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Original Research Article

Prevalence of periodontal diseases among patients attending at Dr. R. Ahmed dental college & hospital, Kolkata, W.B.

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ABSTRACT

Background: Periodontal disease is a public health problem and is associated with systemic diseases. Periodontitis is a highly prevalent disease in developed and developing country across all age group & gender. Majority of population in the developing countries suffer from different stages and grades of periodontitis which causes alveolar bone loss, tooth mobility and tooth loss.

Materials and Methods: A cross-sectional study was conducted on 2220 dentate person including both male & female aged from 20 to 65 reported in the Department of Periodontics in 3 months

Results: It was observed estimated prevalence of periodontitis increased with age which is much higher among subjects with poor oral hygiene practice and females are suffering more than male. The current study collected significant data for prevalence

Conclusion: Inadequate and/or improper maintenance of Oral hygiene confirmed as the most important predictor for periodontitis.

Severity was found to be increased with increasing age also more in female than male.

The effect of age and gender on the progression of periodontitis seemed to be less important when good oral hygiene is practiced.

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1. Introduction

Periodontitis is “an inflammatory disease of the supporting tissues of the teeth caused by microorganisms, resulting in progressive destruction of the periodontal ligament and alveolar bone with increased probing depth, formation of recession, or both may lead to, tooth mobility and tooth loss if left untreated.”¹

In 2010, severe periodontitis was estimated to be the sixth most prevalent disease in the world, with a prevalence of 11.2%, gradually increasing with age.²

Periodontal disease is a chronic inflammatory disease resulting in destruction of tissue structures surrounding the teeth and manifest as a wide variety of inherited conditions

affecting the periodontium (Fujita1900).

It is the most prevalent oral diseases worldwide especially in developing countries.

The prevalence of periodontal disease dates back to early human civilization as it was indicated by paleopathological studies and recently the global epidemiological data suggests periodontal disease to be one of a major burden on oral diseases.³

The current demographic data of India shows a population of over 1.2 billion people making it the second most popular country in the world contributing around 17.5% of the total world population.⁴ An array of cultural, ethnic, and demographic diversities is found amongst the people inhabiting here.

The studies on the prevalence of periodontal disease in different populations are useful for not only determining the

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Fig. 2:



Fig. 3:



Fig. 4:

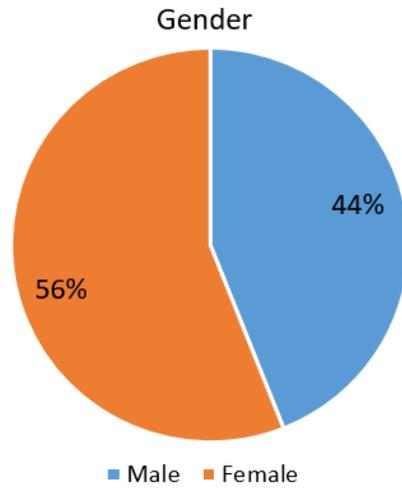


Chart 1: Percentage of periodontitis among males and females

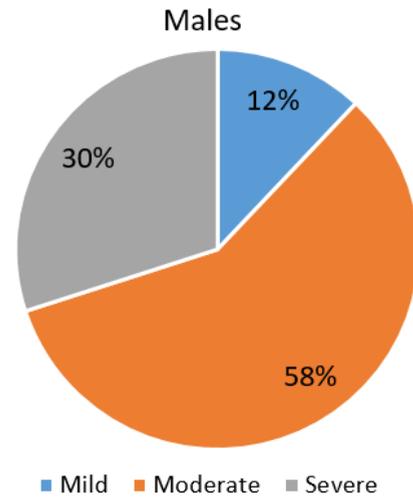


Chart 2: Distribution of periodontitis among males

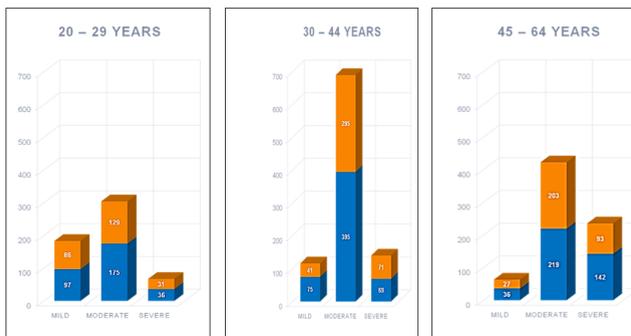


Fig. 5: Distribution of periodontitis among males and females based on age groups

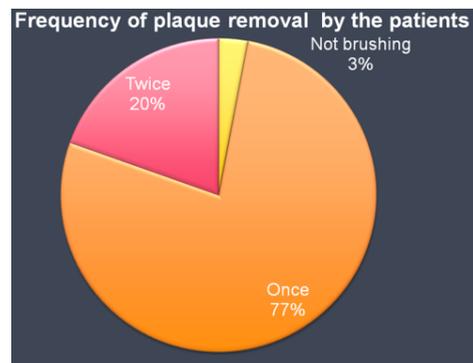


Fig. 6:

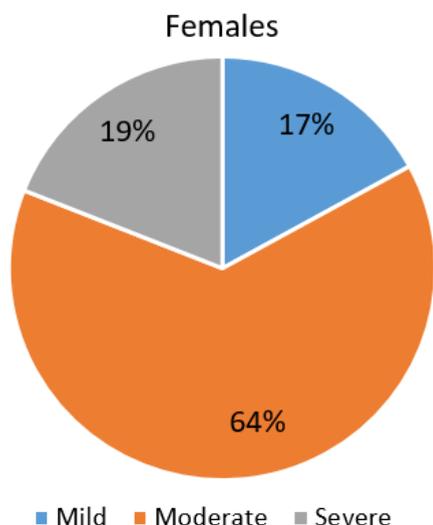


Chart 3: Distribution of periodontitis among females

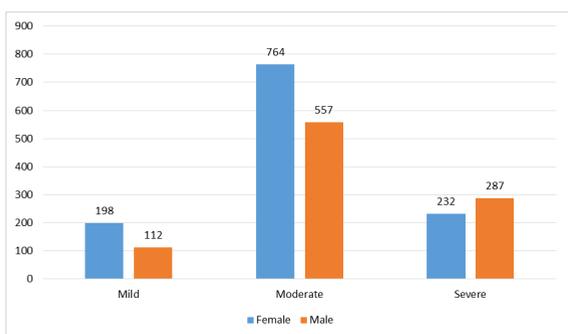


Chart 4: Distribution of periodontitis among males and females based on severity (Mild, Moderate, Severe)

Significant value for male and female distribution						
	MALE (n=938)		FEMALE (n=1194)		P Value	Remarks (<0.05)
Mild	112	826	198	996	0.0043	S
Moderate	557	381	764	430	0.0429	S
Severe	287	651	232	962	0.0001	S

Chart 5: S-Significant; NS – Nonsignificant

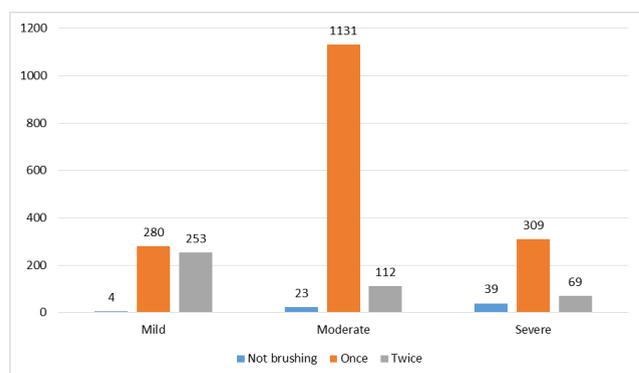


Fig. 7: Distribution of periodontitis based on frequency of brushing

finding may be that males are less health conscious and have poor oral hygiene than females and heavy deposition of plaque and calculus. There is difficulty in comparing the data of such observational studies because the results depend upon several factors such as, study designs, sample size, eligibility criteria, recording of data, criteria for assessment of disease, microbial pathogens, disease activity and multifactorial nature of periodontal diseases including age, gender, socioeconomic status, educational status, stress factors and control of these factors is challenging.

In the present study, the findings suggest that only 29.90% subjects need complex treatment. On the other hand, approximately 63% subjects require either oral hygiene instructions or oral hygiene instructions or oral prophylaxis. Only 7% subjects were healthy and needed no treatment. Finally, the results indicates that majority of the population need primary and secondary level of program to educate, motivate and instruct people about oral hygiene maintenance and provide the treatment in its early stages to reduce the chances of initiation or progression of periodontal diseases.

Periodontal diseases were found to be 96.30% (highly prevalent) in the study population, and most participants required oral hygiene instructions and oral prophylaxis.

It shows that the estimated prevalence of periodontitis increased with age which is much higher among subjects with poor oral hygiene practice and females are suffering more than male.

Inadequate and/or improper maintenance of Oral hygiene confirmed as the important predictor for periodontitis.

1. The effect of age and gender on the progression of periodontitis seemed to be less important when good oral hygiene is practiced.

6. Conclusion

Periodontal Disease was found to be 93.00% in the study population, and most participants required oral hygiene instruction and oral Prophylaxis.

To prevent or minimize the progression of the disease, more number of oral health surveys will help in planning of preventive health program at large scale in the beneficence of the society.

Qualitative research should be done for welfare of community through "systematic science and community" programs and improved oral health literacy, community education, community-based interventions, and accessible dental services at the primary or community health centers should also be provided to improve the oral as well as systemic health.

7. Source of Funding

None.

8. Conflict of Interest

The authors declare no conflict of interest.

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