The role of dentist & forensic odontologist in oral and dental aspects of child abuse and neglect

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Abstract

Child abuse can take many forms like physical abuse, sexual abuse, emotional abuse and Munchausen's syndrome. It is important to realize that dentist should be aware that such physical & sexual abuse may result in oral & dental injuries or conditions. This review is going to highlight the facts of child abuse & neglect that are overlooked and unnoticed in routine dental practice. Dentists are in an ideal position to detect signs of child abuse because 65% of all physical trauma associated with abuse occurs in the face or neck area. This paper lays emphases on such findings, their significance and to meticulously observe and document them. Furthermore, prominences on key steps in recognizing and reporting abuse while conducting and documenting interviews with the children and parents culminating with discreet cases of abuse related to dentistry.

Keywords: Child abuse, neglect, forensic odontology, dentist, oral hygiene.

Introduction

Child mistreatment includes all types of abuse and neglect of a child under the age of 18 by a parent, caregiver, or another person in a custodial role (e.g., clergy, coach, teacher) that results in harm, the potential for harm, or threat of harm to a child (1). The literature states that more than half of the injuries from maltreatment occur in the head and face regions (2).

Dentists must be attentive to the fact that physical or sexual abuse might result into oral or dental injuries that at times can be confirmed by laboratory findings. Moreover, injuries perpetrated by one's mouth or teeth might leave evidence, regarding the timing and nature of the injury, along with the identity of the perpetrator. Therefore, dentists are recommended to be erudite about such findings and their consequence and to systematically observe and document them. As compared to the general physician the probability of dentist encountering cases of hypodermal bleeding in faces, abrasions, and mandibular fractures are slightly higher. Therefore dentists have to keep in mind the possibility of abuse and should contact forensic odontologist or pediatric dentist for further investigations, diagnosis and treatment (3) (4).

Material and methods

Extensive online literature searches were conducted and an overview is provided. This article gives a descriptive summary of the concept of child abuse and neglect; enlighten the dentists and forensic odontologist in identifying such cases in the particular relevance of orofacial structures. Furthermore, outline the interviewing practices, semi-structured interviews that can be considered by a dentist or forensic odontologist

when they encounter such abused children in their dental setup.

Discussion

A. Concept of Child Abuse and Neglect

Child abuse and neglect (CAN) is defined by the World Health Organization as "Every kind of physical, sexual, emotional abuse, neglect or negligent treatment, commercial or other exploitation resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power." (5). There are three major forms of child abuse has been evolved over time, physical abuse, sexual abuse and emotional abuse (6).

Physical abuse is the use of physical force, such as hitting, kicking, shaking, burning, or other shows of force against a child (1).

Sexual abuse includes any activity with a child, before the age of legal consent, that is for the sexual gratification of an adult or a significantly older child. Sexual abuse includes oral-genital, genital-genital, genital-rectal, hand-genital, hand-rectal, or hand breast contact; exposure of sexual anatomy; forced view of sexual anatomy; and showing pornography or using a child in the production of pornography. Sexual intercourse includes vaginal, oral, or rectal penetration. Penetration is an entry into an orifice with or without tissue injury (7).

Emotional abuse refers to behaviors that harm a child's self-worth or emotional well-being. Examples include name calling, shaming, rejection, withholding love, and threatening (1).

Additionally, two more forms of child abuse have been reported in literature shaken baby syndrome and Munchausen syndrome by proxy. The **shaken baby syndrome** is a devastating form of abuse with clinical characteristics appearing in the triad and including retinal, subdural and/or subarachnoid hemorrhage in children with no or few external signs of trauma it was first described by John Caffey (8). **Munchausen syndrome by proxy** is another particular form of abuse in which the child's caregivers produce the signs and symptoms of a disease, not having this syndrome a typical presentation. Suspicions may arise when parents don't correctly interpret or exaggerate normal behaviors, ranging cases between apparent fabrications to the provocation of the symptoms (9).

Neglect is the failure to meet a child's basic physical and emotional needs. These needs include housing, food, clothing, education, and access to medical care (1).

Dental neglect is as defined by the American Academy of Pediatric Dentistry, is 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." (10).

Some of the risk and contributory factors for abuse are disabled children, youngest in large family, premature babies, low birth weight babies, unwanted pregnancy, social isolation of families, breakdown of family unit, parental history of domestic abuse, socioeconomic disadvantage, poor parenting skills, substance abuse, young, single parent, mental health condition of parent/ caregiver, refugee or displaced children (11).

One of the significant aspects of child abuse, parenting behavior is universally neglected or overlooked in our society. The common assumption that the child can be abused generally by an individual outside the family is exaggerated. This elementary statistic of parenting behavior in population-based samples and cultural differences in childrearing was shown by Runyan et al. They did parallel surveys of parental discipline of children in samples of mothers from Brazil, Chile, Egypt, India, Philippines, and the United States. Their study criteria included 6 discipline i.e., nonviolent discipline, moderate verbal discipline, harsh verbal discipline, moderate physical discipline (includes hitting with an object), harsh physical discipline without including hitting with an object, harsh physical discipline including hitting with an object. Their survey revealed deplorable results that physical and verbal punishments of children are common in high-, middle-, and low-income communities around the world. The forms and rates of punishment vary among countries and among communities within countries (12).

B. Role of Dentists or Forensic Odontologist in identifying such cases in particular relevance of orofacial structures

Table 1: Findings of orofacial abuse in the head, face, and neck region that can be considered (11) (20) (21) (22).

OROFACIAL REGION INVOLVED	FORM OF ABUSE
	Physical Abuse
Teeth	Missing and fractured (32%), avulsion, mobility, discolored teeth and residual roots.
Mucous Membrane **Lips (54%)** **Tongue** **Frenal Area** **Gingiva** **Soft Palate** **Floor of the Mouth** **Buccal Mucosa**	Laceration (14%), Burns (5%), Bruises (24%), Bite marks (65%), Scarring, hematoma and Contusions, Abrasions and Lacerations Injuries in different stages of healing
	Sexual Abuse
Lip, Tongue, and Palate	Petechiae, erythema. Ulcers and purulent discharge. Pseudomembrane and condymatous lesion. Papular- vesiculobullous lesion. Oral-perioral warts

Several studies reveal that more than 50% and up to 75% of all child abuse cases involve trauma to the mouth, face, or head (13) (14). Besides, it is also been observed that while abusive parents often do not take the child to the same physician (fearing the physician will recognize the abuse), they tend to return to the same dentist.

Most orofacial injuries reported in literature involves frenulum lacerations inflicted during forced feeding, abnormal appearance and mobility of the tongue, missing teeth for no apparent reason, dental fractures, maxillary and mandibular fractures, abrasions, lacerations, contusions, oral trauma, traumatic alopecia, burns and bite marks (15) (16) (17) (18).

Abuse or neglect may present to dental team by any of these means (a) through a direct allegation made by the child, a parent or some other person (b) through signs and symptoms which are suggestive of physical abuse or neglect (c) through observations of child behaviour or parent–child interaction (19).

When a dentist or forensic odontologist finds such lesions or trauma in the child, then there are few questions that have to be considered and answered by them in their clinical practice. Like whether they or their team members recognize the signs and symptoms of abuse? Do know how best to record any suspicions? Whether they are aware of what action to take in a case of suspected abuse? Finally how safe is your practice for children (11)?

Few of the orofacial abuse findings that can be considered in head, face and neck region are listed in Table 1. It should reminisce that no single indicator can be taken as a conclusive proof. It is always advisable and recommended that look for patterns or clusters of indicators that suggest a problem.

Similarly, various aspects of dental neglect have to be acknowledged, it could be done unintentionally or deliberately by the parents or caregivers. Wherein a Dentist can easily recognize dental neglect with poor oral hygiene, halitosis, periodontal disease, aptha lesions as a consequence of a nutritional deficiency status, Early Childhood Caries (ECC), or else untreated dental caries with rapid progression, extended on more than a half of teeth found in the oral cavity, odontogenic infections (recurrent and previous abscesses), tooth eruption, language acquisition (23).

Further, it should be considered by Dentist or Forensic Odontologist that there are possibilities that parents or carers may have a lack of knowledge, difficulty in understanding or complying with home dental care and might be ignorant to dietary needs that may cause problems for the child that cannot be considered as deliberate neglect. Other reasons for failure to seek or obtain proper dental care may be due to

factors such as family isolation, lack of finances (23) (24). This has to be distinguished from deliberate parental behavior voluntary neglect towards their children (as for example alcoholics and addicted to drugs) (25).

Whenever suspicions of dental abuse and dental neglect arise by observing physical signs that may be proof, dentist or forensic odontologist should immediately register these findings and necessary action should be taken. More so, when on enquiring about on child's behavior and health they receive no answers or uncertain answers from parents or caregivers. Detailed methodologies of managing such cases are discussed in section D of this paper.

C. Outline the interviewing practices: semi-structured interviews

On suspicion of child abuse, it's advisable that not many investigators should be involved and not to ask several questions. Since there is probability that different people or investigators (police, medical examiner, dentist) ask so many questions and the child get confused. Children think that they have to be certain, so they say things, that they are even though not certain about. The longer the questions asked the more children become confused.

A routine practice should be followed, with specific questioning techniques divided into four major areas: (1) rapport building skills (2) competency testing (3) obtaining the details of abuse and (4) closing the interview (26).

To begin with most important is to gain child's trust, for that it is necessary to provide a safe, and loving environment for these children. During communications with children, show them attentiveness, respect, honesty and care. Children frequently fail to report because of the terror, that revelation will bring consequences even worse than being victimized again. Explain them abuse is not their fault and they get a chance to talk, while emphasizing that they are not alone and the child should be reassured that he/she will be getting some help (27) (28).

It is endorsed, that child is interviewed in the presence of some witness, could be family members who accompanied the child, so that child may speak easily without being in fear of retaliation. Avoid using closed end questions, preferably use open-ended questions and allow the child to narrate or give complete description. It is significant to highlight once again that the child should describe everything that will come to his/her mind, without guessing or inventing anything. Try not to suggest answers for the child, avoid pressurizing the child for answering to questions he or she is reluctant to answer.

Another important aspect that hast to be considered by dentist and forensic odontologist in abuse cases is to interview the parent separately from the child, ideally with a witness present and to observe if the child's explanation is consistent with the parent's explanation. Nevertheless, the oral healthcare professionals should make an effort to gain as much information as possible, as well as the confidence of the parent (4) (29).

D. Documentation and Reporting

If the existence and appearance of the injury does not correlate to the history of the injury and the explanation of its cause given by both the child and the care-giver, suspected abuse must be reported. It has to be understood that reporting suspected abuse is not an allegation of abuse by the reporter. It is a call for help for the child and abuse is a problem that requires instantaneous management.

Dentists or forensic odontologists, who suspect or recognize some form of child abuse, have a responsibility of reporting it to the concerned authorities. It is suggested that a staff member (witness) assist in the documentation of evidence. Written records must comprise the child's name, age and address along with the name and address of the parent or whoever brought the child in for care. Also record the name of any staff member assisting in the examination (30). A routine protocol should be followed, including questions about patient history and how the incident happened, and all relevant information should be documented with radiographs, photographs, and impressions when necessary. Details like the size, shape, location, colour, degree of healing of the injury, detailed notes of behavioural indicators should be documented before reporting. Furthermore, pictures drawn of the injured area then labelled accordingly is expedient (31) (32) (33).

It is important that the critical photographs comprise a ruler or scale held adjacent to the injury and on the same plane as the injured surface. Essentially if the child requires medical attention, immediately referral should be made to the suitable resource (34).

It is often observed that although dental professionals are in the best position to see some injuries from child abuse, but still why don't they recognize them? If they suspect the abuse, why don't they report it? One of the reasons for doing so is that they fear it will alienate their paying patients or fear retaliation lawsuits from the parents (35).

The most common reason for the disinclination to report is uncertainty about the diagnosis, fear of a lawsuit, inexperience with symptoms, probable effect on the practice, hesitancy to believe one could inflict brutalities on one's offspring and indecisiveness about the reliability of the child's account of the injury (34).

It has to be well understood by dentists and forensic odontologist that they are not the authorities charged with determining whether abuse or neglect has actually occurred. Their responsibility is only to report suspected cases. It is recommended if a report is needed then it has to be made immediately. Further call state or local child protective services (CPS) or agencies, as directed by state law. Their trained social worker will look into the case and will, therefore, take necessary action. The fact should be considered that a call to these agencies does not necessarily mean that dentist or forensic odontologist have to file a report on the specific case. It's a professional consultation call to help to decide if the particular case needs to be reported. As professional we have, remember that a call to CPS or agency is not an allegation but a request for help on behalf of a child.

Conclusion

Dentists and dental staff are not the professionals who determine whether abuse or neglect has actually occurred. Their responsibility is only to report suspected cases. Dental assistants should talk privately to the dentist and other staff members about conditions or problems they see.

If a report needs to be made, make the report immediately. Simply call state or local child protective services (CPS) agency, as dictated by state law. A trained social worker will discuss the case with you and determine necessary action. It should be noted that a call to CPS does not necessarily mean you have to file a report on the specific case. The call can be a professional consultation to help you decide if you need to report. Most importantly, remember that a call to CPS is not an accusation but a request for help on behalf of a child. If an investigation is warranted, CPS will investigate the case. In India, "Child line" with helpline number 1098 is accessible and its detailed description is available at (36):
http://www.childlineindia.org.in/child-abuse-child-violence-india.htm

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