International Journal of Research in Health and Allied Sciences
Journal home page: www.ijrhas.com
Official Publication of "Society for Scientific Research and Studies" [Regd.]
ISSN: 2455-7803

Original Research

Assessment of prevalence of periodontal diseases among villagers

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***ABSTRACT*:**
Background: Diseases of tissues surrounding and supporting the teeth are known as periodontal diseases. The present study was conducted to assess periodontal diseases among villagers. **Materials & Methods:** The present study was conducted on 580 villagers of both genders. A through oral examination was done in all subjects. The prevalence of periodontal diseases was recorded. **Results:** Out of 580 subjects, males were 320 and female child were also 260. Chronic gingivitis was present in 70 males and 58 females and chronic periodontitis in 180 males and 162 females. The prevalence of chronic gingivitis was 27% and periodontitis was 73%. Common risk factors were smoking in 210, alcoholism in 130, diabetes mellitus in 280 and hypertension in 168. The difference was significant (P< 0.05). **Conclusion:** Authors found that chronic periodontitis was seen in most of the villagers followed by chronic gingivitis.
Key words: Periodontitis, Gingivitis, Villagers

Received: 22 July, 2019 Revised: 15 August, 2019 Accepted: 18 August, 2019

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This article may be cited as: Raina K, Choudhary A, Singhai V, Azad V, Bhardwaj S, Bagaria A. Assessment of prevalence of periodontal diseases among villagers. Int J Res Health Allied Sci 2019;5(5):23-26.

INTRODUCTION

Diseases of tissues surrounding and supporting the teeth are known as periodontal diseases.[1] Periodontal disease is broadly categorized as gingivitis and periodontitis with gingivitis being an earlier reversible form of periodontal disease in which inflammation is confined to the gingiva without destruction of the supporting tissues while periodontitis is the irreversible destruction of the deeper structures of the periodontium with resultant connective tissue attachment and alveolar bone loss, periodontal pocket, tooth mobility and eventual tooth loss.[2]

Periodontal disease is the most important cause of tooth loss in individuals over the age of 45 years and along with caries, is the most frequent oral health problem in the world. Apart from the repercussions in the oral cavity, there is evidence that this disease is associated with systemic damage and problems, like preterm or low birth weight in women with periodontitis.[3]

Kolawole et al[4] observed that there is a direct effect on the prevalence of periodontal disease if access to the village health center is easy.[4] Community health centers serve as a good option for the upliftment of oral health, but due to lack of dental equipment, materials, and instruments, they are not fully functional. Most of the hospitals and teaching institutions that organize regular dental checkups and encourage people regarding the prevention and treatment of existing dental disease are located in urban areas. Therefore it is less likely for rural areas to avail benefits from these because of conveyance problem.[5] The present study was conducted to assess periodontal diseases among villagers.

MATERIALS & METHODS

The present study was conducted in department of Community Dentistry. It comprised of 580 villagers of both genders. The study was approved from the institutional ethical committee. Informed consent was obtained prior to the study.

General information such as name, age, gender etc. was recorded. A through oral examination was done in all subjects. The prevalence of periodontal diseases was recorded. Results were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of subjects

Total- 580		
Gender	**Male**	**Female**
Number	320	260

Table I shows that out of 580 subjects, males were 320 and female child were also 260.

Table II Prevalence of periodontal diseases among villagers

Periodontal diseases	Males	Females	Total
Chronic gingivitis	70	58	128 (27%)
Chronic Periodontitis	180	162	342 (73%)
Total	250 (78.1%)	220 (84.6%)	470 (100%)

Table II, graph I shows that chronic gingivitis was present in 70 males and 58 females and chronic periodontitis in 180 males and 162 females. The prevalence of chronic gingivitis was 27% and periodontitis was 73%.

Graph I Prevalence of periodontal diseases among villagers

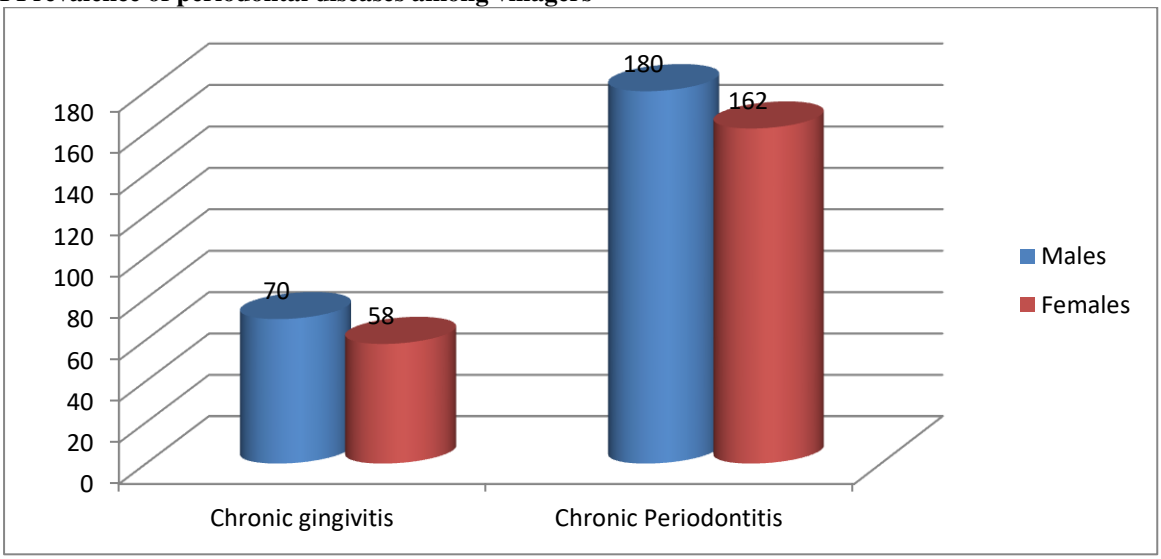
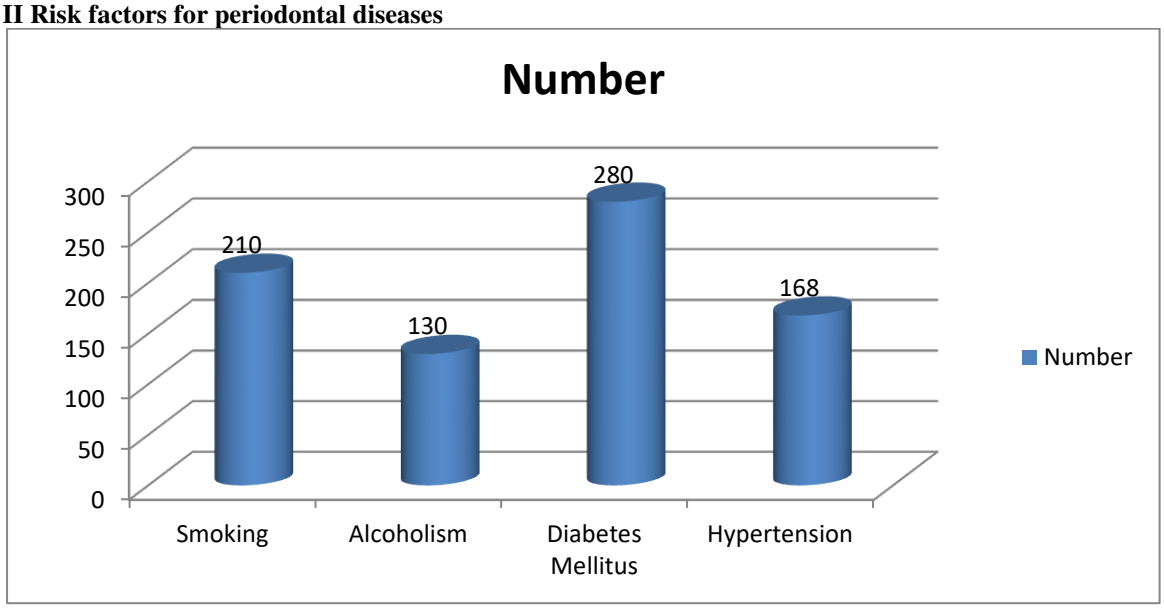


Table III Risk factors for periodontal diseases

Risk Factors	Number	P value
Smoking	210	0.05
Alcoholism	130	
Diabetes Mellitus	280	
Hypertension	168	

Table III, graph II shows that common risk factors were smoking in 210, alcoholism in 130, diabetes mellitus in 280 and hypertension in 168. The difference was significant (P< 0.05).

Graph II Risk factors for periodontal diseases



DISCUSSION

Oral health is an important aspect of overall health status of an individual. Teeth and their supporting (periodontal) structures are of main importance to oral health. Diseases of periodontium are among the most widespread diseases of mankind.[6] Periodontium is widely affected by dental plaque - a diverse microbial community found on the tooth surface, embedded in a matrix of polymers of bacterial and salivary origin.[7] If not removed regularly, plaque gels mineralized to form calculus which in turn initiates the inflammatory process of PD. Initially the inflammation is confined to gingivae leading to bleeding gums. Later, other supporting structures become involved so that small pus filled packets form around teeth and there is loss of attachment. This ultimately results in tooth mobility and tooth loss.[8] The present study was conducted to assess prevalence of periodontal diseases in villagers.

In present study, out of 580 subjects, males were 320 and female child were also 260. Chronic gingivitis was present in 70 males and 58 females and chronic periodontitis in 180 males and 162 females. The prevalence of chronic gingivitis was 27% and periodontitis was 73%. Danielson et al[9] conducted a study their study, the decline in immune and healing potential with aging impairs host response to disease thereby increasing the prevalence of periodontal disease among older individuals. The slight difference in the prevalence of periodontal disease noted in this study between the older and younger age groups may be explained by the negligible difference in tooth cleaning frequency and periodontal disease risk behavior among older participants than younger participants.

We found that common risk factors were smoking in 210, alcoholism in 130, diabetes mellitus in 280 and hypertension in 168.

The occurrence of periodontal disease has been associated with factors such as low socio-economic status, poor access to healthcare services and other health-related risk behaviors such as smoking, alcohol intake, carbohydrate-rich diets and inadequate oral hygiene which are dominant in developing countries. The information on the prevalence and determinants of periodontal disease will form the basis of developing preventive and interventional programs geared towards prevention, restoration and amelioration among individuals suffering from this condition.[10]

Okeigbemen et al[11] found that the prevalence of periodontitis was 24.4%. The following factors were all positively associated with the presence of periodontitis: being male, being 30 years of age or older, living in a house where there was more than one person per room, being a cigarette or pipe smoker or ex-smoker, having a plaque index of over 65% and more than four missing teeth. The authors concluded that socioeconomic and biological factors, especially poor oral hygiene and older age, are positively associated with periodontitis in the rural population of a small village.

Umesi et al[12] found 27% prevalence of periodontitis in fluorosis-affected patients attending Periodontics OPD. Prevalence increased with age and was significantly more among females. The prevalence should be considered keeping in mind that the population was a hospital-based one. The increased prevalence found among females could be attributed to their increased treatment-seeking behavior.

CONCLUSION

Authors found that chronic periodontitis was seen in most of the villagers followed by chronic gingivitis.

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