

## **THE IMPORTANCE OF ORAL HABITS AND ITS IMPACT ON THE JAW-DENTAL SYSTEM**

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### **ABSTRACT**

#### **Introduction**

*Whether poor habits and mouth breathing contribute to the etiopathogenesis of malocclusions is still up for dispute. Beyond this debate, the prognosis is significantly impacted anytime these issues are linked to malocclusion and need to be resolved to guarantee a functioning environment suitable for physiological development. Certain neuromuscular actions have an etiological purpose, whereas others are created to compensate for dent alveolar or skeletal abnormalities*

#### **Methods**

*The proposal was accepted by the authors' institute's Scientific and Ethical Committee following submission and review of the study protocol. The Declaration of Helsinki was adhered to in this investigation, meaning that before each child was included in the trial, their parents or legal guardians were fully informed about the study's design, goals, and anticipated benefits.*

#### **Results**

*Tooth decay (29%) were the major teeth problem, followed by tooth sensitivity (15%) and Gum diseases (12%).*

#### **Conclusion**

*Early dental interventions, the incidence of dental and skeletal complications caused by such oral habits can be reduced.*

**KEYWORDS:** *Oral Habits, Jaw, Dental Diseases*

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### **INTRODUCTION**

Whether poor habits and mouth breathing contribute to the etiopathogenesis of malocclusions is still up for dispute. Beyond this debate, the prognosis is significantly impacted anytime these issues are linked to malocclusion and need to be resolved to guarantee a functioning environment suitable for physiological development. Certain neuromuscular actions have an etiological purpose, whereas others are created to compensate for dent alveolar or skeletal abnormalities.<sup>1-3</sup>

Numerous environmental factors, including eating habits particularly the contemporary tendency toward eating soft-consistency meals with less masticator forces as well as non-nutritive sucking behaviors like finger and pacifier

sucking and early weaning have been linked to malocclusion, according to some research. Atypical swallowing, anterior open bite, posterior cross bite, protrusion of the upper incisors and premaxilla, and infant bottle and pacifier sucking are all common consequences of these behaviors.<sup>4-5</sup>

An automatic activity that may be boring and repetitive is called a habit. Pediatricians frequently address harmful habits and how they affect a person's quality of life. In the mouth, bad habits are a common behavior. These include chewing one's nails, grinding one's teeth in addition to mouth breathing, and nonnutritive sucking of the lips, pacifier, and thumb. Higher intensity and longer length of oral habits may cause muscle imbalance in developing dental structures, which will result in malocclusion, facial deformity, and slurred speech.<sup>6</sup>

Bad dental habits, such as biting nails and sucking fingers, might, nevertheless, have negative consequences. By destroying the mouth's structure, they may cause imbalances and disruptions in the jaw's development, poor dental positioning, malocclusion, and distortion of the harmony of the face and oral cavity. Additionally, by changing the oral microflora, they may contribute to gum disease and tooth decay. In the meantime, they could result in the spread of numerous infectious diseases, respiratory issues, trouble speaking, muscular imbalance, and psychological issues. The type, look, and duration of the habit will determine how severe these negative impacts are.<sup>7-8</sup>

A etiological causes for mouth breathing can be obstructive, including deviation of the nasal septum and palatine and par pharyngeal tonsillar hypertrophy. When caused by extended oral habits, muscle changes, temporary oedema of the nasal mucosa, such as intermittent rhinitis, and corrected airway blockage, they can also be characterized as functional.<sup>9-10</sup>

Since most writers agree that nose breathing is essential to the healthy development of the oral cavity, obstruction of the upper respiratory airway may have a detrimental effect on the development of the skeleton and teeth, leading to the following characteristic features: Skeletal Class II or Class III profiles, long face, narrow maxilla, high palatal vaults, open mouth, crossbite, displacement, shortened upper lip, everted lower lip, and forward head posture The purpose of this study is to find out the importance of oral habits and its impact on the jaw-dental system.<sup>11</sup>

## **METHODS**

The proposal was accepted by the authors' institute's Scientific and Ethical Committee following submission and review of the study protocol. The Declaration of Helsinki was adhered to in this investigation, meaning that before each child was included in the trial, their parents or legal guardians were fully informed about the study's design, goals, and anticipated benefits. This was carried out upon the receipt of their signed written consent, which guaranteed participants the freedom to leave the study at any time, should they so choose.

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A multi-stage cluster random sampling procedure was used in this study to choose the sample. The first step involved enrolling 100 primary school pupils who fit the desired age range of 6 to 12 years. They were affiliated with nine primary schools that were chosen at random since they were located in various parts of Jeddah City.

A specially designed questionnaire was used to collect data for this cross-sectional investigation. A questionnaire including both demographic and dental health-related issues. Following a series of conversations amongst the panel of experts which included a subject specialist, researcher, and language expert the questionnaire was created. The questionnaire's Cronbach alpha was computed.

Data was coded and entered into the SPSS ver.20 program after it was collected in order to analyze descriptive statistics (mean standard deviation, frequencies, and percentages were calculated) and determine whether there were any significant differences. At the 5% significance level, the chi-square test was applied.

### RESULTS

The cronbach alpha of the questionnaire was 0.81, Total respondents were 300 (response rate was 96%).

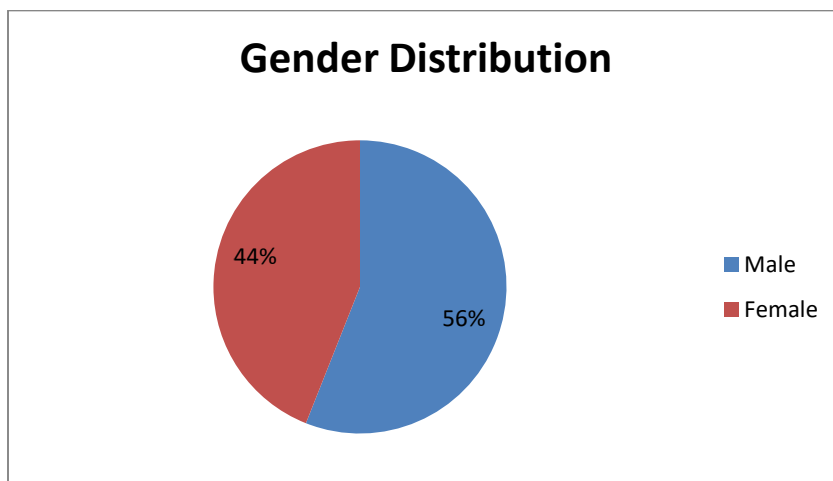


Figure 1: Gender Distribution.

As per figure 1, out of 300 respondents 44% were females while 56% were male students.

The mean age and S.D of the age of the student was 14.6 (9.3)

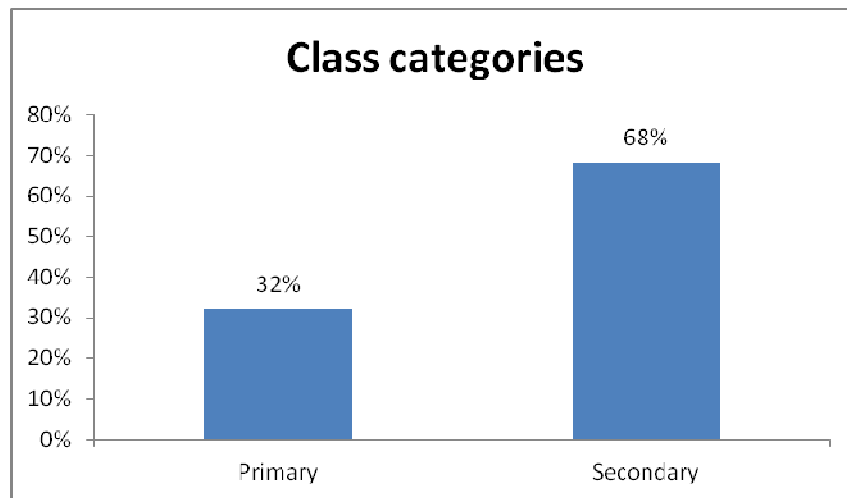


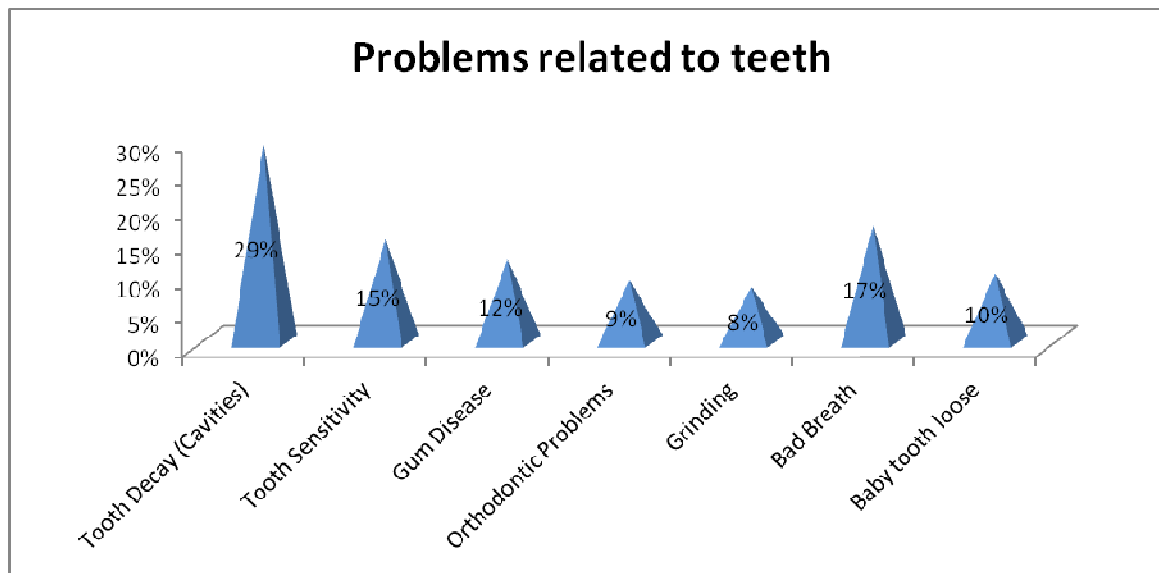
Figure 2: Class Categories.

As per figure 2, 32% were belongs to primary classes while 68% were belongs to the secondary classes.

**Table 1: Gender Wise Comparisons Regarding Bad Habits**

Table 1	Bad Habits (Nail Biting, Finger Sucking)		
	Yes	No	p
Male	68	100	N.S
Female	45	87	

Table 1 described the comparisons of bad habits among gender and we did not get any significant differences p-values is not less than 0.05



**Figure 3:**

As per figure 03, tooth decay (29%) were the major teeth problem, followed by tooth sensitivity (15%) and Gum diseases (12%).

**Table 2: Comparison between Classes and Bad Habits**

Classes	Bad Habit (Nail Biting, Finger Sucking)	
	Yes	No
Primary	75	21
Secondary	38	166
p<0.05		

As per table 02 we have observed significant differences regarding bad habits among secondary and primary class students.

**Table 3 Comparisons of Bad Habits with Dental Diseases:**

Bad Habits	Dental Diseases	
	Yes	No
Yes	100	113
No	35	152
p<0.05		

As per table 03, bad habits had an significant impact over the dental diseases prevalence's.

P values was less than 0.05

## **DISCUSSION**

The topic of oral habits has been of interest to dentists, particularly pediatric dentists. It was discovered that younger children exhibited comparatively a greater number of thumb sucking practices than did older children.

This is consistent with other studies; this could be because, as a child gets older, his or her desire to suck decreases and, more likely than not, the child will kick the habit on their own initiative, whilst other kids will likely need parental encouragement to kick the habit. The psychoanalytic theory's facts which indicate that as children get older, they are likely to break some habits and hold onto others can be used to demonstrate this. 5-6 In terms of gender, we didn't see any notable variations. The findings of earlier research indicated a strong correlation between children's age and dental habits: younger children were found in the non-nutritional sucking group and bruxism group, while older children were discovered in the nail biting group. The Gulf-based study found a statistically significant decrease in the prevalence of finger sucking in children between the ages of 3 and 6; these results were consistent with our observations.12-14

The lack of participation from the kid and parents, the parents' inadequate understanding of oral habits, or the potential for parent bias in the questions they answered are some of the drawbacks of this study.

It is recommended that further study be conducted in this area in the future with the goal of examining the many factors influencing the prevalence of oral habits and the difficulties associated with them.

## **CONCLUSION**

The incidence of oral habits and children's age were shown to be significantly correlated, according to the study's findings. Thus, by recognizing this sensitive age range, providing the parents with the necessary training, and conducting the required early dental interventions, the incidence of dental and skeletal complications caused by such oral habits can be reduced.

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