Child Abuse and Neglect Screening: The Role of the Dental Team

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ABSTRACT

Child abuse is a worldwide public health and social issue that affects people from all social classes equally. Child abuse or maltreatment includes "all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that results in actual or potential harm to the child's health, development or dignity". Any deliberate action or attempt of maltreatment to a person younger than 18 years old is considered child abuse. Recognizing the dentist's critical role in identifying children who have been the victims of domestic abuse it is required to recognize and report perioral indications of child abuse. In accordance with rase of domestic violence and child abuse incidence, dentists are now required to become familiar with the perioral warning signs of child abuse and to report any suspected cases to the relevant authorities in accordance with state legislation. The aim of the study is to present the contribution of the dental team in the identification of children victims of abuse, through the presentation of two cases.

Keywords: Awareness, child abuse, neglect, the role of the dentist.

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I. INTRODUCTION

Child abuse is a worldwide public health and social issue that affects people from all social classes equally [1]. According to the World Health Organization (WHO) child abuse or maltreatment includes "all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that results in actual or potential harm to the child's health, development or dignity" [2]. Particularly, any deliberate action or attempt of maltreatment to a person younger than 18 years old is considered child abuse.

Child abuse may appear in numerous forms, such as physical, sexual, emotional abuse and neglect, which often occur simultaneously. As a child is powerless to protect himself, abuse might result an imminent risk of serious injury, death, physical or emotional disability, sexual abuse, or exploitation. As abuser might act any person from the family environment, or any stranger who meet the child [3]-[5].

Physical abuse refers to injuring a child's body by use of excessive force. Physical harm can be caused by a lot of actions for example: punching, beating, kicking, causing burns, violently shaking. In general, signs of physical abuse are injuries that cannot be easily explained, such as bruises, scars, burns or bite marks [6], [7].

Sexual abuse includes actions such as intercourse and contact with the child's genitals, incest, rape and public exposure or commercial exploitation through prostitution or the production of pornographic material [3], [8]. Also, exposing one's genitals in front of a child is considered as sexual abuse. Signs of sexual abuse are the appearance of phobias (nightmares, depression, unusual fears, attempts to run away), sexual behavior unusual for the child's age, chest pains, bedwetting, urinary tract infections, pain, and bleeding in the genital area, and appearing sexually transmitted diseases [9].

Emotional abuse refers to actions or neglect by parents or persons responsible to take care of the children, which have caused or may cause serious behavioral problems and cognitive or intellectual disturbances. Signs of emotional abuse are sudden lack of self-confidence, aggression, disturbed behavior, anger, rage, occurrence of phobias, sadness or other symptoms of depression, unexplained stomach or chest pains, self-destructive tendencies, suicidal tendencies, passive behavior, learning problems and addiction to toxic substances or alcohol [10]-[12].

Child neglect is the most common type of child abuse and refers to the inability to meet a child's basic physical, emotional, spiritual, and educational needs. maltreatment involves continuous failure to protect a child from exposure to any danger, cold, starvation or substance abuse. Neglecting a child is passive abuse, poor supervision of a child could be an indication of neglect [9]. Neglect can be physical and involve deprivation of food, clothing, family shelter and inability to meet physical needs, or emotional and involve deprivation of love and affection or medical and involve deprivation of medical and dental care [13]. Dental neglect is defined as the "willful failure of parent or guardian to seek and follow through with treatment necessary to ensure a level of oral health essential for adequate function and freedom from pain and infection" [14].

It is challenging to estimate the true prevalence of child abuse since many incidents either go unreported or unnoticed [1]. However, children with impairments have a higher risk of experiencing child abuse [15]. Findings of abuse in the craniofacial region constitute 50-65% of the findings throughout the body. As face, head and neck are exposed and easily accessible there are the most commonly injured regions [16]. These findings emphasized the contribution of the dentist and especially the pediatric dentist and orthodontist in the diagnosis of child abuse. Therefore, dentists are encouraged to be knowledgeable about such findings and their significance and to meticulously observe and document them [17].

The aim of the study is to present the contribution of the dental team in the identification of children victims of abuse, through the presentation of two cases.

II. CASE REPORTS

A. 1st Case

An 8-year-old child who was suffering from pain in the upper right region of the maxilla, attended our university dental clinic. The parents were unable to provide detailed information regarding the child's onset of pain throughout a brief medical and dental history taking process. Additionally, they were unable to explain how they handle their child's pain. When questioned on the issue, the kid gave reluctant and vague answers.

After the clinical examination it was revealed that the child has a mixed dentition. The primary right upper canine was found to be displaced and lateral luxated. In particular, the canine's crown was displaced in a palatal direction, bleeding was noticed around the tooth. Moreover, the tooth was firmly locked into the displaced position. Parents were unable to explain when, where and how, the tooth become misaligned in detail. Additionally, parents were unable to justify why they delayed seeking dental treatment. By combining information from the clinical examination, dental history, and the parents' efforts to cover up the situation, it turned out to be an abuse occurrence, as first suspected. To gathering some legal evidence, intraoral photographs were obtained.

The patient was referred to the pediatric dental clinic with the notice that further investigation of the case, including the relevant services is required, due to a strong suspicion that it may be a case of child abuse, which finally parents admitted.

B. 2nd Case

A 9-year-old child attended our university dental clinic seeking treatment for a tooth fracture. Clinical examination revealed a mesial fracture in the upper right central permanent incisor which was moved palatally. There was a bruising in the upper lip mucosa respectively to the central incisor. Also, there was an ulcer in the lower lip oral mucosa respectively to the lower right central permanent incisor.

Parents couldn't clarify the cause of these injuries or why they didn't seek treatment immediately. Merging the data

from the clinical examination, the dental history, and the parents' unclear answers concerning the situation, it was suspected that tooth and mucosal injuries had not been traumatized accidently. Intraoral photos were taken to initially collect some legal evidence.

This case of child abuse, which the patient's parents eventually admitted, was referred to the paediatric dentistry clinic with the notice that additional investigation of the case, involving the necessary services, is required.



Fig. 1. Case 1. During the child's clinical examination, a luxation of 53 was observed, which parents were unable to sufficiently justified it.







Fig. 2. Case 2. During the child's clinical examination, the following were observed: a) palatal displacement of the right upper central segment, b) upper lip bruising and c) lower lip injury. The child's parents did not provide satisfactory answers regarding the cause of the above findings.

III. DISCUSSION

Recognizing the dentist's critical role in identifying children who have been the victims of domestic abuse the American Dental Association added to its Principles of Conduct and Code of Ethics, the requirement for recognizing and reporting perioral indications of child abuse. In accordance with the new rule, dentists are now required to become familiar with the perioral warning signs of child abuse and to report any suspected cases to the relevant authorities in accordance with state legislation [1].

Trauma to the skull, spots on the scalp from hair pulling, and bruising behind the ears, are indications of child abuse on the head. On the face, bruises, cuts, and bleeding in the lips are indications of child abuse, as are bruising around the eyes and a broken nose [18]-[21]. Signs of child abuse on the skin involve burns, marks from objects and bite marks. Intraoral sings of child abuse include root remnants, tooth fractures, tooth mobility, extensive caries, palatal ecchymosis, improperly healed jaw fractures, and occlusal abnormalities from unhealed fractures [22]. Moreover, a thorough examination of the oral cavity is important to proving sexual abuse, since there is a characteristic redness between the hard and soft palate that is indicative of pressure during oral intercourse [22], [23].

By the age of 14, 30% of youngsters have suffered a dental injury [24]. The second most frequent injury in children during the first six years of life is oral, which includes injuries to the lips, gingiva, tongue, palate, and severely damaged teeth [17], [25]. Abuse should be considered while evaluating the causes of oral trauma, since child abusers frequently target the cervicofacial region [26]. According to published research data, mouth, facial, and skull injuries are found in about 60% to 75% of child abuse victims [1].

A dentist who notices evidence of child abuse to rule out child abuse, should question the parents about how the injuries were sustained and what actions they took to care for the child [26]. Parents or guardians must be able to explain in detail the circumstances behind the occurrence of oral and craniofacial injuries, including how, when, and where they happened. Otherwise, if the script is modified depending on the questions asked, serious abuse allegations are raised.

The dentist can recognize a non-accidental trauma, focus not only on the child's dental care, but also on the child's mental and physical condition and consider the child's relationship with its environment [1], [27]. Parents who cover up abuse-often one parent covering for the other-avoid going to doctors or hospitals out of concern for being found out, but they don't think going to the dentist puts them in danger of being found out. The dentist can help in a number of ways, including helping to recognize the occurrence, treating it appropriately, as well as the safeguarding of the kid from further abuse, directing the family to appropriate treatment facilities, and protecting the child from further abuse [28].

The cases which are presented in this paper highlight the contribution of the dental team in identifying victims of domestic violence by the identification of children victims of abuse based on dental evidence.

Since the child's companion is frequently the abuser as well, it might challenge to talk to the child in their presence. In order to conceal the abuse, the abuser frequently creates fake scenarios [29]. Since this type of discussion is quite

difficult for children, we should try to speak to them in private and with a great deal of flexibility and discretion. The child is likely to initially deny being abused, therefore the dentist should be aware of this. If the child is a girl, having a woman present throughout the dialogue will help her feel more comfortable. The dentist needs to find out if the child feels secure in his home setting or while he is with his caregivers. We also need to find out if the injuries were accidental or caused by someone else, and if so, who. The dentist shouldn't ever express his irritation, and by his behavior, he must reassure the child and his companion that the dialogue is private [30].

Considering medical confidentiality and the legal framework of each country, healthcare personnel are legally obligated to investigate and report any reasonable suspicion of child abuse [17], [25], [30], [31]. Additionally, where appropriate, they should take x-rays, pictures, and impressions to document the evidence discovered during a clinical examination [26].

In conclusion, children's abuse is a heinous crime that deserves the harshest punishment. Dentists can readily identify it; thus, they need to be proactive in assisting the victims. Healthcare practitioners, especially dentists, should be alert for indications of child abuse. It is crucial that suspected injuries are adequately documented with the appropriate supporting evidence. Additionally, they should be aware that mouth or tooth injuries may leave traces that need to be thoroughly documented. To ensure correct testing, diagnosis, and treatment, interdisciplinary coordination is required with pediatric dentists or with a person who has had professional training in forensic odontology. Because the management of child abuse can be complicated and will sometimes need a multidisciplinary approach, dental team personnel should have the appropriate training to be able to identify and properly manage the victims.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES

- Singh V, Lehl G. Child abuse and the role of a dentist in its identification, prevention and protection: A literature review. Dent Res J (Isfahan). 2020; 17(3): 167-173.
- Gonzalez D, Bethencourt Mirabal A, McCall JD. Child Abuse and Neglect. 2022 Jul 4. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022.
- Malhotra S, Gupta V, Alam A. Child Abuse and Neglect: Role of Dentist in Detection and Reporting. Journal of Education and Ethics in Dentistry. 2013; 3(1): 2-5.
- Janssen TL, van Dijk M, Al Malki I, van As AB. Management of Physical Child Abuse in South Africa: Literature Review and Children's Hospital Analysis. Paediatr Int Child Health. 2013; 33(4): 216-227.
- Mohamed N, Naidoo S. A Review of Child Abuse and the Role of the Dental Team in South Africa. S. Afr. Dent. J. 2014; 69(6): 250-256.
- Maguire S, Mann MK, Sibert J, Kemp A. Are There Patterns of Bruising in Childhood Which Are Diagnostic or Suggestive of Abuse? A Systematic Review. Arch Dis Child. 2005; 90(2): 182-186.
- Zhou Y, Hallisey EJ, Freymann GR. Identifying Perinatal Risk Factors for Infant Maltreatment: An Ecological Approach. Int J Health Geogr. 2006: 5: 53-63.
- Johri N, Navit S, Khan SA, Singh R, Chandha D SA. Child Abuse and Neglect: A review. Annals of Dental Speciality. 2015; 3(1):16-20.

- Naidoo S. A profile of the oro-facial injuries in child physical abuse at a children's hospital. Child Abuse Negl. 2000; 24(4): 521-534.
- [10] Jaudes PK, Ekwo E, Van Voorhis J. Association of Drug Abuse and Child Abuse. Child Abuse Negl. 1995; 19(9): 1065-1075.
- [11] Legano L, McHugh MT PV. Child abuse and neglect. Curr Probl Pediatr Adolesc Health Care. 2009; 39(2): 31. e1-26.
- [12] Tsang A, Sweet D. Detecting Child Abuse and Neglect-Are Dentists Doing Enough? J Can Dent Assoc. 1999; 65: 387-391.
- [13] American Academy of Pediatric Dentistry. Definition of dental neglect. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2022:16
- [14] Needleman HL. Orofacial trauma in child abuse: types, prevalence, management, and the dental profession's involvement. Pediatr Dent. 1986; 8((1 Spec No).): 71-80.
- [15] Lang J, Kerr DM, Petri-Romão P, McKee T, Smith H, Wilson N, et al. The hallmarks of childhood abuse and neglect: A systematic review. PLoS One. 2020; 15(12): e0243639.
- [16] Stavrianos, C, Metska ME, Petalotis N. Child Abuse and Neglect: It's Recognition by Dentists. Balkan Journal of Stomatology. 2005; 3-6.
- [17] Kellogg N. American Academy of Pediatrics Committee on Child Abuse and Neglect. Oral and Dental Aspects of Child Abuse and Neglect. Pediatrics. 2005; 116(6): 1565-1568.
- [18] Wagner, GN. Bitemark identification in child abuse cases. Pediatr Dent. 1986; 8(1): 96-100.
- [19] Needleman HL. Orofacial Trauma in Child Abuse: Types, Prevalence, Management, and the Dental Profession's Involvement. Pediatr Dent. 1986; 8((1 Spec No)): 71-80.
- [20] Sperber ND. Bite Marks, Oral and Facial Injuries-Harbingers of Severe Child Abuse? Pediatrician.1989; 16 ((3-4)): 207-11.
- [21] Vadiakas G, Roberts MW, Dilley DC. Child Abuse and Neglect: Ethical and Legal Issues for Dentistry. J Mass Dent Soc. 1991; 40(1): 13-15.
- [22] Costacurta M, Benavoli D, Arcudi G, Docimo R. Oral and dental signs of child abuse and neglect. Oral Implantol (Rome). 2015; 8: 68-73.
- [23] Stevens-Simon C, Nelligan D, Breese P, Jenny C, Douglas JM Jr. The Prevalence of Genital Human Papillomavirus Infections in Abused and Nonabused Preadolescent Girls. Pediatrics. 2000; 106(4): 645-649.
- [24] Andreasen JO, Andreasen FM, Andersson L. Textbook and Color Atlas of Traumatic Injuries to the Teeth. 4th ed. Copenhagen, Denmark: Munksgaard; 2007: 224-225
- [25] Keels MA; Section on Oral Health, American Academy of Pediatrics. Management of dental trauma in a primary care setting. Pediatrics. 2014; 133(2): e466-476.
- [26] Diangelis AJ, Andreasen JO, Ebeleseder KA, Kenny DJ, Trope M, Sigurdsson A, et al. International Association of Dental Traumatology. International Association of Dental Traumatology Guidelines for the Management of Traumatic Dental Injuries: 1. Fractures and Luxations of Permanent Teeth. Dent Traumatol. 2012; 28(1): 2-12.
- [27] Schwartz S, Woolridge E, Stege D. The Role of the Dentist in Child Abuse. Quintessence Int Dent Dig.1976; 7(10): 79-81.
- [28] Mouden LD. How Dentistry Succeeds in Preventing Family Violence. J Mich Dent Assoc. 1996; 78(7): 44-48.
- [29] Howes C, Espinosa MP. The Consequences of Child Abuse for the Formation of Relationships with Peers. Child Abuse Negl. 1985; 9(3):
- [30] Glasser M, Kolvin I, Campbell D, Glasser A, Leitch I, Farrelly S. Cycle of Child Sexual Abuse: Links between Being a Victim and Becoming a Perpetrator. Br J Psychiatry. 2001; 179: 482-494.
- [31] Nuzzolese E, Lepore M, Montagna F, Marcario V, De Rosa S, Solarino B, et al. Child Abuse and Dental Neglect: The Dental Team's Role in Identification and Prevention. Int J Dent Hyg. 2009; 7(2): 96-101.