



## DENTAL AWARENESS AMONG MEDICAL PROFESSIONALS IN BENGALURU: A QUESTIONNAIRE SURVEY

### Dental Science

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### ABSTRACT

**Aim :** To assess the awareness of oral hygiene, periodontal diseases and availability of treatment techniques among medical professionals.

**Materials and method:** One hundred medical professionals were interviewed through a questionnaire . This was a KAP ( knowledge, attitude, practice ) study which included questions based on knowledge, attitude and practice towards periodontal awareness among medical professionals .

**Results and Conclusion :** A positive attitude towards dental and periodontal check and the treatment needs was observed among those questioned. However, inputs from this survey can be used to organize periodontal health programs and for planning of joint ventures.

### KEYWORDS

Awareness, healthcare professionals, periodontal health

#### Introduction :

Periodontology is one of the fast growing dental specialities. Its services not only cover preventive and curative aspects of oral health, but also offer cosmetic flare and regenerative health programs. Of late, periodontal disease is shown to have systemic manifestations and has been implicated in a wide range of conditions such as hypertension, stroke, atherosclerosis, poor pregnancy outcome, to name a few<sup>1</sup>. Understanding the relationship between periodontal disease and systemic health is necessary for the accurate diagnosis and treatment of both. The prevalence of periodontitis in India is reaching epidemic proportions with serious implications for general health. It is expected that health-care providers will see and refer these patients to dentists in greater numbers. Yet, periodontics is still seen to be nascent and perception of it is quite variable among the dental professionals themselves. Many studies are carried out to know the knowledge and behaviour of patients attending the general and dental clinics.<sup>2,3</sup> The studies addressing the awareness level about periodontics among other healthcare providers like medical professionals are very few.<sup>4,5</sup>

The present study was planned to explore the awareness of periodontal disease and availability of treatment techniques among medical professionals.

#### Materials And Methods:

In the present study, randomly selected medical doctors ( $n = 100$ ) practicing in Bengaluru were interviewed through a questionnaire survey about their awareness of periodontal disease and availability of treatment techniques.

Among the 100 interviewed, 60 were males while 40 were females. They were interviewed at their workplace.

The questionnaire covered different areas like knowledge about pigmented gingiva, dental implants, relation between preterm low birth weight deliveries and periodontal diseases, cause for gingival enlargements, and about alveolar bone substitutes (question #1-5), questions based on attitude (question # 6-10), questions related to practice of general practitioner (question # 11-15) (Table 1). The options for all the questions designed in three point Likert scale.

#### Three point Likert scale:

1. Yes
2. No
3. Don't know

#### Table 1:

Knowledge :
1.If your gums are pigmented , do you think they can be treated?
2.Do you know dental implants are artificial tooth that is anchored in the jaw bone? Dental implants are Removable partial dentures/
3.Can periodontal disease lead to preterm low birth weight deliveries ?
4.Do you think gingival enlargement is caused by
i.Bacterial deposits
ii.Drugs
5.Do you know that alveolar bone can be regenerated by using bone substitutes (artificial bone) ? If your gums are pigmented, do you think they can be treated? If your gums are pigmented, do you think they can be treated?
Attitude:
1. Do you think periodontal diseases are preventable?
2. Do you think there is need to visit the dentist when there is bleeding from gums?
3. Do you think one should visit dentist once in every 6 months
4. Do you think scaling can cause the removal of enamel?
5.Do you think LASERs can be used for the better periodontal health?
Practice:
1.If a pregnant women comes with gingival swellings , will you refer to dentist?
2.If a patient complains of dental pain, will you prescribe antibiotics?
3.Do you refer smokers to dentist for cleaning?
4.Do you refer patients with bleeding from gums to a dentist ?
5.Do you communicate or consult with dentist if a trauma patients comes with facial injuries?

The responses were compiled, computed and analysed for agreement or otherwise between and within the groups. Chi-square test with its corrections was used to confirm the difference in proportions. Probability of 95% was considered as statistically significant.

#### Results And Discussion:

To the question related to pigmented gingiva, almost 81% knew that

pigmented gingiva can be treated, 7% said that it cannot be treated and remaining did not have any idea regarding pigmented gingiva (Graph 1)

74% had the idea about dental implants, almost 21 % did not know what are dental implants. With implantology coming up to be recognized as a sub-specialty, it is necessary that information about implants be disseminated among the public and also the professionals. (Graph 1)

To the question regarding PTLBW (pre term low birth weight) relation with periodontal disease, only 37 % knew about this, but remaining had the negative response. Awareness should be developed among the healthcare professionals for planning joint ventures in reducing low birth weight deliveries and perinatal morbidity. (Graph 1)

Although all answered in assertive that drugs cause gingival enlargement, the responses were not uniform when asked to indicate the drugs that would cause gingival overgrowth (Graph 1).

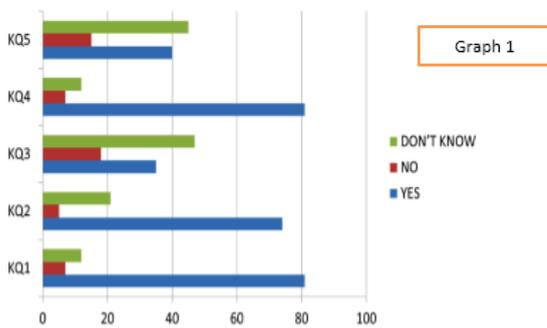
There were questions asked about the use of bone substitutes and LASER (Light Amplification by Stimulated Emission of Radiation) in periodontal therapy (Graph 1). Awareness about these modalities in periodontal treatment was poorer in the interviewed professionals.

As far as the practice and attitude (Graph 2 &3) was concerned, it was good to know that most agreed with the impact of smoking on oral health. Similarly, most of them believed that bleeding gums requires dental check. But, almost all were unsure of the frequency of dental visits that one should make in a year, less than 25% indicating that a dental visit is required.

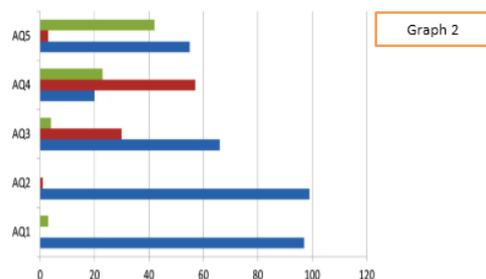
This indicates that although they were aware of the gum problems, the urge or the need for treatment is often underestimated. Such an attitude seems to be common even in other parts of the Country. It was reported that only 10% of dentists and 27% of physicians received a regular oral health check-up from a dentist.<sup>6</sup> Those who utilized the dental care facility did so only when they had problems.

**GRAPHS:**

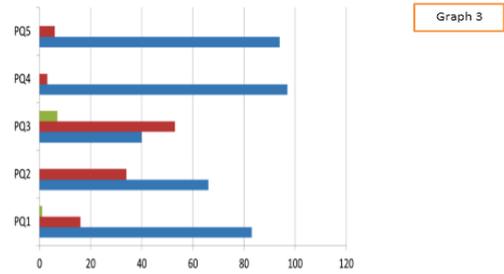
**Graph(1) showing healthcare professionals response to knowledge based questions :**



**Graph(2) showing healthcare professionals response to attitude based questions :**



**Graph(3) showing healthcare professionals response to practice based questions :**



The  $\chi^2$  (chi square values) and 'p' values were listed in Table 2.

**Table 2:**

Question No	$\chi^2$	P Value
KQ1	2.499	0.287
KQ2	0.092	0.955
KQ3	2.506	0.286
KQ4	1.653	0.437
KQ5	0.752	0.686
AQ1	2.062	0.151
AQ2	1.515	0.218
AQ3	4.691	0.096
AQ4	1.834	0.4
AQ5	0.68	0.712
PQ1	0.762	0.683
PQ2	0.364	0.546
PQ3	0.964	0.617
PQ4	0.916	0.338
PQ5	0.357	0.811

Although a positive attitude towards periodontal disease and its treatment needs was observed among those questioned, but there was no statistical significance.

**Conclusion:**

The information obtained from this survey should be utilized to bring change in knowledge, attitude and practice in terms of dental problems and its treatment needs among medical professionals. There is a need for medical professionals to improve and impart oral health counselling in their day to day practice, which calls for joint advocacy between the dental services and medical professionals. Authors believe that the inputs of the survey will help the dental care providers to organize Periodontal Health Awareness Programs, structuring special clinics, and planning for joint ventures.

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