



FREQUENCY OF ORAL HABITS AMONG 3-13 YEAR OLD CHILDREN IN PUNJAB - A SCHOOL BASED SURVEY

Dental Science

Dr. Rohini Dua

Prof. & Head of Department of Pediatric & Preventive Dentistry, National Dental College & Hospital, Derabassi, S.A.S Nagar, Punjab.

Dr. Heena Rani

Postgraduate Student, Department of Pediatric & Preventive Dentistry, National Dental College & Hospital, Derabassi, S.A.S Nagar, Punjab.

ABSTRACT

Background: Oral habits are learned pattern of muscle contraction and have a complex nature. It is classified as physiological such as nasal breathing, chewing, phonoarticulation and swallowing, and non-physiological habits which are often called harmful or parafunctional such as thumb or lip sucking, mouth breathing and tongue thrust. An oral habit in infancy and early childhood is normal. It is considered abnormal over 3 years old. The persistence of the oral habits have little effect on the child's health but can affect the facial growth. So, the present study was conducted to assess the prevalence of oral habits among 3-13 year old children in Dera Bassi, punjab.

KEYWORDS

oral habits, parafunctional habits and prevalence

INTRODUCTION:

A habit is defined as an automatic repetitive action as a result of complex natural process involving muscle contraction. Habit may be a normal or an abnormal habit. Normal habits serve as a constructive role in growth pattern while abnormal habits may lead to disturbances in normal growth pattern (1).

Oral habits are learned patterns of muscle contraction and have a very complex nature. Persistent oral habits beyond the normal age have been considered as an important factor which may lead to the malocclusion. Anterior open bite, posterior crossbite, incisor protrusion, lip incompetence distal step molar relation are some of the common negative consequences caused by the prolonged oral habits. The extent of these disturbances varies from child to child depending on their actual skeletal and dental relationship and their inherent actual habit (2).

According to Yassaei et al (2004) The prevalence of oral habits in high school students and primary school students have been reported to be 87.9 and 30% respectively (9). Quashie-Williams et al (2007) found that 34.1% of children were having deleterious oral habit (8).

According to many researchers finger sucking and nail biting are the most frequent ones present during childhood. Digit sucking is more common among young children while nail biting in older children. This finding may be attributed to the fact that digit sucking is closely related to the child's psychoemotional maturity and considered as normal phenomenon in the first 2 years with a reported prevalence of 20 to 30%. From the age of 4 to 7 years, finger sucking has been reported to have prevalence between 5 and 17% in different populations. Other oral habits, such as lip biting, tongue thrusting, lip sucking, bruxism are sometimes observed in children but to a lesser extent. Their lower prevalence rates could be due to difficulty to notice such oral habits (3).

The present study was conducted with aim of knowing the prevalence of oral habits in 3 to 13 years old children of Dera Bassi, so that their deleterious effects can be prevented and eradicated.

MATERIALAND METHODS:

The study included 516 children of age 3 to 13 years, belonging to Dera Bassi. Children were examined on an upright chair using torch light, mouth mirror and straight probe. Prevalence rates of different oral habits were studied and calculated.

Inclusion Criteria:

- Children aged 3 to 13 years.
- Children whose parents or legal guardians provided written informed consent.
- Children who were physically and mentally fit to participate in the study.

Exclusion Criteria:

- Children with any medical condition that could affect their oral

health.

- Children with a history of orthodontic treatment.
- Children with a history of orofacial trauma.
- Children with special needs or disabilities.
- Children whose parents or legal guardians did not provide written informed consent.

RESULTS:

The overall prevalence of oral habits in this study was found to be 6.39%.

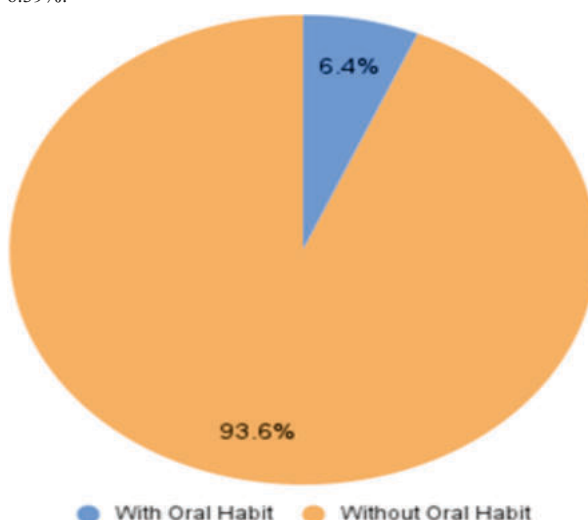


Figure 1: Overall Prevalence of Oral Habit

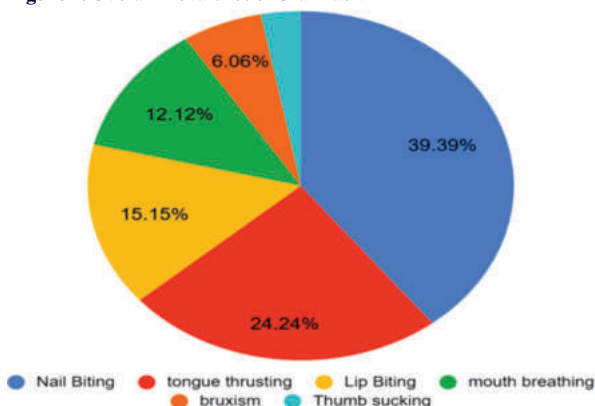


Figure 2: Distribution of Common Oral Habits Among Children

The results showed that most common habits were nail biting (39.39%), followed by tongue thrusting (24.24%), lip/cheek biting

(15.15%), mouth breathing (12.12%), bruxism (6.06%), and Thumb sucking (3.03%).

DISCUSSION:

One of the contributory factors in the establishment of improper occlusion is child's deleterious oral habits. Development of these parafunctional habits in the preschool age children is considered as a sign of distress and emotional instability. Children practice these anomalous habits as a way to attract attention, possibly because they find themselves in a violent family environment, lack of parental attention, lack of emotional maturity, or constant changes in the family.

Nail biting was seen in 39.4% of children in our study which is very high compared to the prevalence reported by **Garde et al.,(2014)** **Shetty and Munshi (1998)**, and **Sharma et al., (2015)**, who reported a prevalence of 5.8%, 12.7%, and 3%, respectively (3,5,6).

Baydaş et al., (2007) have reported an increased prevalence of Enterobacteriaceae in the oral cavities of children having nail-biting habit (2).

Study conducted by **Onyeaso and Sote (2001)** reported a high prevalence of oral habits (13.14%) among Nigerian preschool children (7).

Tongue thrusting was reported in 24.2% of children. **Shetty and Munshi (1998)**, **Kharbanda et al.,(2003)** and **Amitha and Arun (2009)** have reported tongue thrusting prevalence to be 3.02%, 18.1%, and 33.65%, respectively.

Besides, poor physical health and chronic illness, infancy can also predispose to the development of these habits. Many authors in most of the studies mentioned that oral habits, if persisted beyond preschool age, play a significant role in the development of dental anomalies and malocclusion as they produce a disequilibrium between the intra and extraoral muscular activities (1,4,5).

CONCLUSION:

Oral habits, if they persist beyond the preschool age, have detrimental effects on the developing dentition, oral functions, and facial esthetics. The present study provides an insight into the prevalence of oral habits. The results of this study also warrant the need for educating the children, parents as well as teachers about the deleterious effects produced by such habits on the development of normal occlusion and importance of timely intervention.

REFERENCES:

1. Amita MH, Arun MX. Childhood habits: Ignorance is not bliss – A prevalence study. *Int J Clin Pediatr Dent* 2009;2:26-9.
2. Baydaş B, Uslu H, Yavuz I, Ceylan I, Dağsuyu IM. Effect of a chronic nail-biting habit on the oral carriage of enterobacteriaceae. *Oral Microbiol Immunol* 2007;22:1-4.
3. Garde JB, Suryavanshi RK, Jawale BA, Deshmukh V, Dadhe DP, Suryavanshi MK, et al. An epidemiological study to know the prevalence of deleterious oral habits among 6 to 12 year old children. *J Int Oral Health* 2014;6:39-43.
4. Kharbanda OP, Sidhu SS, Sundaram K, Shukla DK. Oral habits in school going children of Delhi: A prevalence study. *J Indian Soc Pedod Prev Dent* 2003;21:120-4.
5. Sharma S, Bansal A, Asopa K. Prevalence of oral habits among eleven to thirteen years old children in Jaipur. *Int J Clin Pediatr Dent* 2015;8:208-10.
6. Shetty SR, Munshi AK. Oral habits in children – a prevalence study. *J Indian Soc Pedod Prev Dent* 1998;16:61-6.
7. Onyeaso CO, Sote EO. Prevalence of oral habits in 563 Nigerian preschool children age 3-5 years. *Niger Postgrad Med J*. 2001 Dec;8(4):193-5.
8. Quashie-Williams R, daCosta OO, Isiekwe MC. Oral habits, prevalence and effects on occlusion of 4-15 year old school children in Lagos, Nigeria. *Niger Postgrad Med J*. 2007;17(2):113-7.
9. Yassaie, S., Rafieian, M., & Ghafari, R. Abnormal oral habits in the children of war veterans. *Journal of Clinical Pediatric Dentistry*, 2004; 29(3), 189–192.