

Content available at: <https://www.ipinnovative.com/open-access-journals>

International Journal of Oral Health Dentistry

Journal homepage: www.ijohd.org

Original Research Article

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

Sandip Ghosh^{1,*}, Balaji R¹, Priyanka Yadav¹, Somen Bagchi¹¹Dept. of Periodontics, Dr. R. Ahmed Dental College & Hospital, Kolkata, West Bengal, India

ARTICLE INFO

Article history:

Received 30-02-2022

Accepted 06-03-2022

Available online 23-03-2022

Keywords:

Periodontitis

Prevalence

Periodontal disease

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.

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprint@ipinnovative.com

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

* Corresponding author.

E-mail address: sgghosh23352@gmail.com (S. Ghosh).

The present cross-sectional prevalence study aimed to assess the prevalence of periodontal disease the subjects those visited to the dental OPD, Dr. R Ahmed Dental College and Hospital, West Bengal, India, Of the 2220. Males were more affected with moderate and severe periodontitis as compared to females that is also consistent with the other reported studies. The factors responsible for this



Fig. 2:



Fig. 3:



Fig. 4:

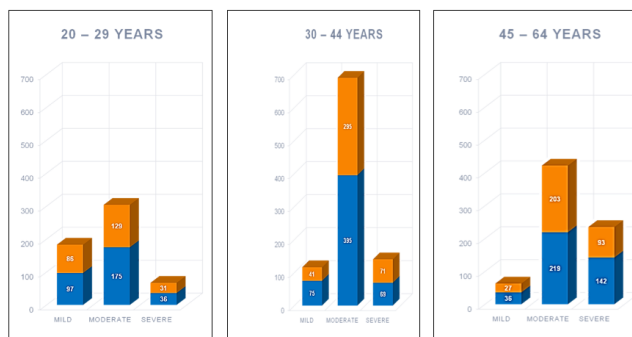


Fig. 5: Distribution of periodontitis among males and females based on age groups

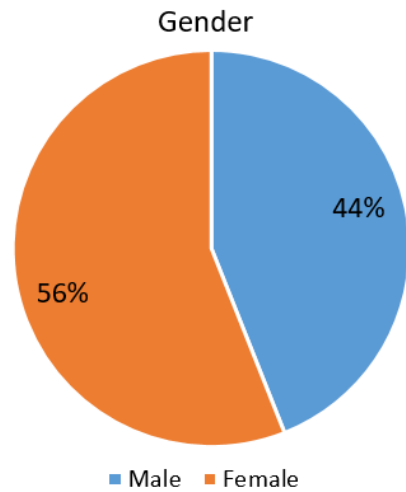


Chart 1: Percentage of periodontitis among males and females

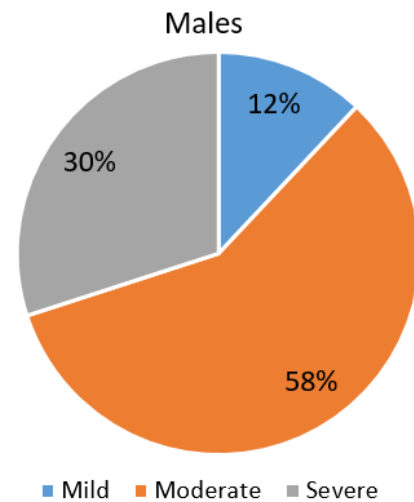


Chart 2: Distribution of periodontitis among males

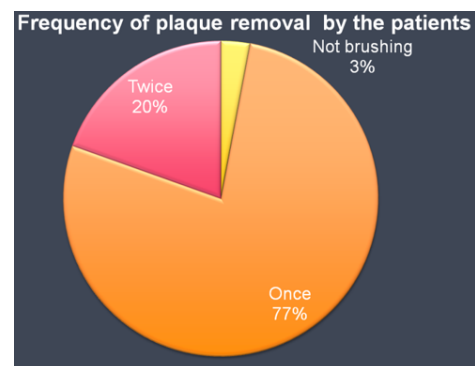


Fig. 6:

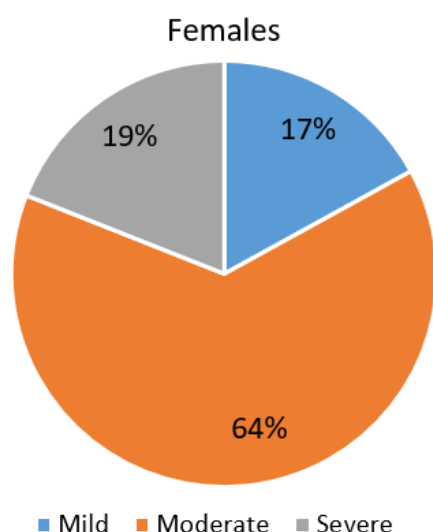


Chart 3: Distribution of periodontitis among females

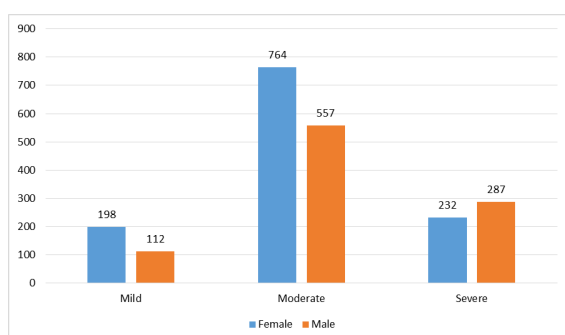


Chart 4: Distribution of periodontitis among males and females based on severity (Mild, Moderate, Severe)

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

Chart 5: S-Significant; NS – Nonsignificant

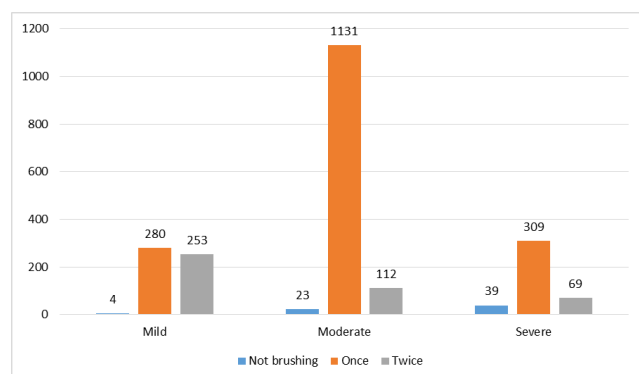


Fig. 7: Distribution of periodontitis based on frequency of brushing

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.

References

1. Fujita H. Periodontal Diseases in Jomon Peoples. *J Archaeol Soc Waseda Univ.* 1990;107:65–76.
2. Page RC, Beck JD. Risk assessment for Periodontal Diseases. *Int Dent J.* 1997;47(2):61–87.
3. World Health Organization. The WHO Global Oral Health Data Bank. Geneva: World Health Organization; 2003.
4. Government of India Ministry of Home affairs. Available from: <http://censusindia.gov.in/>.
5. Gautam A, Jain S. Assessment of prevalence of periodontal disease and treatment needs in the general population: a hospital based study. *Galore Int J Health Sci Res.* 2019;4(2):13–7.
6. Kulkarni AT, Sachdeva NL. The Problems of oral health in India. *Swasth Hind.* 1995;39:62–4.
7. Mealey BL. Influence of periodontal infections on systemic health. *Periodontol 2000.* 1999;21:197–209.

Author biography

Sandip Ghosh, Final Year PGT

Balaji R, 2nd Year PGT

Priyanka Yadav, Assistant Professor

Somen Bagchi, Professor

Cite this article: Ghosh S, Balaji R, Yadav P, Bagchi S. Prevalence of periodontal diseases among patients attending at Dr. R. Ahmed dental college & hospital, Kolkata, W.B.. *Int J Oral Health Dent* 2022;8(1):59-63.