RESEARCH ARTICLE

TO ASSESS THE DENTAL AWARENESS AND ATTITUDES OF REGISTERED MEDICAL PRACTITIONERS IN MUMBAI AND NAVI MUMBAI.

Dr. Mamta Rathod¹ and Dr. Varsha Rathod².

1. Post graduate student, Department of Periodontology, Bharati Vidyapeeth Dental College & Hospital, Navi Mumbai.
2. Principal, Professor and Head Department of Periodontology Bharati Vidyapeeth Dental College & Hospital, Navi Mumbai.

Abstract

Aim: To assess the dental awareness and attitudes of registered medical practitioners in Mumbai and Navi Mumbai.

Method: The present study was cross-sectional survey undertaken to assess knowledge, attitude and practice of dental awareness among registered medical practitioners who are teaching in institutes in Mumbai and Navi Mumbai, Maharashtra, India. 200 registered medical practitioners from medical colleges were randomly selected. The data pertaining to their knowledge, attitude and practice about oral health was gathered using a self-administered questionnaire.

Results: The results showed that medical practitioners in Mumbai and Navi Mumbai have adequate knowledge about dental diseases. 174(87%) have said that the plaque and calculus are the most important factor causing periodontal disease. 192(96%) of medical practitioners advised patients to visit dentist at least once in six months.

Conclusion: Dental knowledge, awareness was found to be good among registered medical practitioners in Mumbai and Navi Mumbai and also showed positive attitudes towards dentistry.

Introduction:

Mouth is an integral part of the body, so it is necessary to maintain good oral health or prevent oral disease, for that oral health habits should be learned and practiced regularly by people.

Adoption of healthy oral habits is difficult and if patient is non-compliant then it leads to oral diseases, dental caries and periodontal disease. There are oral manifestations of many systemic diseases that must be managed in both healthy and medically compromised people. All members of the health profession should encourage common people for maintaining good oral health.

There are oral manifestations of many systemic diseases that must be managed in both healthy and medically compromised people. All members of the health profession should encourage common people for maintaining good oral health.
The medical practitioners come across a number of patients in their routine practices. Proper knowledge and oral health behavior help them in early detection of oral diseases and they can play an important role in the oral health education.

As the medical practitioners are primary health care providers, patients also consult them for their dental problems. It is necessary to have basic dental knowledge to medical practitioners so that they can identify signs and symptoms of dental diseases in patients and help them by providing appropriate advice or refer them to dentist.

To have adequate knowledge, dental education should be given to the under graduate medical students and interns in the medical institutes. It will make a habit to them at an early stage to examine oral cavity along with the medical examination. The medical practitioners who are attached to any medical college should have proper knowledge and awareness about oral diseases so that they can teach and give proper knowledge and cultivate positive attitude towards dentistry in them.

It was found that very few studies have collected data concerning the dental knowledge of medical practitioners who are teaching in institute.

The aim of the present study was to assess the dental knowledge, attitudes and awareness of dental diseases in registered medical practitioners teaching in institute in Mumbai and Navi Mumbai.

**Materials and methods:-**
A cross sectional questionnaire survey was carried out to assess the knowledge, attitude and awareness of medical practitioners teaching in institute of Mumbai and Navi Mumbai. The ethical clearance was obtained by the institutional ethical committee BharatiVidyapeeth Dental Collage and Hospital, Navi Mumbai.

**Inclusion criteria:-**
- The medical practitioners should have registered in the Indian Medical Association of Mumbai branch.
- They should be attached to medical institute in Mumbai and Navi Mumbai.

Convenient sample size of 200 medical practitioners was decided. Survey was conducted in five medical colleges of Mumbai and Navi Mumbai of which 40 practitioners from each college were taken.

A self-structured questionnaire containing a set of 10 questions was formed. It was divided in two parts. Part one consists of 5 questions to know the dental knowledge and part two consists of next 5 questions to know the attitude towards dentistry. Questionnaires were distributed to 200 registered medical practitioners. The principal investigator had approached the registered medical practitioners individually and distributed the questionnaires by hand after obtaining their consent. The questionnaire were immediately collected after answering and analyzed.

**Statistical analysis:-**
Chi-square test was used to analyze the data about dental knowledge, attitude and awareness related to oral health of medical practitioners.

**Results:-**
The present study is to assess the knowledge; attitudes and awareness of dental diseases in registered medical practitioners in Mumbai and Navi Mumbai. A questionnaire were distributed to 200 registered medical practitioners. Out of 200, 148 were male and 52 were female and 122 were attached to the institute and 78 were have private practice and also attached to the institute.

**Responses of the study subjects based on their dental knowledge (Table 1):-**
Question no. 1 was “Which is the important factor causes tooth decay”? 185(92.5%) medical practitioners marked the option of sugar contained food consumed per day, 7(3.5%) marked the option of brushing once daily, 5(2.5%) marked the option of using tooth powder and 3(1.5%) marked the option of smoking. 185(92.5%) medical practitioners marked the correct option and it was statistically significant compared to other options. (Graph 1)
In question no 2, plaque and calculus was answered by 174(87%) of medical practitioners and dental caries was answered by 26(13%) of medical practitioners. It showed that maximum practitioners knew that plaque and calculus is the most important factor causing periodontal disease which was statistically significant compared to other options. (Graph 2)

194(97%) of medical practitioners answered correctly that brushing teeth daily prevents tooth decay and periodontal disease which were found to be statistically significant from other options. (Graph 3)
Among the study subjects, 168 (84%) have marked that Periodontics is a specialty in dentistry, 24 (12%) marked Lasodontics and 8 (4%) marked Ododontics. Majority of practitioner marked the correct answer and it was found to be statistically significant from other options. (Graph 4)

Table 1: Responses of study subjects based on their dental knowledge

| Questions on Dental knowledge | Total (n=200) |
|-------------------------------|--------------|
| Total (n=200)                 | Total (n=200)% |
| Q.1 Important factor causing tooth decay | Brushing once daily | 7 (3.5%) |
|                               | Using tooth powder | 5 (2.5%) |
|                               | Sugar contained food consumed per day | 185 (92.5%) |
|                               | Smoking | 3 (1.5%) |
| Q.2 Which factors are responsible for periodontal disease | Dental caries | 26 (13%) |
|                               | Plaque and calculus | 174 (87%) |
|                               | Teeth with fractured restoration | 0 |
|                               | Inflammation of tongue | 0 |
| Q.3 Brushing teeth daily prevents | Oral cancer | 0 |
|                               | Oral ulcer | 6 (3%) |
|                               | Tooth decay and periodontal disease | 194 (97%) |
Scaling has no adverse effect on teeth, this answer was given by 175(87.5%) of the medical practitioners. It was found to be statistically significant compared to other options. (Graph 5)

Responses of study subjects based on their attitudes towards dental health (Table 2):

Among the study subjects 192(96%) have answered that they would suggest their patients to visit the dentist at least once in six months, 7(3.5%) answered that only if in pain and 1(0.5%) answered once in 2 months. It shows that majority of medical practitioners given the correct answer and it was statistically significant compared to other options. (Graph 6)

The question was “If patient with a dental abscess comes to you then what will you do”? 183(91.5%) of medical practitioner marked the option that they will refer the patient to dentist and 17(8.5%) marked the option that they...
will prescribe antibiotics and analgesics. The correct answer was they should refer the patients to dentist because if they prescribe medicines then patient may not go to dentist and condition may get worsen. Maximum medical practitioners given the correct answer and it was statistically significant compared to other options. (Graph 7)

The question was “Does dental visit improves the quality of life”? 183 (91.5%) of medical practitioners were believed that dental visit improves the quality of life. (Graph 8)

The question was “Do pregnant women need dental checkup”? 171 (85.5%) of medical practitioners were agreed that pregnant women need dental checkup. (Graph 9)
The question was “Do you advise periodic dental care for pediatric patients”? Majority of medical practitioners (186, 93.5%) advice periodic dental care for pediatric patients. (Graph 10) It was shows that medical practitioners have positive attitude towards dentistry. 

Discussion:
This cross sectional study was conducted to assess the dental knowledge, attitude and awareness of different medical practitioners teaching in the institute of Mumbai and Navi Mumbai.

In the present study 87% of the doctors reported that plaque and calculus are responsible for periodontal disease and 97% have said that brushing teeth daily prevents tooth decay and periodontal disease. Similar results were found in the studies done by S Srinidhi et al. and Eveline K.L. Wong et al. In the study done by S Srinidhi et al. in Chennai, 73.3% of the doctors reported plaque and calculus are responsible for periodontal disease¹ and in the study done by
Table 2: Responses of study subjects based on their attitudes towards dental health

| Question                                                                 | Total (n=200) |
|--------------------------------------------------------------------------|---------------|
| Q.6 Advice to visit the dentist                                            |               |
| Atleast once in six months                                               | 192(96%)      |
| Once in two months                                                       | 1(0.5%)       |
| Only if in pain                                                          | 7(3.5%)       |
| Once in every 2-5 years                                                  | 0             |
| Q.7 Patient with a dental abscess                                        |               |
| Refer the patient to dentist                                              | 183(91.5%)    |
| Prescribe antibiotics and analgesics                                      | 17(8.5%)      |
| Ignore                                                                   | 0             |
| Q.8 Does dental visit improves quality of life                            |               |
| Yes                                                                      | 183(91.5%)    |
| No                                                                       | 17(8.5%)      |
| Q.9 Do pregnant women need dental check up                               |               |
| Yes                                                                      | 171(85.5%)    |
| No                                                                       | 29(14.5%)     |
| Q.10 Advise periodic dental care for pediatric patients                  |               |
| Yes                                                                      | 186(93%)      |
| No                                                                       | 7(8.5%)       |

In the present study, 96% of the medical practitioners have answered that they would suggest their patients to visit the dentist once in a six month. In the study conducted by S Srinidhi et al. in Chennai, 76.3% of the medical practitioners have answered that they would suggest their patients to visit the dentist once in six months. In a study conducted by Jagadish Chandra et al. in Davangereresults showed that regular visit of once in six months was suggested by 86.3% doctors.

Results of our study are in accordance with the above studies and showed that the medical practitioners had good knowledge and positive attitude about dentistry.

As William Osler said mouth is the mirror of general health. Poor oral conditions may adversely affect general health and certain medical conditions may have a negative impact on oral health.

Study was done by Anup N. et al. to know knowledge, attitude and practice of dental treatment of medical practitioners at primary health center in Jaipur. They reported that medical practitioners had limited knowledge regarding dental problems. Oral health is neglected in rural areas so there is need for at least one dentist in the primary health center to promote the oral health of the people. Study by Umesh et al. to evaluate dental awareness among medical practitioners in Davangere reported that majority of the medical doctors in rural area of Davangere were aware that there existed a relation between oral health and general health and were not aware that, Caries is infectious and transmissible from mother to child. SreenivasNagarakanti et al. did a study to assess the knowledge of medical practitioners on the association between periodontal disease and general health and their willingness to advise their patients to seek dental treatment reported that medical practitioners dose not refer patients to the dentist and there is a need to educate doctors about oral health and general health.

Ashok patil et al. in 2010, did a study to assess knowledge, attitude and practice of dental awareness among medical practitioners in Sangamner city, they concluded that the medical professionals possess poor level of awareness regarding oral disease and also very few maintained their routine dental check-up, suggesting lack of positive attitude towards oral health. A Gur et al in 2008 conducted a study in medical practitioners of Sikkim to know the knowledge, attitude and practices regarding the oral diseases. They reported that many medical practitioners are unfamiliar with the relation between oral health and general health. Vishal Mehrotra et al. in 2015 assessed the dental knowledge, attitudes and awareness of medical practitioners in Kanpur City. Results of the study showed that the medical practitioners had good knowledge about dentistry.

Conclusion:
The results of the study reported that medical practitioners had a good knowledge, awareness and positive attitude about dentistry.
It is very important to have dental knowledge because medical practitioners are primary health care providers so they can educate the patients about dental care and refer them to dentist. Some seminars should be conducted for newly graduated medical practitioners to update their dental knowledge.

Further studies with larger sample size are required to spread the awareness and knowledge of dental disease.

Acknowledgement:
The author wish to thank all the staff of Department of Periodontics of BharatiVidyapeeth Dental College and Hospital, Navi Mumbai for their constant support at needy times throughout the study period.

References:
1. S Srinidhi et al. Dental Awareness and Attitudes among Medical Practitioners in Chennai. J Oral Health Comm Dent 2011;5(2)73-78.
2. Umesh et al. Assessment of Knowledge, Attitude and Practices of Medical Practitioners towards Dental Care in Rural Areas of DavangereTaluk. International Journal of Current Research, October, 2014, Vol. 6, Issue, 10, pp.9275-9278.
3. Eveline K.L. Wong et al. Knowledge and attitudes towards dental care among newly graduated medical doctors. Available at: http://www.google.com. Accessed January 10th 2010.
4. Jagadish Chandra et al. Dental awareness and attitudes of medical practitioners of Davangere city. Journal of Indian Association of Public Health Dentistry 2006;8:38-43.
5. Sumi Y et al. Attitudes to oral care among medical practitioners in Japanese nursing homes. Gerodontology 2001;18(1):1-6.
6. Radha G et al. Knowledge and attitude and practice of oral health among medical practitioners and nursing staff of Bangalore city. Journal of Indian Association of Public Health Dentistry 2008;(11):17-21.
7. Dr. Anup.N et al. Knowledge, Attitude and Practice of dental treatment among medical officers at PHC’s of Amer and Jamwaramgarh Tehsil, Jaipur, Rajasthan – A Pilot Study. Journal of Dental and Medical Sciences 2014, Volume 13, Issue (12): 115-120.
8. SreenivasNagarakanti et al. Knowledge, attitude, and practice of medical doctors towards periodontal disease. J Indian SocPeriodontol. 2013 Jan-Feb; 17(1): 137–139.
9. Ashok Patil et al. Awareness of Oral health among medical practitioners in Sangamner City- A cross-sectional survey. Int. Journal of Clinical Dental Science, November, 2010;1(1):26-29.
10. A. Gur et al. Knowledge, Attitude and Practices Regarding the Systemic Effects of Oral Diseases among the Medical Practitioners. The Internet Journal of Dental Science. 2009 Volume 6 Number 2.
11. Mehrotra V et al. A Study Based on Dental Awareness, Knowledge and Attitudes among the Medical Practitioners in and Around Kanpur City (India). J Interdiscipl Med Dent Sci 2015, Volume 3; Issue 4.