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Original Article

# Assessment of Prevalence of Chronic Periodontitis among Teachers of Guru Vashistha Vidyayan, Hajipur

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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 chronic periodontitis in teachers. **Materials & Methods:** The present study was conducted in 60 teachers of Guru VashisthaVidyayan, Hajipur. The presence of clinical attachment loss (CAL), periodontal probing depth (PPD) and bleeding on probing (BOP) was measured at baseline, after 3 months and 6 months. **Results:** Mean BOP score was 2.4±1.2 and 2.3±1.0 in males and females at baseline, 2.0 ±1 and 2.0±1 after 3 months and 1.2±0.4 and 1±0.6 after 6 months in males and females respectively. Mean± SD CAL was 6 mm in males and 5 mm in females II at baseline, 4 mm and 3 mm at 3 months and 1.2 mm and 1.1 mm at 6 months in males and females respectively. PPD was 4 mm at baseline in both genders, 2 mm and 3 mm at 3 months and 1.4 mm and 1.2 mm at 6 months in both subjects respectively. **Conclusion:** The CAL, PPD and BOP was almost at same level in males and females teachers. Good oral hygeine is required to prevent bone loss.

Key words: Bleeding on probing, Periodontitis, Periodontal probing depth.

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# INTRODUCTION

Pathologies of tissues in the vicinity of dental tissues are known as periodontal diseases. Periodontal disease is broadly classified 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.<sup>1,2</sup>

Commonly occurring inflammation of the gingiva is quite reversible but in some instances may provoke chronic inflammation which may have far reaching oral health and general health implications.<sup>3</sup>Periodontium may become severely inflamed resulting in damage to the connective tissue as well as alveolar bone which is known as periodontitis. In extreme cases severe periodontitis may cause painful mastication, extreme discomfort, loosening of teeth which may end up in tooth loss.<sup>4</sup>

Gingival infection and inflammation caused by microbes residing in the subgingival biofilm which incite immune responses which tend to trigger innate inflammation. Gingival epithelium produces chemokines and cytokines as a result of the bacterial assault which chemotactically attracts neutrophils. If the pathologic processes goes unabated inflammation may extend into deeper tissues and may start destruction of the connective tissues supporting the teeth and alveolar bone.<sup>5</sup> The present study was conducted to assess chronic periodontitis in teachers.

## **MATERIALS & METHODS**

The present study was conducted in 60 teachers of Guru Vashistha Vidyayan, Hajipur. 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. All teachers were carefully assessed by dental

RESULTS

#### **Table I Distribution of subjects**

surgeon. The presence of clinical attachment loss (CAL), periodontal probing depth (PPD) and bleeding on probing (BOP) was measured at baseline, after 3 months and 6 months. Results were subjected to statistical analysis. P value less than 0.05 was considered significant.

Total- 60			
Gender	Male	Female	
Number	30	30	

Table I shows that out of 60 subjects, males were 30 and female child were also 30.

#### Table II Comparison of BOP index among subjects

BOP (mean± SD)	Male	Female	P value
Baseline	2.4±1.2	2.3±1.0	
3 months	2.0±1	2.0±1	0.5
6 months	1.2±0.4	1±0.6	

Table II shows that mean BOP score was  $2.4\pm1.2$  and  $2.3\pm1.0$  in males and females at baseline,  $2.0\pm1$  and  $2.0\pm1$  after 3 months and  $1.2\pm0.4$  and  $1\pm0.6$  after 6 months in males and females respectively. The difference was non-significant (P> 0.05).



#### Graph I: Clinical attachment loss in subjects

Graph I shows that mean $\pm$  SD CAL was 6 mm in males and 5 mm in females II at baseline, 4 mm and 3 mm at 3 months and 1.2 mm and 1.1 mm at 6 months in males and females respectively. The difference was significant (P< 0.05).

# Graph II: PPD in subjects



Graph II shows that PPD was 4 mm at baseline in genders, 2 mm and 3 mm at 3 months and 1.4 mm and 1.2 mm at 6 months in both subjects respectively. The difference was significant (P < 0.05).

## DISCUSSION

The predominance of periodontal infection is very high and has been depicted as 'a grave socio- economic issue in Black Africa'. It is the most incessant oral illness, second just to dental caries and a noteworthy reason for tooth mortality among adults.<sup>6</sup> The event of periodontal infection has been related with components, for example, low socio- economic status, poor access to human services administrations and other health- related hazard practices, for example, smoking, liquor admission, carbohydrate - rich eats less carbs and lacking oral cleanliness which are overwhelming in creating countries.<sup>7</sup> The data on the predominance and determinants of periodontal sickness will shape the premise of creating preventive and interventional programs equipped towards counteractive action, reclamation and improvement among people experiencing this condition. The present investigation was directed to survey endless periodontitis in educators.

In all educators we discovered non-huge distinction of seeping on examining file. This is like Okeigbemen SA et al.<sup>8</sup>Adegbembo et al<sup>9</sup> in their examination evaluated periodontal illnesses utilizing network periodontal list while statistic qualities, social propensities and oral propensities were cleanliness evoked utilizing interview- administered poll. The predominance of gum disease and periodontitis was 75.4% and 15.4% separately. The commonness of periodontitis was higher among more seasoned members, those of lower instructive

accomplishment and longer driving background, those that enjoyed just once- daily teeth cleaning, tobacco clients, customary liquor and kolanut shoppers. The pervasiveness was higher in connection to the hazard factors considered in this investigation along these lines requiring the requirement for a mindfulness crusade to edify the general population about the destructive impacts of tobacco, kolanut and liquor on periodontal wellbeing. This examination is additionally prescribed among a bigger number of individuals.

We saw that mean± SD CAL was 6 mm in guys and 5 mm in females II at benchmark, 4 mm and 3 mm at 3 months and 1.2 mm and 1.1 mm at a half year in guys and females individually. Additionally, PPD was 4 mm at gauge in guys and females, 2 mm and 3 mm at 3 months and 1.4 mm and 1.2 mm at a half year in the two subjects individually. It is in concurrence with Akhionbareet al.<sup>10</sup> In their investigation, the decrease in safe and recuperating potential with maturing weakens have reaction to malady along these lines expanding the predominance of periodontal illness among more established people. The slight contrast in the commonness of periodontal infection noted in this examination between the more established and more youthful age gatherings might be clarified by the immaterial distinction in tooth cleaning recurrence and periodontal malady chance conduct among more seasoned members than more youthful members. The restriction of the examination is little example estimate. The neighborhood factors were not assessed.

#### CONCLUSION

The CAL, PPD and BOP were almost at same level in males and females teachers. Therefore; good oral hygiene is required to prevent bone loss. However; further studies are recommended in future.

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