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# PREVALENCE OF ORAL HABITS AMONG CHILDREN ATTENDING PATNA DENTAL COLLEGE AND HOSPITAL PATNA BIHAR: A CROSS SECTIONAL STUDY

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## ABSTRACT

**Aim:** The present study was conducted to study the prevalence of oral habits in 5 to 12 year old children in Patna Bihar, India. **Methods:** A total of 1327 school children aged 5 to 12 years reporting to the department of pedodontics were selected for the study. A thorough history was obtained on a specially designed proforma and presence or absence of oral habits like thumb/finger sucking, tongue thrusting, mouth breathing, lip biting, nail biting and bruxism were recorded. The results obtained were processed using Microsoft Office Excel 2010® worksheet and a descriptive statistical analysis was done. **Results:** The prevalence of oral habits was found to be 31.95% in the present study. Tongue thrusting was the most prevalent oral habit affecting 15.22% of children. The second most common oral habit was mouth breathing habit which was found to be 12.96%. The least common oral habit was found to be 0.38%. **Conclusions:** Oral habits play very important role as the one of the most common cause of the development of the malocclusion. So, early diagnosis and proper treatment planning of these habits will reduce the occurrence of malocclusion.

**KEYWORDS:** Thumb sucking; Tongue thrusting; Mouth breathing; Oral habits; Lip Biting.

#### **INTRODUCTION**

Oral habits, especially if they persist beyond the preschool age, have been implicated as an important environmental etiological factor associated with the development of malocclusion.<sup>[1]</sup> Early recognition of the present of oral habits and proper planning to stop them is so important to avoid harmful effect on the developing occlusion. The American Academy of Pediatric Dentistry (AAPD) states a policy to encourage the treatment of oral habits so as to prevent and intercept the occurrence of malocclusions and skeletal dysplasia.<sup>[2]</sup> In India overall prevalence of oral habits has been reported to be as low as 3% among the children of Ambala- North India,<sup>[3]</sup> and 29.7% in Mangalore-South India.<sup>[4]</sup> respectively. The fingersucking habit, normal in the first two or three years of life, may cause permanent damage if continued beyond this time.<sup>[5]</sup> Thumb and finger sucking habits, or non-nutritive sucking are considered to be the most prevalent of oral habits, with a reported incidence ranging from 13% to almost 100% at some time during infancy.<sup>[6]</sup> Oral habits play significant role in altering the position of the teeth, the inter-arch relationship, interfering with the normal growth of the jaws and the function of the orofacial musculature.<sup>[7]</sup>

## MATERIALS AND METHODS

A total of 1327 children reporting to the Department of Pedodontics of age 5-12 years were included in the study. Patients with previous orthodontic treatment, trauma in the maxillofacial region, surgical treatment in maxillofacial region, premature loss of primary teeth. mental retardation and any systemic diseases were excluded. The study was approved by the ethical committee. Written informed consents were obtained from all the parents. Each child was subjected to a thorough history and clinical examination. A thorough history was obtained included the personal data (age, gender, and address), presence or absence of oral habits like thumb/finger sucking, lip biting, tongue thrusting, mouth breathing, nail biting and bruxism. The results obtained were processed using Microsoft Office Excel 2010® worksheet and a descriptive statistical analysis was done.

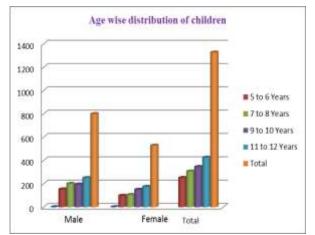
#### RESULTS

Out of 1327 children 799 children were males and 528 children were females. The prevalence of oral habit was found to be 31.95%. The most common oral habit was tongue thrusting which was found to be 15.22% followed

by mouth breathing (12.96%), thumb sucking (2.11%), nail biting (0.83%), bruxism (0.45%) and lip biting (0.38%). In females the most common oral habit was found to be tongue thrusting (18%) whereas in males the most common oral habit was found to be mouth breathing (15%). In females the least common oral habit was found to be bruxism (0.3%) whereas in males the least common oral habits were found to be lip biting and bruxism (0.3%).

Table 1: Age wise distribution of children.

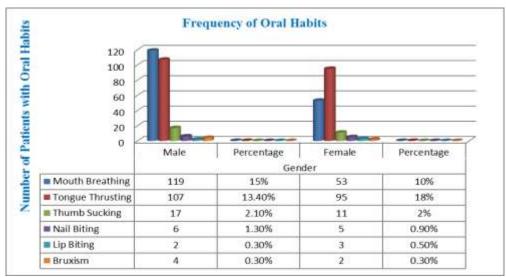
Age (Years)	Gender		Total	
	Male	Female	Total	
5 to 6	153	98	251	
7 to 8	201	105	306	
9 to 10	195	150	345	
11 to 12	250	175	425	
Total	799	528	1327	



Graph 1: Age wise distribution of children.

<b>Table 2: Frequency</b>	of Oral Habits.
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Oral Habit	Gender				Total	Domontogo
Oral Habit	Male	Percentage	Female	Percentage	Total	Percentage
Mouth Breath	119	15%	53	10%	172	12.96%
Tongue Thrusting	107	13.4%	95	18%	202	15.22%
Thumb Sucking	17	2.1%	11	2%	28	2.11%
Nail Biting	6	1.3%	5	0.9%	11	0.83%
Lip Biting	2	0.3%	3	0.5%	5	0.38%
Bruxism	4	0.3%	2	0.3%	6	0.45%
Total	255	19.23%	169	12.74%	424	31.95%



Graph No. 2: Frequency of Oral Habits.

#### DISCUSSION

The prevalence of oral habit in this study was found (31.95%) which in consistent with previous studies.<sup>[8]</sup> and lower than the result reported by Santos SA et al among Brazilian preschool children.<sup>[9]</sup> In the present study, Tongue Thrusting habit was the most frequent (15.22%) which is more than the result reported by Mai I. Omer, Amal H. Abuaffan.<sup>[10]</sup> In the present study

mouth breathing was the second most common oral habits (12.96%). Pruneda et al reported that mouth breathing was the second most common habit (9.5%) among Mexican preschool children and boys being more predominant.<sup>[11]</sup> In the present study lip biting was the least common oral habit (0.38%).

#### CONCLUSION

The Pedodontics can play a very crucial role in early detection of oral habits and they can prevent and intercept the dental problems as soon as possible to get the better results. And Proper Corporation should be achieving between the doctor, parent and the child so as to get the perfect smile for the youngster.

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