

The Impact Of Child Abuse and Neglect on Oral Habit among 10-11 Years Old Primary School Students in Baghdad /Iraq

Wasan Muwafaq Almirhij¹, Ban Sahib Diab²

¹Post graduate/MSc Student in Preventive Dentistry at College of Dentistry University of Baghdad /department pedodontics and preventive dentistry/Iraq, ²Professor /MSc PhD in preventive dentistry at College of Dentistry University of Baghdad / department pedodontics and preventive dentistry/Iraq

Abstract

The purpose of this study was to assess the impact of child abuse and neglect on oral habits among 10-11 years old primary school students in Baghdad/Iraq. This observational study included 600 students distributed to 373 male and 227 female at different economic and social levels with age 10-11 years old of fourth and fifth class of the elementary schools in the Karkh city. Information on child abuse and neglect and presence or absence of oral habits was obtained from a structured, self-administered questionnaire from the students who were willing to participate in the study and their parents. The data was collected, summarized and statistically analyzed. The child abuse and neglect had effect on presence of oral habits in children.

Keywords: child abuse, oral habits; health of children; male; female.

Introduction

Child abuse and child maltreatment had been defined by The World Health Organization (WHO) as “all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in real or potential harm to the child’s health, survival, growth or respect in the context of a relationship of responsibility, trust or power” (1).

The periodic absence of responsive care damages the development of the brain which uses science to discuss that neglect can give rise to even more harm to a young child’s growth than physical trauma, largely because of the significant consequences of persistent high stress as they had been found (2).

Nail biting had been described by Williams in 2010 as a nervous habit often related with anxiety, boredom and defeat or working on difficult mission (3). Many studies had stated that Nail biting will be one of warning signs of child maltreatment as self-calming behaviors as

a result of anxiety, stress, terror, pain, sadness, tension, seclusion and inactivity (4- 9). Another etiology of nail biting was reported by Schuessler and Collin may be related to nutritional deficiency which is considered a result of child abuse and neglect, if eating in depressed or stressful environment, the body may not produce enough acid to digest protein properly; thereby, and undigested peptides pass through the system and may share in mental problems (10).

Digit sucking is a very common habit and is a healthy, normal and natural for infants, occurs in children and can continue through adolescence and sometimes even adulthood. Studies were reported that thumb sucking is a way of relaxation for many children and they usually suck their thumbs when they are bored, stressed, anxious, or nervous or due to developmental problems and environmental disturbances (11, 12). Bishara and Samir in 2001 suggests that children who have some underlying emotional or psychological disorders will develop and continue sucking habit for a long period after age of three years (13). If not well controlled, can have harmful effects on dentitions and oral health like malocclusion (14), apical root resorption (15, 16), temporomandibular disorders (17), gum injuries (18),

Corresponding author:

Wasan Muwafaq Almirhij

E-mail: wasanmuwafaq@gmail.com

anterior open bite, increased overjet, and Class II canine and molar relationships according to duration, frequency and intensity ⁽¹⁹⁾.

According to current knowledge, there is no previous Iraqi study concerning the relation between child abuse /neglect and occurrence of bad oral habits among children in Iraqi populations. For all the above this study was administrated to a random sample at public schools in order to investigate how child abuse and neglect are lead to bad oral habits.

Materials and Methods

This observational study was conducted among 600 students with age range 10-11 years of the fourth and fifth grade primary schools in al Karkh district of Baghdad city over period of 4 months from December 2018, to the beginning of May 2019. Ethical approval was gained from the ethical committee at the college of dentistry /university of Baghdad. The measuring tool of child abuse in the current study was Glasser criteria ⁽²⁰⁾, that designed a scale for recording and measuring child abuse depending on Likert method consist of 44 question ⁽²¹⁾. Changes in questionnaire were performed in current study to 19 questions. Firstly after taking acceptance and consent form from their parents, told the students what the researcher will do and what he/she is doing and that all their data for scientific research purposes only and with no relation to their academic evaluation, with complete confidentiality guarantee, explain and writing the scale and provide an example of what they are doing on the blackboard and give full freedom for students when answering and sometimes exclude the teacher from the class. The students were asked to by (yes) or (no). After collecting the degrees for each case sheet was been

answered by students, some answers were given reverse degree and then the final degree obtained for each child. According to Likert the levels of child abuse was mild if the degree (0-3) consist (160) child with percentage of (27%), moderate if the degree (4-7) consist (260) child with percentage of (43%) and sever if the degree (8-14) consist (180) child with percentage of (30%) depending on the maximum degree of the questions which was (19) degree for each paper of the questionnaire.

For assessment of oral habits (thumb sucking and nail biting) in groups of study another questionnaire was given one copy for the student and another copy was sent for their parents. No technical terms or medical terms are used in the questionnaire for the student and parent to avoid a high incidence of uncertainty or no opinion responses. Therefore, simple words and plain language were used in the questionnaires. Questions in a questionnaire were easy and pleasant to answer to encourage respondents to continue and complete the survey ^(22, 23).

Data was statistically analyzed using SPSS version 24 and the following statistical tests were carried out: frequency and percentage for normal variable.

Results

The distribution of sample according to level of abuse by gender group is present in table 1. This table shows that the occurrence of abuse was higher in male (62.2%) than in female (37.8%). In male, sever level of abuse (31%) was higher than mild level (24.9%) while in female mild level (29.5%) was higher than sever level (27.7%).

Table 1: distribution of sample according to level of abuse

Level of abuse	Gender				Total
	Male		Female		
	No.	%	No.	%	
Mild	93	24.9	67	29.5	160
Moderate	164	44%	97	42.7	216
Sever	116	31	63	27.7	179
Total	373	62.2	227	37.8	600

Only 590 students participated in the present study for oral habit as the other were excluded due to incomplete data. The distribution of sample according to thumb sucking by gender is shown in table 2. This table shows that the percentage of thumb sucking was (6.6%) more among female than among male (2.7%).

Table 2: The occurrence of thumb sucking habit by gender.

Gender	Thumb sucking presence		Total
	No.	%	
Male	10	2.7	364
Female	15	6.6	226
Total	25	4.2	590

The distribution of sample according to level of abuse by thumb sucking is presented in table 3. The percentage of thumb sucking consist (4.2%) from total sample. The higher occurrence of thumb sucking was in moderate level (5.5%) and the lowest occurrence was in mild level of abuse (3.1%).

Table 3: Distribution of sample according level of abuse by Thumb sucking habit.

Level of abuse	Thumb sucking		Total
	No.	%	
Mild	5	3.1	160
Moderate	14	5.5	254
Sever	6	3.4	176
Total	25	4.2	590

The occurrence of nail biting habit by gender is shown in table 4. This table illustrates the percentage of nail biting habit was (22.2%) more among male than among female (17.7%).

Table 4: The occurrence of nail biting habit by gender.

Gender	Nail biting		Total
	No.	%	
Male	81	22.2	364
Female	40	17.7	226
Total	121	20.5	590

The distribution of sample according to level of abuse by occurrence of nail biting habit is presented in table 5. This table shows that the percentage of nail biters composed (20.5%) from the total sample. The higher percentage of nail biting occurrence was at sever level of abuse (22.2%) and this percentage of occurrence decrease with decreasing level of abuse and so the lowest percentage of nail biting occurrence was at mild level of abuse (18.7%).

Table 5: the distribution of sample according level of abuse by nail biting habit.

Level of abuse	Nail biting occurrence		Total
	No.	%	
mild	30	18.7	160
moderate	52	20.5	254
sever	39	22.2	176
Total	121	20.5	590

Discussion

The most striking findings of current study are that emotional and behavioral problems are more common in children with nail biting and thumb sucking than those without these habits. Both habits were higher in sever level than mild level of abuse and this explained by the association of oral habits and children's emotional and behavioral problems. In addition, the results added to literature that occurrence of thumb sucking was higher in female than male while for occurrence of nail biting was higher in male than female.

The result of present study showed that thumb sucking is more occurrence among moderate than mild grade of abuse, this was agreeing with the studies which reported that association of digit sucking and psychological or emotional stress of child as relaxant behavior^(11, 24). Finding of other studies was agreeing with current study that reported emotional disturbances as etiology of thumb sucking⁽¹²⁾, and Pleasure derived from sucking as a result of stress, depression and anxiety⁽²⁵⁾. Previous researchers suggests continuous thumb sucking in children above 3 years due to psychological disturbances⁽¹³⁾.

The data of present study illustrates that the nail biting was more occurrence among sever grade of abusing, this was in line with other study used The Strengths and Difficulties Questionnaire (SDQ) revealed that children nail biting related with higher rates of emotional problems than children without in school age children⁽²⁶⁾. Nail-biting allows children relieve their anxiety, loneliness, and deprivation of safety feeling and love⁽²⁷⁾. The correlation of nail biting and aggression that found in present study has been reported in other study before⁽²⁸⁾. Psychological imbalances,

such as stress, anxiety and nervousness, were the principal cause of nail biting in children⁽²³⁾. Many researchers while explaining the cause of this habitual disorder have referred to psychological and psychiatric issues and nail biting is suggested to be reflective of underlying psychopathology⁽⁸⁾. As an explanation for their relationship, early researchers also considered nail biting as a stress-relieving oral habit⁽²⁹⁻³¹⁾.

Conclusion

Child abuse have an effect on oral habit as oral habit was higher in higher level of abuse than lower. However gender had an effect on the occurrence of habit.

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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