

Original Research

Periodontal health awareness of non-health care professionals in Durgapur, West Bengal

Piyali Poddar¹, Debjit Dhamali², Dithi C³, Amit Kumar⁴, Bhumika Kamal Badiyani⁵, Vinod Sargaiyan⁶

¹Senior Lecturer, Department of Public Health Dentistry, Kusum Devi Sunderlal Dugar Jain Dental College and Hospital, Kolkata, West Bengal;

²Associate Professor, Department of Dentistry, IQ city Medical College and Hospital, Durgapur, West Bengal;

³Reader, Department of Public Health Dentistry, Noorul Islam College of Dental Science, Trivandrum, Kerala;

^{4,5}Reader, Department of Public Health Dentistry;

⁶Reader, Dept of Oral Pathology and Microbiology, Maharana Pratap College of Dentistry & Research Centre, Gwalior (M.P.)

ABSTRACT

Background: Non-health care professionals represent an important segment of the workforce in hospitals because of their management functions in ensuring consistent, high-quality patient care. **Aim:** The aim of this study was to determine the level of Periodontal health awareness of non-health care professionals within a hospital setting in Durgapur, West Bengal. **Materials and Methods:** The study was conducted over 3 months period of 2013 at IQ City Medical College and Hospital, Durgapur, West Bengal. The study design was a descriptive, cross-sectional survey of non-health care professionals working within the hospital premises. The total study population was an estimated 300 non-health care professionals which were multiethnic. **Results:** More than half, (67.4%) of the respondents claimed to be aware of periodontal disease while 32.6% were unaware. Only 16.5% had an adequate level of knowledge of periodontal disease. **Conclusions:** Despite the close proximity of the non-health care professionals to the oral health care facility within the hospital, their knowledge of periodontal disease was limited, although they had a fairly high awareness level. **Key words:** periodontal health, awareness, non-health care professionals, periodontal disease, oral health education

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Corresponding Author: Dr. Debjit Dhamali, Associate Professor, Department of Dentistry, IQ city Medical College and Hospital, Durgapur, West Bengal, India

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INTRODUCTION

Periodontal disease is a predominantly Gram-positive infection which is inflammatory in nature. It is initiated by plaque biofilm resulting in gingivitis, which may progress to periodontitis and eventually tooth loss if left untreated. Periodontal disease is known to have bilateral associations with various systemic diseases such as diabetes mellitus, cardiovascular disease, hypertension, and poor pregnancy outcomes.¹ Gram-positive infection is a predominant cause of periodontal disease with the potential vascular dissemination of these microorganisms and their toxins such as lipopolysaccharides through sulcular epithelium reaches systemic circulation and induces major vascular response.²⁻⁵ This host response can offer explanatory mechanism for the interaction between periodontal inflammation and variety of systemic diseases.⁷⁻¹⁴ A good knowledge of oral health

care is believed to be an important precursor to oral health-related behavior.⁶ Non-health care professionals represent an important segment of the workforce in hospitals because of their management functions in ensuring consistent, high-quality patient care.⁴ They can also play the role of health educators, especially as the general populace belief that anyone working in a health institution must be knowledgeable about health issues. This would in turn support the dental health team and help to promote periodontal health among their family members, as well as the community at large. They can, however, be more efficient provided they are adequately informed about periodontal diseases and are engaging in the appropriate oral hygiene practices. The objective of this study was to determine the level of Periodontal health awareness of non-health care professionals within a hospital setting in Durgapur, West Bengal.

MATERIALS AND METHODS

The study was conducted over 3 months period of 2013 at IQ City Medical College and Hospital, Durgapur, West Bengal. The study design was a descriptive, cross-sectional survey of non-health care professionals working within the hospital premises. The total study population was an estimated 300 non-health care professionals which were multiethnic. The non-health care professionals represent a fairly large segment of the hospital workforce. The sample size was calculated based on the formula $n = \frac{z^2 pq}{d^2}$ and the correction factor, $nf = \frac{n}{1 + n/N}$. A purposive sampling method was used to select study participants in each of the selected departments. The pretested, self-administered, semi-structured, questionnaire was distributed to all nonmedical professionals in the selected departments who consented to participate in the study.

RESULTS

Table 1: Periodontal health awareness of the respondents

Variable	%
Main Cause of Periodontal disease	
Food debris	54.7
Poor nutrition	18.2
Dental plaque	21.6
Didn't know	1.3
Calculus	2.7
Inherited from parents	1.5
Most common sign of periodontal disease	
Bleeding gum	53.0
Swollen gum	38.2
Bad breath	7.3
Didn't know	1.3
Pain	0.2
Best method of preventing periodontal disease	
Cleaning with toothbrush and toothpaste	75.0
Rinsing with mouthwash	12.9
Rinsing with water	11.4
Didn't know	0.7
Relationship between periodontal disease and general health	
Yes	82.5
No	12.6
Didn't know	4.9
Level of knowledge	
Adequate	16.5
Inadequate	83.5

Out of the 300 respondents, 56.5 % constituted males while 43.5 % were females. Majority of the respondents (86.4%) had tertiary level of education, with most (63.8%) being in the junior staff cadre. More than half, (67.4%) of the respondents claimed to be aware of periodontal disease while 32.6% were unaware. Of the

group that were aware, dentists were the most common source of health information on periodontal disease (42.4%) followed by the media (24.6%), medical doctors (14.6%), colleagues/neighbours (9.7%), and family/friends (8.7%). Only 16.5% had an adequate level of knowledge of periodontal disease. (Table 1)

DISCUSSION

This study revealed a fairly high level of awareness of periodontal disease (67.4%) among this group of non-health care professionals. This was not completely surprising though and could have been due to their past dental attendance experience within the dental facility in the hospital premises during their preemployment dental screening. The workers are likely to have received some oral health education from dentists, dental auxiliaries about common oral diseases such as periodontal diseases. This was further buttressed by their most common source of oral health information, which were dentists. Only 16.5 % had adequate knowledge of periodontal diseases and its prevention, while 21.6 % knew dental plaque to be the primary cause of periodontal disease. This highlights the need to educate non-health care professionals on the role of dental plaque in inflammatory periodontal disease. A positive observation in this study were the large number of respondents (82.5%) who correctly affirmed a relationship between periodontal disease and general health which is encouraging in view of the studies linking periodontal health with some systemic conditions such as increased time to conception in women and cardiovascular diseases.⁷⁻¹⁰ The inadequate knowledge of periodontal disease displayed by the respondents could be attributed to their limited exposure to “periodic” oral health education programs within the hospital.

CONCLUSIONS

Despite the close proximity of the non-health care professionals to the oral health care facility within the hospital, their knowledge of periodontal disease was limited, although they had a fairly high awareness level.

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