

## **Prevalence of bad oral habits and it's relation with age in a sample of school students in Al-Mahmoodia city**

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### **Abstract:**

#### **Background**

Oral habits should be of primary clinical concern to orthodontist because they may cause malocclusion and interfere with treatment progress.

#### **Materials and Methods:**

A total of 60 patients were selected from students of relatively fair socioeconomic status background taken from primary, secondary and high schools of which a questionnaire and clinical examination to certify the presence of oral habits and examination of the types of malocclusion.

#### **Results**

Gender differences were shown between males and females where females show greater number than males in digit sucking, lip biting, while males were greater in tongue thrust, mouth breathing, bad oral habits seen most likely of all kinds in any age range of (12-18), and most common type is lip biting then mouth breathing then digit sucking.

#### **Conclusion**

Digit sucking continued to decrease with age, tongue thrust increased with age until the age of 12 years where it starts to decrease.

#### **الخلاصة :**

لقد تبين من هذه الدراسة التي شملت طلبة المدارس التي تتراوح فئاتهم العمرية من ٦ سنوات إلى ٢٠ سنة والذي تم أخذها من مدارس مدينة المحمودية ومن كلا الجنسين بان هذه الحالات قد تؤدي بالمستقبل إلى حالات مرضية تحتاج إلى معالجتها.

### **Introduction**

Abnormal oral habits operate so quietly unconsciously that even the patient is frequently unaware, until finally it is pre-formed entirely unconsciously, becoming apart of the routine of the mind from which the consciously is removed [2]. thumb sucking habits are often considered within broad category of habits that includes finger sucking, hence thumb and finger sucking habits more generally termed digit- sucking habit[10]. The etiology is unclear till now but [11] started that thumb sucking is necessarily a symptom of psychopathology. Prevalence of initial finger sucking in western world is 75% -95%[5]. prevalence of malocclusion is higher in children with sucking habits than in those without the habit at 3-12 years of age [4]., there are different factors affecting the severity of malocclusion like frequency and duration [1]and intensity like[14]. Tongue thrust is an infantile habit, which begins only in infancy, therefore it doesn't increase with age [12].

This study was done to find out the prevalence and distribution of each oral habit (digit sucking, tongue thrust, mouth breathing, lip biting) in a sample of students of 6-20 years old and correlate the habit variable (frequency, intensity and duration) to malocclusion.

### **Materials and Methods**

The sample examined in this study were students of a relatively fair social economic background taken from primary, secondary and high schools of which 23 primary school students (14 boys and 9 girls) and 26 secondary school students (14 boys and 12 girls) and 11 high school students (6 boys and 5 girls). So the total number included in this study was 60 students of both sexes. In the examination of those students the following instruments were used millimeter graded vernier, plain mouth mirror,

indelible pencil, disinfectant solution and cotton. The sample was investigated in steps were questionnaire (figure.1), clinical examined to certify the presence of oral habits and examination of the types of malocclusion, after the past examination those who had the habits were given a case sheet to fill with their parents.

**(Figure – 1): - Case sheet (questionnaire)**

<b>name:</b>	<b>sex:</b>	<b>age:</b>
<b>sequence between brothers and sisters</b>		
<b>level of education of the student</b>		
<b>level of education of the parents</b>		
<b>financial status</b>		
<b>type of bad habit? Is there more than one habit.</b>		
<b>a- digit sucking</b>		
<b>b- tongue thrust</b>		
<b>c- mouth breathing</b>		
<b>d- lip biting</b>		
<b>e- bruxism</b>		
<b>duration</b>		

## **Results**

1- Distribution according to sex :

From (table - 1 )we can see that number of the females higher than males in digit sucking habit, the females about 19 patients while males 16 patients. In the tongue thrust we can see the males higher than females. The males about 16 patient while females 12 patients. In mouth breathing the number of the males higher than females, the males about 19 patients while females about 17 patients. In the lip habit the females higher than makes, the females about 22 while the males about 17 patients. In the bruxism habit the number of the patient in this habit about 10 patient which distribution in no patient in 6-8 year, and 1 patients in all the remain ages.

2- Distribution according to age :

From the (table- 2) we can see that number of the patients in the digit sucking habit about 15 patients which distribution 5 patients at age 6-8 year, 4 patients at age 9-11, 3 patients at age 12-14 years 2patients at age 15-17 year and 1 patient at age 18-20 year. The number of the patient of the tonque thrust habit about 8 patients which distribution in 1 patient at age 6-8 year, 2 patients at age 9-11 year, 3 patients at age 12-14 year, 1 patient at age 15-17 year and 1 patient at age 18-20. in the mouth braething habit, the number of patients about 16. which distribution in 2 patients at age 6-8 year, 3 patients at 9-11year, 5patients at 12-14year, 4 patients at 15-17 year and 2 patients at 8-20 year.in the

lip biting the number of patients about 17 patients which distribution in 1 patient at 6-8year, 2 patient at 9-11 years, 6 patients at 12-14 year, 4 patients at 15-17 year and 4 patients at 18-20 years.

**(Table-1):- the distribution of habits according to the sex**

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Habit group	Digit sucking		Tongue thrust		Mouth breathing		Lip biting		bruxism		total
	Female	male	Female	male	Female	male	Female	male	Female	male	
	19	16	12	16	17	19	22	17	4	6	
35		28		36		39		10			

**(Table -2):- the distribution of habits according to age**

Age group	Digit sucking	Tongue thrust	Mouth breathing	Lip biting	bruxism	total
6-8	19	2	11	5	-	
9-11	7	9	10	12	1	
12-14	5	13	8	13	2	
15-17	3	3	5	4	4	
18-20	1	1	2	5	3	
total	35	28	36	39	10	158

**(Table -3): Significant correlations of the habits**

Habit variable	Digit sucking	Tongue thrust	Mouth breathing	Lip biting	bruxism
Duration	0,04 S.	0,03 S.	0,04 S.	0,03 S.	0,04 S.
Intesity	0,007 H.S.	0,008 N.S.	0,04 S.	0,09 S.	0,06 N.S.
frequency	0,03 S.	0,07 N.S.	0,06 N.S.	0,07 N.S.	0,07 N.S.

P 0.05 S.  
 P 0.01 H.S  
 P 0.05 N.S

**Discussion:**

The present study represent a different population from the geographic and social point of view and differ from most of previously investigated subjects by distribution according to sex and age .

1- Digit sucking :

according to (table -2) the number of patient which suffering digit sucking about 35 patient about (90%), distributed according to age. The digit sucking decrease with age, in agreement with [13]. This decrease in prevalence may be due to maturation of the subjects , which will cause embarrassment from the habit [8].

2- tongue thrust : according to ( table-2) the number of the patients effected by tongue thrust was 28 from the total sample distributed according to age about 4.8% . which show that tongue thrust increase

with age until 12 years old then it start, to decrease gradually this may be due to maturation of path of swallowing at this stage (12 years).

3- Mouth breathing :

According to (table -2) the number of the patient suffering mouth breathing was 16 patient about 9.6% which is differ from the range registered by [2], 7.96% and [6] 5.5 % and lower than [3], 27.3%.

4- lip biting : according to table no. 2 the number of patient have lip biting habit was 39 about 10.2% which higher than [14], which was about 3.8 distributed according to age.

5- Brixism:

According to (table- 2) the number of patients which have bruxism problem was constant range in all yhe age which about 10 patient from the total sample. Which equal 2.4%, which near to the [14] was 1.2%.

**Conclusion:**

- 1- Digit sucking continued to decrease with age.
- 2- Tongue thrust increased with age until the age of 12 years where it starts to decrease .
- 3- Mouth breathing was about to be constant with age.
- 4- Lip habits had its sudden indrease in age of 12 years.
- 5- Bruxism was constant in all age.

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