

## Original Article

### Assessment of prevalence of chronic gingivitis in high school students of Guru Vashistha Vidyayan, Hajipur

Purushottam Singh<sup>1</sup>, Ashok Kumar Singh<sup>2</sup>, Kalpana Singh<sup>3</sup>

<sup>1</sup>Reader, Department of Periodontology, Patna Dental College & Hospital, Bankipur, Patna-4, Bihar, India,

<sup>2</sup>Private consultant, MDS (Oral Medicine and Radiology) Ashoka Hospital and MRC, Doctor's colony, Pokhara, Hajipur, Vaishali, Bihar, India,

<sup>3</sup>Private Practice, BDS (LMNU), Madhubala Dental Clinic, 489, Dhanauti, Rajput Nagar, Hajipur (Vaishali).

#### ABSTRACT

**Background:** Children often manifest periodontal disease as inflammation of the gingival tissue. The present study was aimed at assessing gingivitis in school children. **Materials & Methods:** The present study was conducted on 200 high school students of Guru Vashistha Vidyayan, Hajipur. All children were carefully assessed by dental surgeon. Gingival index was recorded as 0 – no inflammation, 1- mild inflammation, 2- moderate inflammation and 3- severe inflammation. **Results:** Out of 200 subjects, males child were 100 and female child were also 100. Age group 5-8 years had 8 male child and 7 female child, 8-11 years had 24 males child and 20 female child, 11-14 years had 28 male child and 32 female child and 14-17 years had 38 male child and 31 female child. Score 3 was seen in 55% male child and 43% female child, 2 in 30% male child and 25% female child, 1 in 10% male child and 20% female child while 0 in 5% male child and 12% female child. 4% male child and 8% female child never brush teeth, 72% male child and 57% female child brush once a day, 14% male child and 20% female child twice a day and 10% male child and 15% female child thrice a day. **Conclusion:** Gingivitis in school children is quite common. There is need to educate the children about good oral hygiene and their advantages.

**Key words:** Gingivitis, School children, Teeth

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**Corresponding Author:** Dr. Purushottam Singh, Reader, Department of Periodontology, Patna Dental College & Hospital, Bankipur, Patna-800004, Bihar, India

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#### INTRODUCTION

Children with adequate gingival tissues in all probability, advance to grown-up existence with great periodontal wellbeing. Past reports show that a periodontal infection is the second most regular dental issue in youngsters and grown-ups. Pediatric population regularly shows periodontal infection as irritation of the gingival tissue. As a result of these illnesses, on the off chance that they are not treated on time, the ruinous procedures are advance in both strong and delicate tissues together with losing teeth.<sup>1</sup> Periodontal maladies including gum disease and periodontitis are not childrending contamination that whenever left untreated can prompt tooth misfortune. Gum disease is reversible with expert treatment and great oral

home consideration, while periodontitis is irreversible as this advancement with obliteration of bone.<sup>2</sup>

Gum disease in children happens, as a rule, because of bacterial plaque aggregation on the cervical edges of the teeth. The measure of plaque gathering in children shifts in understanding to their tooth brushing propensity, recurrence, diet and dental caries. The seriousness of gum disease saw in youngsters could likewise rely upon the previously mentioned variables. Sex contrasts in the dimensions of plaque and gum disease has been recently detailed, where guys would in general have fundamentally bring down PI scores, yet higher gingival file (GI) scores than females.<sup>3</sup>

As indicated by the World Health Organization (WHO), oral wellbeing is indispensable to general wellbeing and basic for prosperity. Reconnaissance of oral wellbeing on network level in this way must be done at standard intervals.<sup>4</sup>The present study was aimed at assessing gingivitis in school children.

**MATERIALS & METHODS**

The present study was conducted in high school students of Guru VashisthaVidyayan, Hajipur. It comprised of 200 children 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. All children were carefully assessed by dental surgeon. Gingival index was recorded as 0 – no inflammation, 1- mild inflammation, 2- moderate inflammation and 3- severe inflammation.

Results were subjected to statistical analysis. P value less than 0.05 was considered significant.

**RESULTS**

**Table I Distribution of subjects**

<b>Total- 200</b>		
<b>Gender</b>	<b>Male Child</b>	<b>Female child</b>
Number	100	100

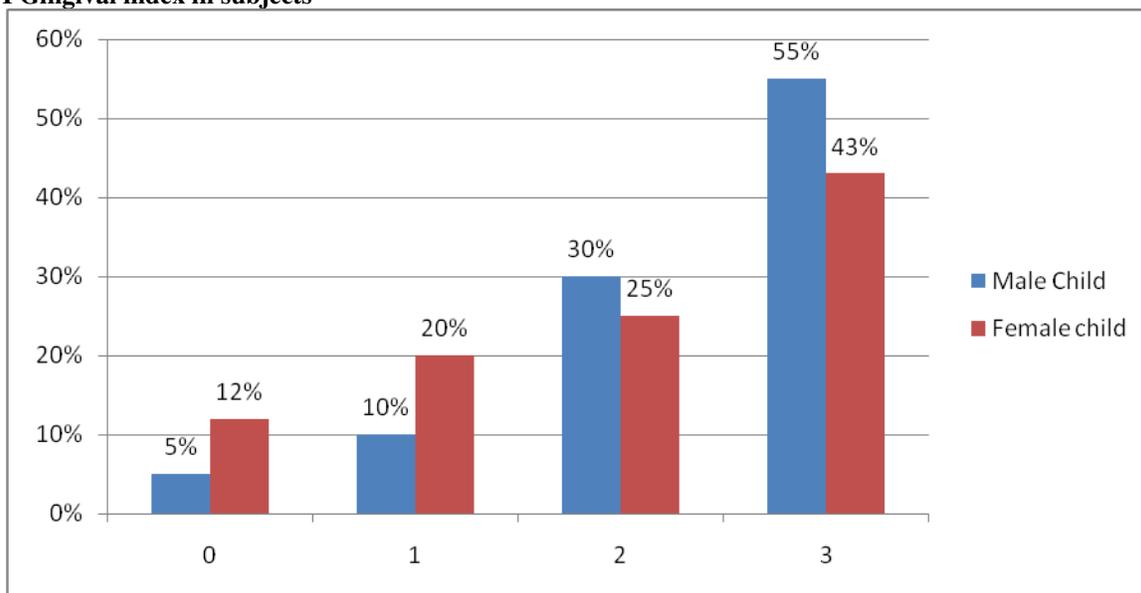
Table I shows that out of 200 subjects, males child were 100 and female child were also 100.

**Table II Age wise distribution of subjects**

Age group	Male Child	Female child	P value
5- 8 years	8	7	0.21
8-11 year	24	20	
11-14 year	28	32	
14-17 years	38	31	

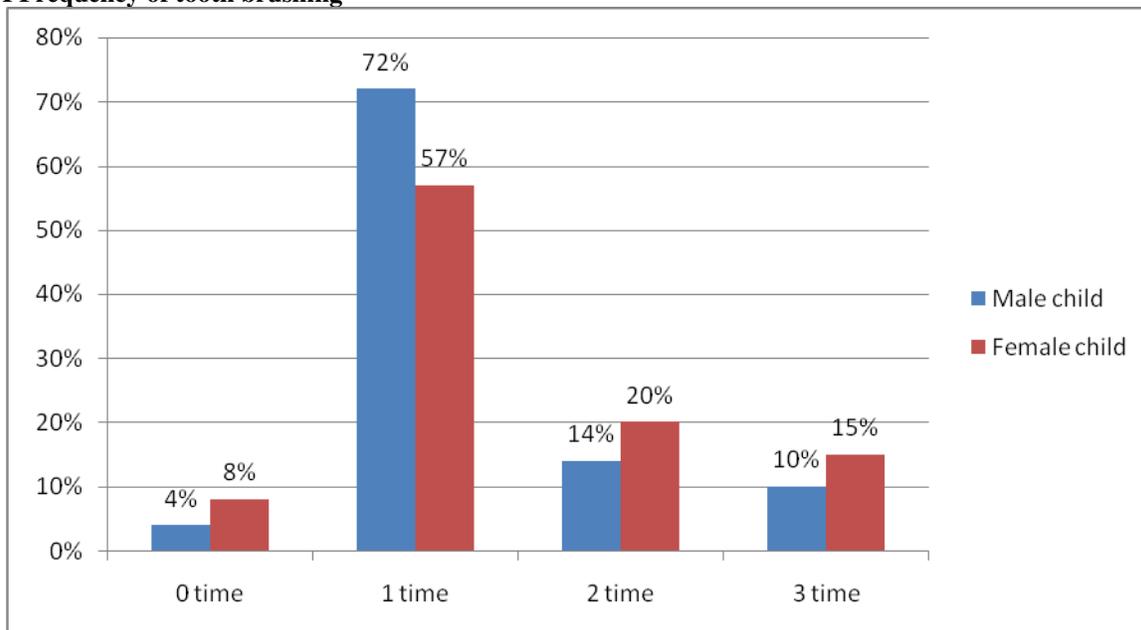
Table II shows that age group 5-8 years had 8 male child and 7 female child, 8-11 years had 24 males child and 20 female child, 11-14 years had 28 male child and 32 female child and 14-17 years had 38 male child and 31 female child. The difference was non- significant (P> 0.05).

**Graph I Gingival index in subjects**



Graph I shows that score 3 was seen in 55% male child and 43% female child, 2 in 30% male child and 25% female child, 1 in 10% male child and 20% female child while 0 in 5% male child and 12% female child. The difference was significant (P< 0.05).

**Graph I Frequency of tooth brushing**



Graph II shows that 4% male child and 8% female child never brush teeth, 72% male child and 57% female child brush once a day, 14% male child and 20% female child twice a day and 10% male child and 15% female child thrice a day.

**DISCUSSION**

Adequate daily removal of bacterial plaque prevents periodontal diseases and tooth decay. The foremost common and effective thanks to promote oral hygiene are tooth-brushing; so brushing is usually recommended to be adopted as a habit that is recurrent each morning and evening, a minimum of double every day. Additionally to improved oral hygiene, that prevents periodontal diseases, frequent brushing with halide dentifrice will increase the resistance of dentition to tooth decay.<sup>5</sup>

Tooth brushing and different behaviors that comprise lifestyle of adolescents could directly or indirectly affect their health within the short or long run. Majority of the habits are achieved during childhood. Oral health behavior could represent associate integral a part of associate individual’s mode. It’s essential to develop good teaching programs for oral health and observe targeted at youth.<sup>6</sup>The current study aimed toward assessing periodontal disease at school going children.

We found that people 5-8 years had eight youngster and seven female paediatric population, 8-11 years had twenty four males children and twenty female paediatric population, 11-14 years had twenty eight youngster and thirty two female paediatric population and 14-17 years had thirty eight youngster and thirty one female paediatric population.

Kolawoleet al<sup>7</sup> in their study found that solely twenty nine.8 % had healthy gum, 38.5 available delicate periodontal disease, 31.4 available moderate periodontal disease, and 0.3 available severe periodontal disease. The

distinction between each genders wasn't statistically important P >0.05. 36.8 % of the examined students ne'er brushed their teeth. Average animal tissue index (GI) and average plaque index (PI) were 0.77 and 0.61 severally.

Poor oral health has so the potential of hampering the standard of life. decreased food intake due to oral pain or poor dental standing will cause low growth in youngsters and will worsen the biological process standing. Pain may additionally have a negative impact on the flexibility to interact in social relations and children may not get the complete good thing about their education if laid low with pain and discomfort. whereas poor dental standing among youngsters contains a negative result on speech development, it should even have a socially stigmatizing result in adolescents poignant social acceptance. but there's no definite image, nevertheless relating to the illness standing among youngsters in rural and backward areas of country.<sup>8</sup>

Fotedaret al<sup>9</sup> found the prevalence of periodontal disease, among school-going youngsters of urban and rural areas of Bhopal district, India. The current descriptive, cross-sectional study was conducted among twelve & fifteen male recent middle and college high school government rural and concrete school youngsters of Bhopal district. it had been conducted of a amount of 2 months. 1100 youngsters were examined by mistreatment World Health Organization (modified) oral health assessment kind. Prevalence of periodontal disease was fifty nine found. 584 (53.09 %) youngsters had delicate periodontal disease, 61(5.5%) youngsters had moderate periodontal disease.

We found that score three was seen in fifty five youngster and forty three female paediatric population, a pair of in thirtieth youngster and twenty five female paediatric population, one in tenth youngster and twentieth female paediatric population whereas zero in fifth youngster and twelve-tone music female paediatric population. four youngster and eight female paediatric population ne'er brush teeth, seventy two youngster and fifty seven female paediatric population brush once every day, one hundred forty youngster and twentieth female paediatric population double every day and tenth youngster and fifteenth female paediatric population thrice every day. This was in agreement with Dharet al.<sup>10</sup>

## CONCLUSION

Under the light of above obtained results, the authors concluded that gingivitis in school children is quite common. There is need to educate the children about good oral hygiene and their advantages.

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