

Evaluating The Oral Hygiene Knowledge, Attitude And Practices Among Dental And Medical Students In Kanpur City

Dr. Devina Pradhan*, Dr. Jayant Kumar*, Dr. Girish R Shavi**, Dr. Nidhi Pruthi***, Dr. Gagan Gupta****, Dr. Deepshikha Singh*****

*PG Student, **Professor & Head, ***Reader, Department Of Public Health Dentistry, ****PG Student, Department Of Orthodontics & Dentofacial Orthopaedics, *****PG Student, Department Of Periodontics, Rama Dental College Hospital & Research Center, Kanpur, India.

Abstracts: Background & Objective: Oral health is essential for general health and well-being throughout life and is a marker for overall health status. Poor oral health can have a significant effect on quality of life. Oral health behavior plays an important role in maintaining optimal oral health. Awareness regarding it can lead to the enhancement of oral health. Aim is to evaluate the Oral hygiene knowledge, attitude and practices among Dental and Medical students in Kanpur City. **Methodology:** The present study is a cross sectional descriptive survey. 400 students were selected from dental and medical colleges of Kanpur city as the targeted population for the study. Convenience sampling technique was used. A pre- tested, self-structured, close- ended questionnaire consisting of 15 questions was administered to evaluate the knowledge, attitude and practices regarding oral hygiene to the targeted population. The data was collected, compiled and then percentage and frequency distribution were calculated. **Results:** It was seen that 80% dental students and 67% medical students considered that oral health is a part of overall health. It was also seen that the frequency of tooth brushing among dental students was found to be 100% twice a day and amongst medical students it was 51% twice a day. Finally the visit to the dentist in every 6 months amongst dental students was higher (100%) than the medical students (35%). **Conclusion:** From the study conducted, we can conclude that the awareness regarding knowledge and behaviours amongst dental and medical students was found to be satisfactory. Hence, there is a need for implementation of more preventive programs immediately on oral health promotion which can further help in increasing the knowledge, attitude and practices of the students. [Pradhan D NJIRM 2016; 7(2):73-76]

Key Words: Oral health, Knowledge, Attitude, Practices, Awareness, Oral health promotion

Author for correspondence: Dr. Devina Pradhan, 3/99, Vishnupuri, Kanpur-208002, India. E-mail: meetdrdevina@gmail.com

Introduction: Oral health is essential for general health and well-being throughout life. Poor oral health and dental diseases like caries and periodontal disease can have a significant effect on quality of life as they might affect patients eating, drinking, swallowing, smiling and communication.¹ Though, oral health has always been neglected in the developing or underdeveloped countries.² In order to maintain a good oral health, proper and effective preventive measures must be practiced. Many studies have shown that there has been an association between good oral health and knowledge.^{3, 4, 5, 6} Students who specialize in the dental or medical profession must have adequate knowledge regarding oral health as they come across a large number of patients with various age groups and diverse backgrounds during their course of the study. Thus, students play an important role in the enhancement of oral health of the people.

Improvement in the oral hygiene basically involves a healthy and a clean mouth which is incorporated by proper brushing of teeth and flossing. This also helps in the prevention of decaying of teeth and gum diseases. A good oral health is directly associated with behaviour

of practising correct methods regarding oral hygiene.⁷ Apart from dental professionals it is very important for other health care professionals or medical doctors to have correct knowledge and awareness regarding oral health as they are more likely to encounter underserved and most vulnerable populations.⁸

However, it is very important for the dental and medical professionals to have adequate knowledge regarding maintaining a good oral health. According to the research that is available, it is seen that emphasis has been laid on the oral hygiene habits rather than the knowledge and practices.⁹ So the present study was conducted regarding the evaluation of oral hygiene knowledge, attitude and practices among the dental and medical students of Kanpur city.

Material and Methods:

Study design: The present study is a descriptive cross sectional survey. A pre- tested, self-structured, close-ended questionnaire consisting of 15 questions was administered to evaluate the knowledge, attitude and practices regarding oral hygiene to the targeted

population. Validity of the questionnaire was also checked.

Sampling method & sample size: A convenience sampling technique was used to determine the targeted population. The sample size consisted of 400 students from both the dental colleges (Rama Dental College, Hospital & Research centre and Maharana Pratap Dental College) and medical colleges (Ganesh Shankar Vidyarathi Memorial & Rama Medical College) of Kanpur city. 100 students from each college were selected as the target population.

Inclusion & Exclusion criteria: The inclusion criterion for the study was: all the students willing to participate in the study and all students from fourth professional year. The exclusion criterion included: students not willing to participate in the study and students who were not from fourth professional year as they might have lesser clinical knowledge.

Pilot study and Pre-testing of the questionnaire: Pilot study was conducted amongst 40 students comprising of both dental and medical colleges in order to determine the feasibility of the study. Questionnaires were administered to the study subjects based on convenience sampling. Depending upon the answers given, the data was analysed and Cronbach's coefficient was calculated, which was found to be 0.77.

Approval from authorities and ethical consideration: The required permission was taken from the concerned authorities of all the above mentioned institutions for conducting the study. The study protocol was approved by the Institutional review board of Rama Dental College, Hospital & Research Centre.

Data collection and analysis: The collection of data was done by a pre- tested, self-structured; close- ended questionnaire consisting of 15 questions (5 each for knowledge, attitude and practice) taken on a nominal scale were administered to evaluate the knowledge, attitude and practices regarding oral hygiene to the targeted population. The questionnaire comprised of the various socio demographic details, questions regarding brushing, importance of oral health, visit to the dentist, care regarding gums and teeth etc.

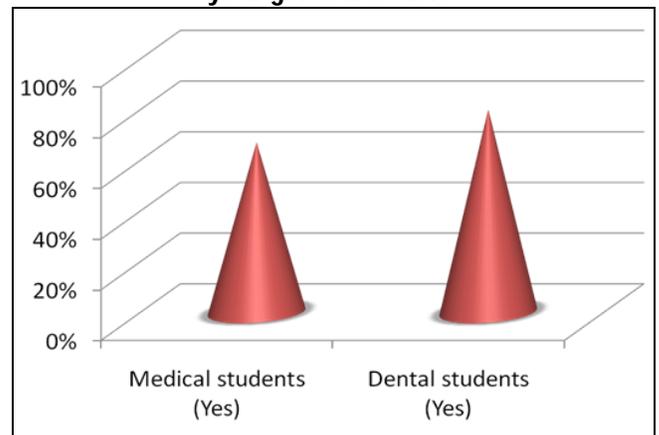
The questionnaire was administered by a single investigator. The students were told to approach the

investigator immediately in case of any doubts regarding any of the questions in the questionnaire. The study was conducted between July 2015 to September 2015.

The data was collected, compiled and then percentage and frequency distribution were calculated.

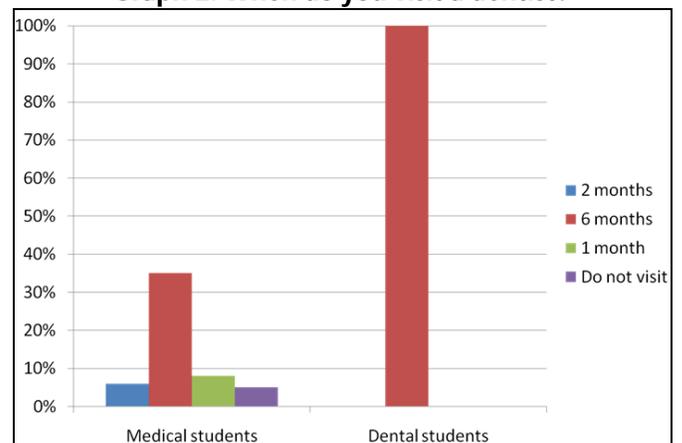
Results: After collection of data and its compilation, the following observations were made. Amongst the targeted population, 80% dental students and 67% medical students considered that oral health is a part of overall health (Graph 1).

Graph 1: Do you think that Oral health is a part of your general health?

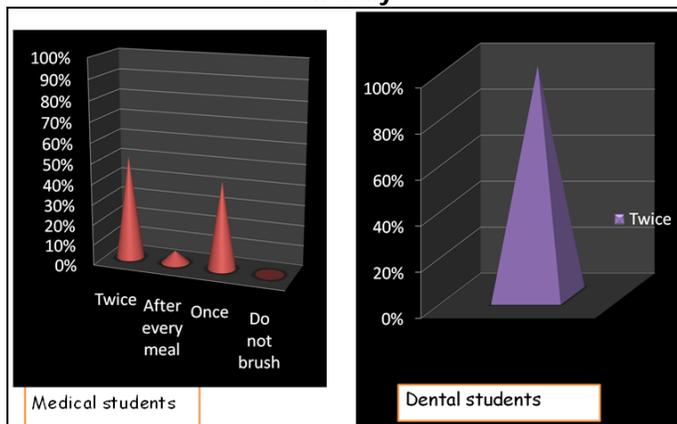


Visit to the dentist was also found higher in the dental students (100%) when compared with the medical students (35%). Though, students preferred a six month visit to the dentist (Graph- 2).

Graph 2: When do you visit a dentist?



Frequency of brushing teeth twice daily was found to be 51% in the medical students as compared to the dental students where the frequency was found to be 100% (Graph 3 and 4).

Graph 3 & 4: What is the frequency of brushing your teeth daily?

Discussion: In the current study, it was found that the awareness of dental students was better than the medical students but still dental students should have more efficient knowledge in order to promote good oral health. Also, 80% dental students believe that oral health is important for overall health than the medical students where the percentage was just 51%. As compared to various studies^{1, 4, 6, 10, 11} it was found that most of the students belonging to other professions apart from dentistry like engineering (93%), medical (97%), paramedical (91.3%), computer science, literature, economy & education (86.5%) also believed that oral health is very important for overall health.

Visits to the dentist were also found to be higher amongst the dental students (100%) than the medical students (35%) in this current study. A study in Karad also revealed lower percentage regarding the visits to the dentists by the medical students (23.8%). Another study in Kuwait showed very less percentage (22%) for the dental visits by the students of dentistry, pharmacy and medicine. Rather better results were seen for the dental visits because of any reason associated with dentistry.^{2, 12}

Knowledge related to bleeding gums and gum diseases was found to be quiet low amongst the medical students (7%) than the dental students (35%) in this present study. According to other studies^{1, 5, 7, 9}, the percentage was low regarding the knowledge related to gum diseases or bleeding gums but a better score was found in the study which was conducted in school children of Jordan and their knowledge was found to be better (51.2%) when compared to dental and medical students.¹³

Practices related to the frequency of brushing teeth twice daily was found to 100% amongst the dental students as compared to the medical students (51%) in this current undertaken study. Similar studies^{1, 2, 4, 7} conducted have shown lower scores regarding the frequency of brushing teeth twice daily. A study was conducted in Nigeria on the medicine residents revealed lower scores (33%) for the frequency of brushing teeth twice daily.¹⁴

Therefore, the knowledge regarding oral hygiene of dental and medical students in this study is satisfactory. Some efficient and effective measures must be incorporated to increase the knowledge and awareness and hence practice a successful oral health promotion.^{15, 16}

Conclusion: The present study revealed an overview on the knowledge, attitudes and practices regarding oral hygiene among the dental and medical students of Kanpur city. The awareness related to oral health was not found to be good. Thus, there is an immediate need to improve the knowledge related to oral health amongst both dental and medical students. In order to achieve this, oral health promotion & awareness programs must be implemented soon in their curriculums.

References:

1. Kakkad D, R M, Krishna M, Yadav S, Yalamalli M, Kumar A. Assessment of Oral Hygiene Knowledge, Attitude, and Practices among Engineering Students in North Bangalore: A Cross-sectional Survey. *International Journal of Scientific Study*. 2015; 3(1):84-89.
2. Suragimath G, Varma A, Zope S, Abbayya K, Guddad S, Mohitey J. An insight into oral health practices among 1 st year medical students of Karad, India: A questionnaire study. *Journal of Dental Research and Scientific Development*. 2015; 2(1):3
3. Usman, S, Bhat S, Sargod S. Oral Health Knowledge and Behavior of Clinical Medical, Dental And Paramedical Students In Mangalore. *J Oral Health Comm Den*. 2007; 1(3):46-48.
4. Permi S, Bhandary R, Thomas B. Randomised cross sectional study of oral health related knowledge and behaviour among paramedical students. *Nitte University Journal of Health Science*. 2016;5(2):19-21.

5. Al Subait A, Alousaimi M, Geeverghese A, Ali A, Metwally A. Oral health knowledge, attitude and behavior among students of age 10–18 years old attending Jenadriyah festival Riyadh; a cross-sectional study. *The Saudi Journal for Dental Research*. 2015;1-6.
6. Sujatha B, Yavagal P, Gomez M. Assessment of oral health awareness among undergraduate Medical Students in Davangere city: A cross-sectional survey. *Journal of Indian Association of Public Health Dentistry*. 2014; 12(1):43.
7. Emmanuel A, Chang E. Oral health related behaviour, knowledge, attitudes and beliefs among secondary school students in Iringa municipality. *The Dar-es-salaam Medical Students' Journal*. 2010:24-30.
8. Kaur S, Kaur B, Ahluwalia S. Oral Health Knowledge, Attitude and Practices amongst Health Professionals in Ludhiana, India. *Dentistry*. 2015; 05(07):1-5.
9. Kawamura M, Yip H, Hu D, Komabayashi T. A cross-cultural comparison of dental health attitudes and behaviour among freshman dental students in Japan, Hong Kong and West China. *International Dental Journal*. 2001; 51:159-163.
10. Zhang S, Lo E, Chu C. Attitude and awareness of medical and dental students towards collaboration between medical and dental practice in Hong Kong. *BMC Oral Health*. 2015; 15(1).
11. Al-Batayneh O, Owais A, Khader Y. Oral Health Knowledge and Practices among Diverse University Students with Access to Free Dental Care: A Cross-Sectional Study. *Open Journal of Stomatology*. 2014; 04(03):135-142.
12. Al-Hussaini R, Al-Kandari M, Hamadi T, Al-Mutawa A, Honkala S, Memon A. Dental Health Knowledge, Attitudes and Behaviour among Students at the Kuwait University Health Sciences Centre. *Med Princ Pract*. 2003; 12(4):260-265.
13. El-Qaderi S, Taani D. Oral health knowledge and dental health practices among schoolchildren in Jerash district/Jordan. *International Journal of Dental Hygiene*. 2004; 2(2):78-85.
14. Iwuala S, Adesola U, Beatrice O, Fasanmade O. Oral self-care practices, dental attendance self-perceived oral health status of internal status among internal medicine residents in Nigeria. *European Journal of General Dentistry*. 2015; 4(2):79.
15. Rong W, Wang W, Yip H. Attitudes of dental and medical students in their first and final years of undergraduate study to oral health behaviour. *European Journal of Dental Education*. 2006; 10(3):178-184.
16. Madan C, Arora K, Chadha V, Manjunath B, Chandrashekar B, Rama Moorthy V.A knowledge, attitude, and practices study regarding dental floss among dentists in India. *Journal of Indian Society of Periodontology*. 2014; 18(3):361.

Conflict of interest: None

Funding: None

Cite this Article as: Pradhan D, Kumar J, Shavi G, Pruthi N, Gupta G, Singh D. Evaluating the Oral hygiene K.A.P. among Dental and Medical students in Kanpur City. <i>Natl J Integr Res Med</i> 2016; 7(2): 73-76
--