowledge about plaque control methods, dental attendance and smoking. A total of 265 students responded with fully filled questionnaires out of which 121 were filled by medical students and 144 by dental students.

Results:

Almost 79.8% Dental students knew about plaque out of which 78(54.1%) students thought that is caused by not cleaning the oral cavity and 65(45.1%) thought that it leads to dental caries. One hundred and thirty nine (96.5%) students clean their teeth out of which 93(64.5%) clean their teeth twice a day with a tooth brush. One hundred and eighteen (81.9%) have visited a dentist before out of which only 49(41.5%) went for regular checkup. Sixteen (11.1%) students smoke.

Almost 61.1% Medical students knew about plaque out of which 41(33.8%) students thought that it is caused by not cleaning the oral cavity and 37(30.5%) students thought that it leads to dental caries. One hundred and fourteen (94.2%) students clean their teeth out of which 69(57%) clean their teeth twice a day with a tooth brush. Sixty nine (57%) students have visited a dentist before out of which only 26(37.6%) students went for regular checkup. Twenty nine (23.9%) students smoke.

Conclusions:

It is concluded that there is a marked difference between the knowledge and practices among the medical and dental students, and there is a need to enhance the knowledge of medical student regarding dental attendance. Both need more awareness regarding plaque control methods to have a positive role in the oral health education of their patients and the community.

Key words: Plaque control, dental attendance, tooth brushing, smoking

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INTRODUCTION

Plaque control is the regular removal of dental plaque and the prevention of its accumulation on the teeth and adjacent gingival surfaces. Plaque is a major etiology of periodontal diseases and plays important role in causation of dental caries the two of the most prevalent oral diseases². Oral diseases such as dental caries and periodontal diseases excessively burden the people of Pakistan. The available data on the prevalence of dental caries show that Pakistan is a low caries country and high prevalence of periodontal diseases³.

Periodontal disease is chronic infection caused by bacteria that accumulate in plaque. Therefore by effective plaque control the prevalence of these diseases can be reduced. Effective plaque control methods that can be carried out by the individual themselves include brushing, flossing, oral irrigation, use of fluoride tooth paste and mouthwashes. Besides individual care professional services for plaque control include scaling, pits and fissure sealants and tooth surface conditioning by laser.

Dental students are an important part of academic dental community as they have a role in oral health promotion and education of the public⁴. However their personal oral health literacy & behavior provide a significant driving force for their role as oral health advisers¹.

The first objective of this study was to evaluate knowledge and practices about plaque control methods among the dental students of Gandhara University Peshawar who will be the oral health professionals of future. The second objective was to compare the same behaviors with the medical students of the same university, who will be the future health professionals.

MATERIALS AND METHODS

The cross sectional study was done in Gandhara University during the months of January and February in year 2011, using self administered questionnaire that assessed student's knowledge and behavior about plaque control methods, dental attendance and smoking. The questionnaire was based on standard oral health questions from review of relevant publications and dental literature⁵.

Convenience sampling was used as both the colleges are located on the same campus in Peshawar.. Inclusion criteria for the selection of the subjects were current 1st to final year B.D.S and 1st to final year MBBS. Informed consent and confidentiality was included in the questionnaire's ethical review portion. Some questionnaires were filled on the spot and some were collected later on. Students not returning the questionnaires within a week's time were considered unwilling to participate and were set to be the exclusion criteria. The data was analyzed by SPSS version 18 (Statistical Program for Social Sciences).

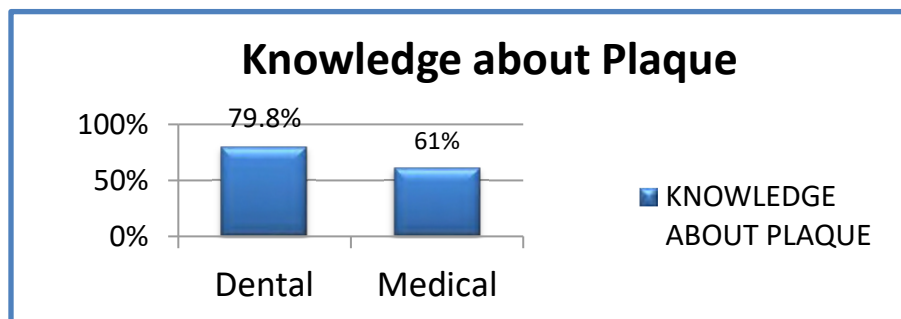
RESULTS

A total of 386 students, were surveyed by using self administered questionnaires. A total of 265 students responded with fully filled questionnaires so the response rate was calculated to be 68.6%. Out of the 265 questionnaires 121 were filled by medical students and 144 by dental students.

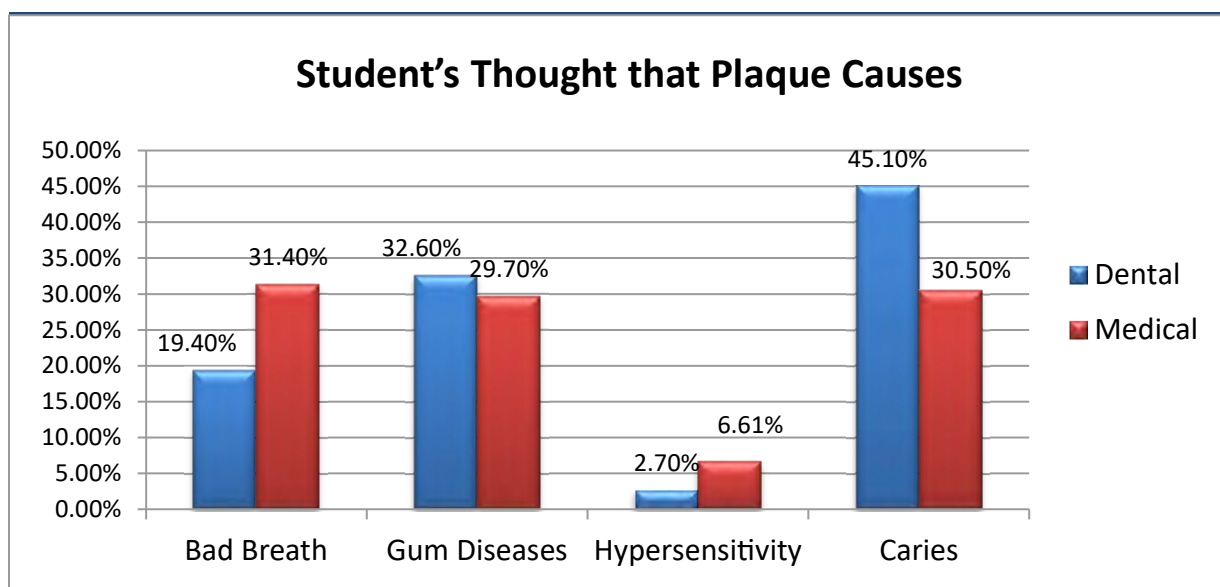
Results were grouped into four categories: knowledge about plaque, knowledge and behavior regarding plaque control methods, dental attendance and smoking.

KNOWLEDGE ABOUT PLAQUE

Almost 79.8% dental students knew about plaque out of which 54.1% students thought that plaque is caused by not cleaning the oral cavity. Sixty five (45.1%) students thought that it leads to dental caries



Almost 61.1% Medical students knew about plaque out of which 41(33.8%) students thought that it is caused by not cleaning the oral cavity and 37(30.5%) students thought that it leads to dental caries.



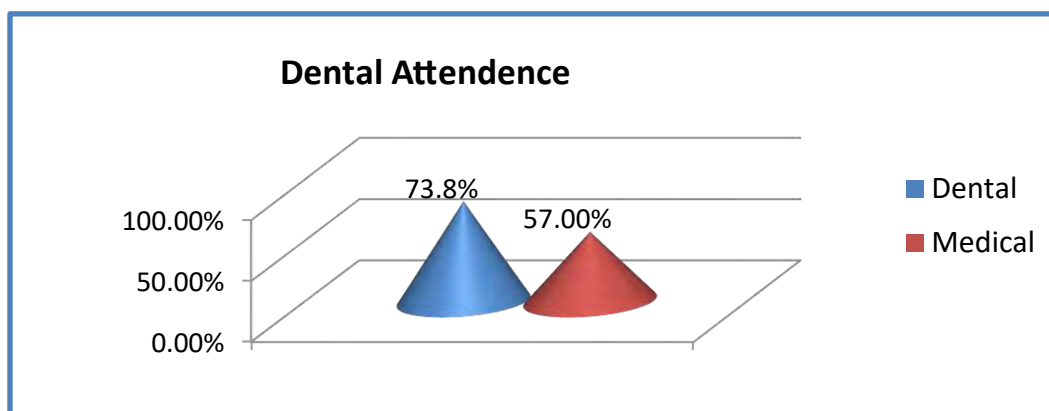
Cleaning of teeth was observed by majority of the students. The data shows that 96.5% dental students clean their teeth while 94.2% medical students clean their teeth.

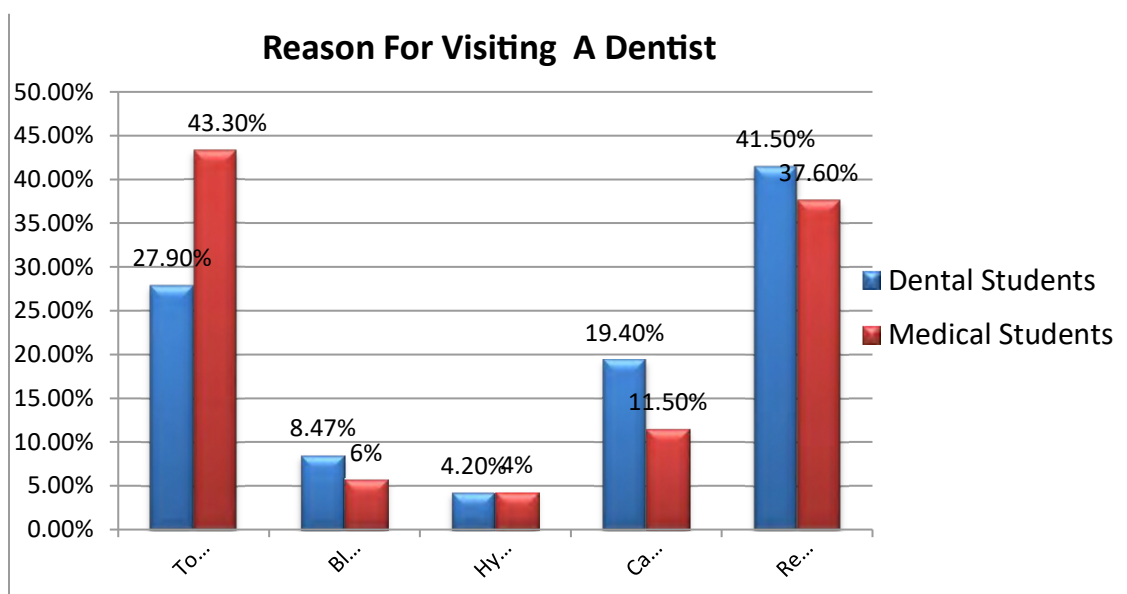
Among dental students 53.9% brush their teeth after breakfast and before going to bed and among medical students 40.3% brush their teeth after breakfast and before going to bed. Fifty six point four percent dental students and 50.8% medical students spent two minutes on brush their teeth. Fifty five point three percent dental students and 49.1% medical students use soft brush.

Majority of students change their brush after 2 months i.e. 47.4% dental students and 52.6% medical students. Knowledge about brushing technique is more in dental students as compared to medical students, 93% dental students and 70.2% medical students know the correct brushing technique out of which 50.7% dental students and 3.5% medical students were taught by their teachers.

DENTAL ATTENDANCE

Majority of the dental students had visited a dentist i.e. 81.9% and only 41.5% went for regular checkup as compared to 57% medical students, out of which 37.6% went for regular checkups.





SMOKING

Twenty three point nine percent medical students smoke whereas compared with dental students only 16% smoke.

DISCUSSION

This article reported about the Knowledge and practices about plaque control methods among medical and dental students of Gandhara University Peshawar.

Dental students have more knowledge about plaque and its control methods than medical students. Our study showed that almost 45% students brush their teeth more than once a day as compared to study conducted in University of Italy in which the result was 92 percent¹¹. Majority of the students visited a dentist when they had some dental problem similar to study done in Kuwait¹². In a study conducted among the students of an Italian University 60% students used to regularly visit the dentist a much larger number than our study i.e. 41 percent¹¹.

Almost 20% students of the students used to smoke which is less when we compared it with the study done in Koirala Institute of Health Sciences, Nepal, where 38.4% students smoke tobacco¹³.

CONCLUSION

It is concluded that there is a marked difference between the knowledge and practices among the medical and dental students, and there is a need to enhance the knowledge of both medical and dental student regarding dental attendance (Regular Visits). Both need more awareness regarding plaque control methods to have a positive role in the oral health education of their patients and the community.

RECOMMENDATIONS

To improve oral health behavior of medical students as they are the future role models for their patients, greater emphasis should be placed on oral health related knowledge during their undergraduate training by conducting seminars and workshops to improve their oral care behavior. Comparisons of dental student's oral behavior with students of other profession have been reported⁹.

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