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## Research article

### PERIODONTAL DISEASES & TREATMENT FROM PERSPECTIVE OF MEDICAL PROFESSIONALS: A SURVEY STUDY

Mundhe Priti G<sup>1</sup>, Neelima Rajhans S<sup>2</sup>, Nilofer Sheikh.S<sup>3</sup>, Nikesh Moolya N<sup>4</sup>, Nilkanth Mhaske<sup>4</sup>, Nikhil Gutte D<sup>5</sup>

<sup>1,3</sup>Post Graduate Student, <sup>2</sup>Professor & Head, <sup>4</sup>Reader, Department Of Periodontics, Y.C.M.M. & R.D.F's Dental College Ahmednagar, Maharashtra, India.

<sup>5</sup>Consultant, Pediatrician Siddhivinayak Pediatrics Hospital, Ahmednagar, Maharashtra, India

\*Corresponding author email: pritim222@gmail.com

#### ABSTRACT

**Background:** Periodontics is fast evolving dental specialty. But periodontics is still seen to be nascent & perception of it is variable among different health professionals. **Aim:** To assess the awareness of periodontal diseases, it's causes & treatment modalities available among medical professionals. **Materials & methods:** Two hundred & five medical professionals working in Ahmednagar were interviewed through questionnaire. The questionnaire was consist of different terminologies, periodontal diseases their cause, it's systemic effects, different treatment techniques used and newer treatment modalities. **Results:** positive attitude towards periodontal diseases were observed. The level of awareness was marginally higher with consultants. The difference was statistically significant among three groups. **Conclusion:** Awareness about periodontal diseases, it's aetiology and association between systemic diseases was observed. But awareness about periodontal therapy & newer treatment modalities was poor.

**Key words:** Periodontal awareness, attitude, treatment modalities

#### INTRODUCTION

The term "periodontal diseases" is a nonspecific term that refers to any disease or disease process that affects the periodontium.<sup>1</sup> while Preventive periodontics is preventing the initiation and recurrence of periodontal disease & discussing on minimizing or eliminating the etiological factors that are currently believed to contribute to it. The main **aim** of preventive periodontics is to promote optimum health of the periodontium.

The surgeon general's report <sup>2</sup> recognizes "the mouth as a mirror of health or disease, as a guard or ward of warning, and as a potential source of pathogens affecting other systems." thus Medical practitioners must play an active role in periodontal health promotion.

Though periodontics is rapid developing dental specialty, but it is still seen to be budding & perception of it is erratic among different health professionals. Many studies are carried out to evaluate the awareness of patients attending the hospitals and dental clinics.<sup>3,4</sup> There are few studies addressing periodontal awareness in various healthcare professionals.<sup>5,6,7</sup> Hence present study was conducted to assess the awareness of periodontal diseases, it's causes & availability of treatment modalities among medical professionals in Ahmednagar.

**Aim:** To assess the awareness of periodontal diseases, it's causes & availability of treatment modalities among medical professionals.

## MATERIALS & METHODS:

The present study was done after approval from the ethical committee of our college, and the participations were informed about survey study and consent forms were taken before interview.

**Inclusion criteria:** Medical interns, Postgraduate students, and consultants present in Ahmednagar, as well as rurally based medical institutes in Ahmednagar which were randomly selected for the present study.

A total two hundred five [132-males & 73-females] medical professionals (i.e., M.B.B.S. & further specialist of clinical branches) were interviewed. All medical professionals were interviewed through questionnaire.<sup>7</sup> They were interviewed at their place of work 30 minutes were given to fill the questionnaire.

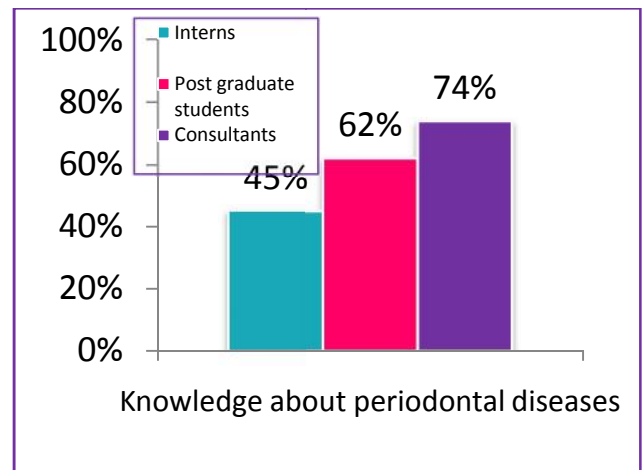
The questionnaire is based on information about different terminologies, periodontal diseases their cause, its systemic effects, different treatment techniques used and newer treatment modalities<sup>7</sup>. The questionnaire consists of 24 questions which are divided under headings such as: 1] knowledge about periodontal diseases, 2] awareness about treatment availability and 3] awareness about newer treatment modalities. Eight questions under each heading.

Statistical analysis was done by descriptive analysis as percentage/proportions. Chi-Square test was applied to test the association between medical professionals and their awareness, cause and treatment modalities of periodontal diseases. Probability level  $p < 0.05$  was considered as significant.

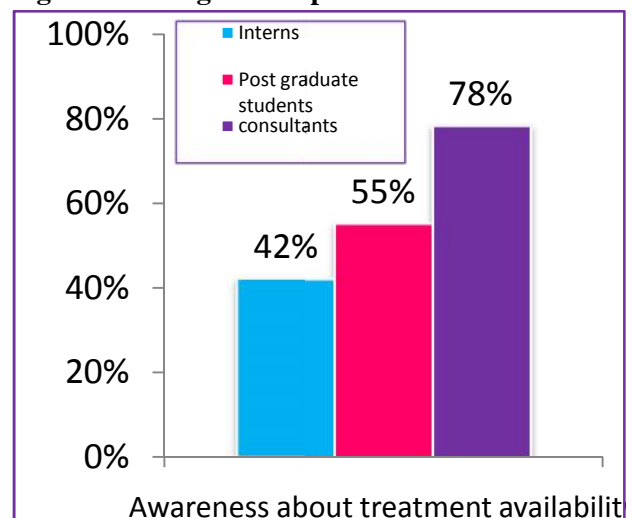
## RESULTS

Results of the present study showed that affirmative attitude was observed among medical professionals. The knowledge about the periodontal diseases it's causes and association with systemic conditions.

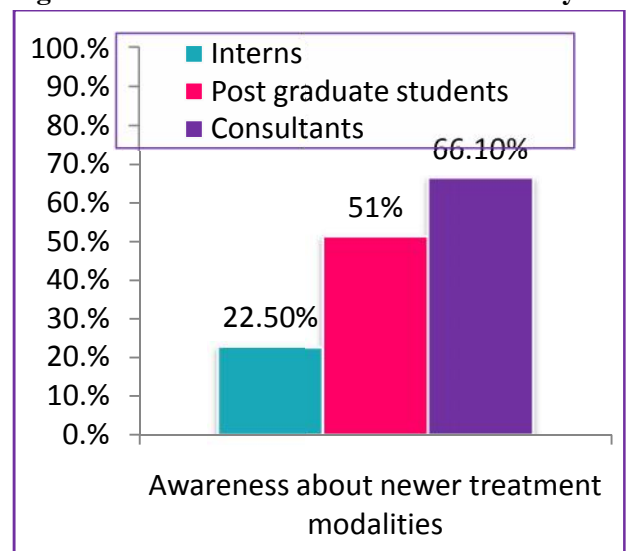
Awareness about availability of treatment options such as T/t of pigmented gums, gummy smile were good, but the awareness about newer treatment modalities used in periodontal treatment such as local drug delivery systems, LASER, alloderm, bone substitutes, and platelet-rich plasma is slightly poorer.



**Fig 1: knowledge about periodontal diseases:**



**Fig 2: awareness about treatment availability**



**Fig 3: Awareness about newer treatment modalities**

The level of awareness was higher with consultants than interns and post graduate students. The difference was statistically significant among groups.

## DISCUSSION

Medical professionals need to have a basic periodontal knowledge as they were the first person to encounter oral problems in patients while practicing such as swelling in the oral cavity, bleeding gums, if they examine the oral cavity regularly these conditions can be identified in the initial stages. Another important fact to consider is that some periodontal infections may not always be easily identified. The symptoms are vague. And if left untreated, will destroy both periodontal tissue and the underlying bone.

The present study reveals, positive attitude towards periodontal diseases. The knowledge about the periodontal diseases it's causes and association with systemic conditions such as halitosis, association with diabetes mellitus cardiovascular diseases was significant.

Recent studies reveal the association between periodontal diseases and many serious and life-threatening systemic diseases, such as, coronary heart disease<sup>8, 9,10</sup>; contribute to low pre-term birth weights<sup>11</sup>; increase the severity of diabetes<sup>12</sup>; play a role in osteoporosis; rigorously hassle the immune system; lower resistance to other infections; and reduces life expectancy<sup>13</sup>.

Awareness about drugs as a cause of gingival enlargement is higher with Ca. channel blockers then phenytoin sodium then cyclosporin and other drugs. Percentage of awareness is again higher among consultants compared to other groups.

The awareness about newer treatment modalities such as, local drug delivery systems, LASER, alloderm, bone substitutes and platelet-rich plasma is slightly poorer. Questions regarding local drug delivery systems, use of LASER or platelet rich plasma should have evoked a higher affirmative response than obtained i.e. 22%–66% because these are the modalities which are frequently used in different medical practices.

A similar study was done by Swati pralhad et al. (2011) which has a similar type of questions. The result of study shows that a positive attitude towards dental and periodontal check up and treatment needs was observed.<sup>7</sup>

The drawback of the present study was it contained close ended questions, so the assessment of knowledge may be affected.

## CONCLUSION

A positive attitude towards periodontal diseases, its aetiology and association between systemic diseases was observed. But awareness about periodontal therapy & newer treatment modalities was poor among those questioned. However, inputs from such surveys can be used in preventive periodontal programs. Periodontal health programs and joint ventures can be planned in future. So physicians can provide oral health counselling and helps to install a positive dental attitude. They can also help to intercept soft and hard tissue lesions in order to restore health and prevent further damage.

**Conflict of interest: Nil**

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