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Assessment of Children with Thumb Sucking Habit in Babylon City

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Abstract

Aims: The purpose of this study is to assess the prevalence of thumb sucking habit between preschoolers and the effect on their occlusion of the habit.

Materials and Methods: 42 of pre-school children aged 4-5 years who were inspected by questioning for the presence or absence of thumb sucking habit, and thumb examination, and the teeth were examined for the presence of decreased over flight and overbite or open bite.

Results: Total number children have thumb sucking habit, and open bite of them.

Conclusion: In this age group (4-5) years , the number of children with thumb sucking habit was considered high and the habit was found to increase the prevalence of malocclusion of deciduous.

Keywords: *Thumb, Children, Babylon, school.*

Introduction

The incidence of malocclusion is greater in children with sucking habits than in children with no habit at the age of 3-12, but when children avoid sucking their fingers before the age of 6, they do not have a higher rate of malocclusion than children with no history of sucking habits^(1,2).

1. Oral habits should be of paramount health interest to orthodontists because they can induce malocclusion and interfere with the advancement of therapy ⁽⁴⁾. Irregular oral habits work so silently and unintentionally that even the patient is often unaware of their presence. Originally, all these basic habits are performed by deliberate attention, with each occurrence being less and less conscious effort

Sucking habit is the infant's fist-coordinated muscle activity and is also considered a natural reflex. There are essentially two forms of sucking; the nutritional form that provides essential nutrients, while non-nutritional sucking provides a feeling of warmth and a sense of safety, and this type of sucking can be considered as an important first step in the child's self-regulation

development.

So that, babies suck to comfort themselves when they are upset, it's also away for exploring and in some cases, sucking may be just away for babies to pass the time ^(9,10), but many children recognize that the habit is an infantile mechanism, they find it difficult to leave because it becomes an enjoyable habit by the time ⁽¹¹⁾, Besides, they may use it to get their parents' attention ^(12,13).

The sucking habit period is important, a short period of time may have no or little effect ^(13,14). In some children, the sucking habit is little or more than a passive insertion of the finger into the mouth, with no apparent buccinators activity.^(14,15), so that children who suck vigorously but intermittently may not displace the incisors much, if at all, while others who produce 6 hours or more may not displace them.

Literature Review

A review of the literature on thumb sucking habit prevalence shows that this varies from one population to another. The aim of this research was: 1) to evaluate the prevalence of sucking habits among Iraqi pre-school

children living in Babylon City; 2) to assess the impact of certain cultural factors on that prevalence; and 3) to study the effect that these habits could have on primary dentition. Cross-sectional

Study was conducted using a survey questionnaire and clinical examination of 42 Iraqi children aged 3-5 using a stratified random sampling technique for clusters. The prevalence of sucking habits with the dummy-sucking being the dominant type was 48.36 per cent. In the first few years of life most dummy suckers had lost their habits while more digit-suckers were still present at age 5. Sucking behaviors were related only to the schooling of the parents and the methods of feeding the infant without any major influence of gender or birth rank or family income. Kids with current digit sucking habits had slightly more distal molar and canine relationships of Class II ($P < 0.05$), greater over jet, and wider bite than kids without sucking habits.

Such variations became also more important ($P < 0,01$) when compared dummy-suckers to non-suckers. A more flexible snap was the only observable consequence of past sucking habits. In children with sucking habits the posterior cross bite was no more common than in children without these habits. The concern regarding

sucking habits is evident from the number of articles that have appeared in scientific journals over the past 50 years.

Methodology

The sample of this study was consisted of 50 preschool children from districts in Babylon city, with age range of 4-5, the selection of this age group is to reveal the prevalence and affect of thumb sucking habit before the time of eruption of permanent teeth. The children were divided into two groups, first group consisting children with thumb sucking habit and the second consisting children without thumb sucking habit. the children were examined for the presence of thumb sucking habit ;the sucked digit often reveal callous formation and under development ⁽¹⁶⁾;in addition to that a history is taken from the teaching staff about the presence of the habit for all children to confirm the clinical findings, the overjet was measured by avernia by measuring the distance between the labial surface of lower central incisors and labial surface of upper central incisors ,while the overbite is measured by considering the amount of

vertical coverage of the upper central incisors to the lower central incisors.

Results

Habits Boys (N=25) Girls(N=17) Total(N=42)

	N	%	N	%	N	%
Dummy	18	36	9	2.25	27	29.16
Digit	7	5.4	8	16	15	9
Total	25	69.4	17	11.56	42	70.56

Table(1) Show that the (42) examined children (15)of them have thumb sucking habit (9%) of the total

Discussion and Conclusion

Prevalence of thumb sucking habit in preschool children and its effect on deciduous teeth was not adequately dealt with in researches; on the other hand, it may be much easier to manage the habit at early stages

than to leave it to become more enjoyable behavior to the child, so that data of prevalence and effect of T.S.H. during this stage of child’s life is beneficial to know how much efforts are needed to assist children to leave the habit at early stages. This study found that the percent

of preschool children having T.S.H. is 9% which is not angelic table percent because part of them may retain the habit causing malocclusion of the permanent teeth. This study also made accompanist of dental occlusion between children with and without T.S.H.

It was found that the percent of children having increased over jet is higher in the group having T.S.H. which may be due to proclination of maxillary incisors and retroclination of mandibular incisors ;and the overbite in the group having T.S.H.is higher which may be due to over eruption of upper incisors due to the increase in the over jet ,and the percent of children with open bite in the group with T.S.H.is higher which may be due to a combination of interference with normal eruption of incisors ,and excess eruption of posterior teeth, these findings agree with the findings about the differences between the two groups in all types of changes in occlusion (overjet;overbite) are statistically non-significant which may be due to the small percent of children with increased overjet ,overbite and open bite in the control group due to causes other than T.S.H, like ; class 2 malocclusion ,mouth breathing, tongue thrusting

It can be concluded that thumb sucking habit effect the deciduous teeth by increasing over jet, overbite and prevalence of open bite; these effects may arise in permanent teeth if the habit was retained, and the percent of children having the habit of thumb sucking at this age range is still considered to be high, so it is suggested that parents should be instructed to consult psychiatrist and orthodontist if the child still having the habit at this age, to stop the habit as soon as possible

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both environmental and health and higher education and scientific research ministries in Iraq

Conflict of Interest: The authors declare that they have no conflict of interest.

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