Child abuse and the role of a dentist in its identification, prevention and protection: A literature review

Vishwendra Singh, Gurvanit Lehl
Oral Health Center, Government Medical College and Hospital, Chandigarh, India

ABSTRACT
Child abuse, a reprehensible act, pervades all strata of society. Dentists are more likely to encounter such cases in their daily practice. However, such cases usually go unreported due to lack of adequate knowledge. Practitioners flinch from reporting these due to various reasons, and this sets up a vicious cycle which traps the victim leading to grave long-term consequences. This review aims to collect all literature available on PubMed, PubMed Central, MEDLINE, Google Scholar, and Google search engines on the role of dentists in child abuse identification and information and summarize these details. The review will shed light on the identification of abuse in dental settings, the various legal recourses and organizations related to it, and how dentists can better equip themselves to tackle such cases if they come across one. The review also makes certain recommendations by which dentists and healthcare providers in general can better prepare themselves for such contingencies.

Key Words: Child abuse, dental, India, laws

INTRODUCTION

“Somewhere in the world a child is suffering deliberate harm, inflicted by someone who is supposed to care about them, at this very moment.”

-Hinchliffe[1] Child abuse is a grave violation of a child’s fundamental rights and is a significant international public health concern. It does not differentiate between classes and masses and pervades all strata of society.

Caffey, an American Radiologist and Pediatrician, was the first to recognize child maltreatment as a social pathology.[2] He was later corroborated by Silverman (1953) and Kempe (1962), who also coined and defined battered child syndrome.[3]

Several definitions have been given over the years to define this heinous indulgence. The Centre for Disease Control and Prevention states that child maltreatment is “any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential for harm or threat of harm to a child.”[4] The Journal of Child Abuse and Neglect defines it as “any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation, an act or failure to act which presents an imminent risk of serious harm.”[5] As per the World Health Organization (WHO), “child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect.
or negligent treatment or 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.”[6]

Dentists are at a vantage point when it comes to identifying child abuse. Literature shows that about 60%–75% of child abuse victims present with head, face, and mouth injuries.[7-9] Furthermore, dental practitioners and auxiliaries come in regular contact with children and their caregivers and thus have an opportunity to assess not just their physical and psychological conditions but also their family milieu.[10] A dentist’s onus in preventing child abuse and neglect was first taken up in the 1970s.[11] The American Dental Association appended the required recognition and reporting of perioral signs of child abuse to its Principles of Conduct and Code of Ethics. The code now states that dentists are obliged to familiarize themselves with perioral signs of child abuse to report suspected cases to appropriate authorities consistent with state law (House Resolution 23S-1B).[12] However, Human Rights Watch reports that no doctor (general practitioner, gynecologist, pediatrician, or dentist) in India has received any training vis-à-vis child abuse identification, examination, reporting, or rehabilitative procedures.[13]

This review attempts to summarize the available information on child abuse and the role of dentists in identifying, preventing, and protecting the rights of the victims.

METHODS OF DATA COLLECTION

Data were collected using the following key words: “Child abuse in dental settings,” “role of dentist in child abuse,” “reporting of abuse by dentists,” and “prevalence of child abuse in India and globally” on PubMed, PubMed Central, MEDLINE, Google scholar, and Google search engines. The reference list of selected papers was handsearched for further relevant articles. The search was limited to articles and books in English. A total of 27 articles meeting the search criteria were found. Since all the available literature was of a descriptive kind, all articles, case reports, and past reviews were included.

TYPES OF ABUSE

The term abuse has varied connotations across different cultures and socioeconomic status. The WHO provides descriptions for different kinds of abuse as follows:

Physical abuse

It is the inflicting of physical injury on a child and includes burning, hitting, kicking, punching, shaking, or otherwise harming a child. The parent or caretaker may not have intended to hurt the child. It may, however, be the result of overdiscipline or physical punishment that is inappropriate to a child’s age.[14]

Sexual abuse

Improper sexual behavior with a child which includes fondling a child’s genitals, making the child fondle an adult’s genitals, intercourse, incest, rape, sodomy, exhibitionism, and sexual exploitation. To be considered child abuse, these acts have to be committed by a person responsible for the care of a child or related to the child. If a stranger commits these acts, it would be considered sexual assault and handled solely by the police and criminal courts.[14]

Emotional abuse

It is also known as verbal abuse, mental abuse, and psychological maltreatment. Acts or failure to act by parents or caretakers that have caused or could cause serious behavioral, cognitive, emotional, or mental trauma to a child are included in this.[14]

Neglect

It is the failure to provide for a child’s basic needs. Neglect includes physical, educational, or emotional components.[14]

EPIDEMIOLOGY

WHO (2002) surmises that almost 53,000 child deaths in 2002 were due to child homicide. About 20% and 65% children confess having been verbally or physically bullied in school. An estimated 150 million girls and 73 million boys under 18 have gone through sexual violence involving physical contact of some kind. The International Labor Organization estimates that 218 million children were involved in child labor in 2004, of whom 126 million were engaged in hazardous work. Only 2.4% of the world’s children are legally protected from corporal punishment in all settings.[14]

In the Indian scenario, Kacker et al.[14] report that 2 out of every 3 children are physically abused (88.6% by their own parents), 53.2% children face one or more forms of sexual abuse, and every second child reported facing emotional abuse (parents were the abusers in 83% of the cases).
The true prevalence of child abuse is difficult to determine as many cases are never reported/investigated or simply not recognized.

**IDENTIFICATION OF ABUSE**

Current global statistics about recognition and reporting of child abuse by dentists is not available. However, earlier reports show that there is inadequate identification of child abuse cases and its reporting is low.\(^{[15]}\)

The situation is not much different in India. A large proportion of child abuse cases go unreported. It is seen that dental graduates are not well prepared to recognize such cases, and even if they can do that, they do not have adequate knowledge about how or where to report them.\(^{[16,17]}\)

Thus, it is imperative to outline some of the easily recognized signs of abuse\(^{[14,18]}\) [Tables 1 and 2].

(Injuries in different stages of healing with misleading or ambiguous explanation should rouse suspicion of child abuse).

**Neglect**

Negligence in meeting fundamental needs of a child also falls under maltreatment. Among the various forms of maltreatment mentioned above, a significant one from a dental perspective is dental neglect.

**Table 1: Signs of physical and sexual abuse**

| Physical abuse                                      | Sexual abuse                                                                 |
|-----------------------------------------------------|-----------------------------------------------------------------------------|
| Extraoral                                           | Ulcers, vesicles (purulent drainage or pseudomembranous and condylomatous lesions of lips, tongue, palate and nose-pharynx) |
| Ecchymosis (slaps, fits, bites)                      | Erythema/petechiae, (of unknown etiology, on soft and hard palates junction or floor of the mouth) |
| Bruises (Battle’s sign)                              | Note: Differentiate these from traumatic lesions, hemorrhagic lesions, violent cough or vomit, bleeding diatheses, antithrombotic or anticoagulant pharmacological therapy |
| Excoriation/abrasions                                | Behavioral markers in victims of sexual abuse: Improper sexually explicit conduct, heightened defensive behavior (child may feel threatened by excessive physical contact or even just conversation) |
| Lacerations                                         |                                                                            |
| Contusions                                          |                                                                            |
| Hematomas                                           |                                                                            |
| Burns (cigarettes, lighters, hot instruments)        |                                                                            |
| Traumatic alopecia                                  |                                                                            |
| Lichenification of commissures                       |                                                                            |
| Intraoral                                           |                                                                            |
| Torn labial/lingual freni                            |                                                                            |
| Abrasions/lacerations of gingival, tongue, palate, floor of mouth |                                                                            |
| Fractures/dislocations/avulsions/pathologic mobility of teeth |                                                                            |
| Fractures of mandible/maxilla                        |                                                                            |
| Malocclusions (due to previous trauma)               |                                                                            |

**Table 2: Signs of emotional abuse and neglect**

| Emotional abuse                                     | Neglect                                                                 |
|-----------------------------------------------------|-------------------------------------------------------------------------|
| Lowering a child's self-esteem by                    | Neglect is often manifested in the form of girl child neglect in the country and some of its indicators are |
| Harsh treatment                                     | Lack of attention to girls as compared to brothers                        |
| Ignoring                                            | Less share of food in the family                                         |
| Shouting or speaking rudely                         | Sibling care by the girl child                                            |
| Name calling and use of abusive language            | Gender discrimination                                                    |
| Comparison between siblings and other children      |                                                                          |
Singh and Lehl: Child abuse and the dental settings

- No interest for oral hygiene education
- Repeated attendance for emergency pain relief
- Failure to access dental treatments and rehabilitation services
- Failure to complete treatment plans
- Poor dental status
- Poor knowledge and attitude in respect to oral health and
- Inadequately performed home oral hygiene.

Apart from the types discussed, there exist two rare forms of neglect. These bizarre entities are opposite ends of the same spectrum dealing with medical care. Medical care neglect is a condition in which caregivers fail to provide the required treatment to infants or children with life-threatening or other grave/chronic medical conditions. Its exact opposite is Munchausen syndrome by proxy – an unusual disorder in which a caretaker, usually the mother, either simulates or creates the symptoms or signs of illness in a child. The child can present with a long list of medical problems or often bizarre recurrent complaints. Fatal cases have been reported.

RISK FACTORS

Child abuse does not usually occur without reason and is a result of different factors/causes. Careful probing generally reveals background factors which lead to individuals resorting to such tendencies. Some of the commonly agreed on risk factors are:

- Children with special health care needs – learning disabilities, developmental disorders, chronic illnesses, mental retardation, etc
- Unwanted children – teenage, unplanned, or twin pregnancy
- Ill-equipped knowledge of parenting and child health
- Depressed parent or partner violence within a family
- Dangerous neighborhoods or poor recreational facilities
- Poverty and associated burdens.

It is to be, however, noted that, children from all socioeconomic backgrounds and not just low-income families are at risk of being maltreated.

INDICATORS

A few signs that indicate child abuse can be:

- Lack of parental concern for the child
- Failure to recognize a child’s emotional needs and distress
- Denying problems at home or school and blaming the child for it
- Belittling and berating the child
- Resorting to hard physical punishment in case the child misbehaves
- Demand perfection in daily chores from the child.

LONG-TERM EFFECTS/ CONSEQUENCES OF CHILD ABUSE

Abuse is not an isolated, one-time event. It can have devastating, long-lasting effects on the victims. Often, the lingering effects affect an individual not just physically but mentally as well. These victims may suffer from:

- Physical health consequences – Impaired brain development and poor physical health
- Psychological sequelae – impaired psychological attachment (in infants), poor mental and emotional health, cognitive difficulties, and social difficulties
- Behavioral consequences – Juvenile delinquency, adult criminality, substance abuse, and aggressive behavior.

Apart from these, dental neglect can also adversely affect a child in the following ways:

- Dental pain
- Difficulty in eating
- Infections
- Loss of oral function
- Disrupted sleep
- Poor appearance
- Low weight
- Poor performance in school
- Low self-esteem
- Poor quality of life.

These not just affect the child’s oral functions but lead to negative effects on nutrition, learning capacity, and other activities which are fundamental for normal growth and development.

Thus, child abuse, affects the sufferer in more ways than one and results in a life-long battle with the self.

LEGAL RESORTS TO PROTECTING THE RIGHTS OF CHILDREN IN THE COUNTRY

Any child abuse incident should be reported to the local police. The Indian constitution recognizes the
vulnerable position of children and their right to protection.\[14\] Several laws have been framed through many international and national conventions toward this end. However, the implementation of these strategies remains elusive. Citizens are grossly unaware of these legal aids and often feel thwarted when it comes to dealing with child abuse. The Ministry of Women and Child Development reported the national prevalence of child abuse in 2007,\[14\] and several measures to safeguard children from abuse were framed after that. One of them is the Integrated Child Protection Scheme. The main objectives of this are:

- Creating database and knowledge base for child protection services
- Strengthening child protection at family and community level
- Enhancing capacities at all levels, and
- Ensuring appropriate intersectoral response at all levels.

Also, a new National Policy For Children (2012) has replaced the earlier 1974 policy.\[25\] Apart from these, several schemes are currently in operation for catering to child protection.\[14\] The Indian Parliament, in one of its biggest moves toward child protection, passed the Protection of Children from Sexual Offences (POSCO) act in 2012. Under this, all forms of sexual abuses are specific criminal offenses. If a clinician suspects that a child has been or is being sexually abused, he/she is required to report this to the authorities. Failure to do so will result in imprisonment of up to 6 months, with/without fine.\[4\]

Several nongovernmental organizations (NGOs) in India are also working toward rehabilitation, feeding and education of underprivileged and abused children. Details of these can be easily accessed through the online link: http://www.ngosindia.com.\[4\]

**ROLE OF A DENTIST**

Dentists are at an advantage when it comes to identifying child abuse. As most of the characteristic signs can be visualized in the craniofacial and oral regions\[26\] (as discussed above), the identification and reporting of abuse becomes not just a moral but legal responsibility as well.\[27\] Not just this, it is observed that perpetrators keep changing the hospitals and clinicians to avoid suspicion; however, they visit the same dentist repeatedly.\[4\]

It is important to report child abuse to save such children from further harassment. In some cases, these victims may repeat the pattern of abuse with their own children. Such reporting is not only required for ethical reasons but has been mandated under Section 21 (1) of the POSCO act, 2012. Failure to report a suspicion of child abuse is punishable. Furthermore, reporting is required irrespective of whether the information was acquired through professional duties or within a confidential relationship of information.\[4\]

**DETECTING CHILD ABUSE IN THE DENTAL CLINIC**

Incomplete history or inadequate explanations of injuries should raise concern of maltreatment. Delay in seeking treatment, history of multiple injuries, an adult other than the parent(s) seeking treatment, and injuries attributed to a sibling are all possible indicators of abuse, especially when there are discrepancies between clinical findings and history provided.\[28\]

Further probing should be done when children exhibit violent behavior, withdrawal from touch, oblivious of environment, wary of adults, watchful, unusual sexual behavior or knowledge, wearing unusual clothing for the season. The dental team should begin observing a child as soon as he/she enters the dental clinic for signs of limp, favoring a particular limb/body part, ability to sit with/without difficulty apart from their emotional/mental state. A responsible dental team follows 4 Rs – recognize, record, report, and refer when it comes to child abuse.\[27\]

**WHY DENTISTS FLINCH FROM REPORTING ABUSE**

It is seen that dentists generally shy away when it comes to reporting child abuse cases. Although majority of them confirm that they can identify abuse, ironically, the same majority is hesitant to report it to appropriate authorities.\[29\] A few reasons why this might be the case are as follows:\[28\]

- Fear of legal entanglement
- Fear of losing patients
- Apathy to the gravity of the crime
- Wary of being accosted by the family
- Lack of faith in child protection services
- Improper education and training on the subject.

Dentists should know that they are mandated to report suspected cases of child maltreatment, with immunity granted to voluntary reporters acting in good faith.\[30\]
It is seen that dentists who can identify signs of abuse often act as sleuths themselves and instead of finding out “if something happened?” try to find out “who did it?”[11]

It is important that a proper protocol be developed and followed when a suspicious case comes along. Interviewing the parents and the child together and documenting this activity is the prime step in recognizing and reporting child abuse. A few other pointers are:[4]

• A gross assessment of the child should begin as soon as he/she walks in the clinic
• Interview should be conducted in the presence of a witness
• Parents and the child should preferable be questioned separately
• Open-ended, nonthreatening, descriptive questions should be asked
• The interviewer should be objective and not attempt to prove abuse. Instead, the parent should be reassured of support
• Any discrepancies in the child’s and the parent’s description of the incident/injury should be noted before informing the authorities
• If there are signs of abuse and the dentist feels that the parent might try to leave the clinic with their child, then the dentist should first inform the concerned authorities about it and after that tell the parents about the same.

WHAT IS TO BE REPORTED

The details to be included in an abuse report include:[4]

• Names and address of the child and its parents
• The child’s present condition
• His/her age
• Nature and extent of injury and proof of previous injuries (size, shape, color, location, number, and radiographs)
• Child’s behavior alone and with parents (if alarming)
• Similar details about other children in the household
• Other relevant information which may be of help in identifying the cause of the abuse
• If it is known, then the identity of person(s) responsible for the abuse/neglect
• Document all interviews with the child and parent
• Sign and date the report and get a witness to sign for the injuries and interview.

CONCLUSION

Child abuse is odious act deserving the severest of censure. Dentists can easily recognize it and must take a proactive role in helping the victims. Healthcare providers (including dental health professionals) should be aware of signs of child abuse. It is important that documentation of suspicious injuries along with relevant proofs be properly done. They should also know that injuries caused by a perpetrator’s mouth or teeth may leave clues which should be meticulously evidenced. Interdisciplinary coordination is needed with pediatric dentists or with a person with formal training in forensic odontology to ensure proper testing, diagnosis, and treatment.

Based on the discourse and observations above, some recommendations are being given for improving the understanding of dental professionals regarding handling a case of child abuse:

• Provision of courses on child abuse identification and reporting in undergraduate and postgraduate dental curricula in the country
• Increasing exposure of dental graduates to cases of child abuse
• Introduction of certificate courses on the subject
• Programs, on the line of the Prevent Abuse and Neglect through Dental Awareness[PANDA] scheme, operational since 1992 in New Jersey and Connecticut, should be planned to train healthcare providers, teachers, and child care providers[19]
• Medical providers with expertise in this area should make themselves available to dentists and dental organizations for consultation and education.

Such endeavors will bolster our ability to prevent and identify child abuse and neglect and pave the way for better care and protection of our children.

Financial support and sponsorship
Nil.

Conflicts of interest
The authors of this manuscript declare that they have no conflicts of interest, real or perceived, financial or non-financial in this article.

REFERENCES

1. Hinchliffe J. Forensic odontology, part 5. Child abuse issues. Br Dent J 2011;210:423-8.
2. Caffey J. Multiple fractures in the long bones of infants suffering from chronic subdural hematoma. Am J Roentgenol Radium Ther 1946;56:163-73.
Singh and Lehl: Child abuse and the dental settings

3. Kempe CH, Silverman FN, Steele BF, Droegemueller W, Silver HK. Landmark article July 7, 1962: The battered-child syndrome. By C. Henry Kempe, Frederic N. Silverman, Brandt F. Steele, William Droegemueller, and Henry K. Silver. JAMA 1984;251:3288-94.

4. Patil B, Hegde S, Yaji A. Child abuse reporting: Role of dentist in India – A review. J Indian Acad Oral Med Radiol 2017;29:74-7.

5. Somani R, Kushwaha V, Kumar D, Khaira J. Review paper – Child abuse and its detection in the dental office. J Indian Acad Forensic Med 2011;33:3615.

6. World Health Organization. Report of the Consultation on Child Abuse Prevention. Geneva: World Health Organization; 1999. Available from: http://www.who.int/violence_injury_prevention/violence/neglect/en/.[Last accessed on 2018 Nov 15].

7. Cairns AM, Mok JY, Welbury RR. Injuries to the head, face, mouth and neck in physically abused children in a community setting. Int J Paediatr Dent 2005;15:310-8.

8. Jessee SA. Physical manifestations of child abuse to the head, face and mouth: A hospital survey. ASDC J Dent Child 1995;62:245-9.

9. da Fonseca MA, Feigal RJ, ten Bensel RW. Dental aspects of 1248 cases of child maltreatment on file at a major county hospital. Pediatr Dent 1992;14:152‑7.

10. Stavrianos C, Stavrianou I, Kafas P, Mastagas D. The responsibility of dentists in identifying and reporting child abuse. Internet J Law Healthc Ethics 2007;5:1-11. Available from: http://archive.ispub.com/journal/the-internet-journal-of-law-health-and-ethics/volume-5-number-1/the-responsibility-of-dentists-in-identifying-and-reporting-child-abuse.html#sthash.[Last accessed on 2018 Nov 17].

11. World Health Organization. Report of the Consultation on Child Abuse Prevention. Geneva: World Health Organization; 1999.

12. American Dental Association. Minutes of House Of Delegates, November 6-10, 993. In 1993 Transactions, 134th Annual Session. Chicago IL: American Dental Association; 1994.

13. Human Rights Watch. Breaking the Silence: Child Sexual Abuse in India. Human Rights Watch; February, 2013. Available from: https://www.ecoi.net/file_upload/1476_1360257470_india0113forupload.pdf.[Last accessed on 2018 Nov 15].

14. Kacker L, Varadan S, Kumar P. Study on Child Abuse: India 2007. Delhi: Ministry of Women and Child Development, Government of India; 2007.

15. Nagelberg RH. Child abuse awareness in the dental profession. Dental Econ 2015;105:1-9.

16. Bandi M, Mallineni SK, Nuvvula S. Knowledge, attitudes, and professional responsibilities among Southern Indian dental residents regarding child abuse: A cross-sectional survey. Int J Forensic Odontol 2017;2:51-4.

17. Malpani S, Arora J, Diwaker G, Kaleka PK, Parey A, Bontala P. Child abuse and neglect: Do we know enough? A cross-sectional study of knowledge, attitude, and behavior of dentists regarding child abuse and neglect in Pune, India. J Contemp Dent Pract 2017;18:162-9.

18. Costacurta M, Benavoli D, Arcudi G, Docimo R. Oral and dental signs of child abuse and neglect. Oral Implantol (Rome) 2015;8:68-73.

19. Fisher-Owens SA, Lukefahr JL, Tate AR; American Academy of Pediatric Dentistry, Council on Clinical Affairs, Council on Scientific Affairs, Ad Hoc Work Group on Child Abuse and Neglect, American Academy of Pediatrics, Section on Oral Health Committee on Child Abuse and Neglect. Oral and dental aspects of child abuse and neglect. Pediatr Dent 2017;39:278-83.

20. Bradbury-Jones C, Innes N, Evans D, Ballantyne F, Taylor J. Dental neglect as a marker of broader neglect: A qualitative investigation of public health nurses’ assessments of oral health in preschool children. BMC Public Health 2013;13:370.

21. Souster G, Innes N. Some clarification of trigger signs for dental neglect. Evid Based Dent 2014;15:2-3.

22. Ramazani N. Child dental neglect: A short review. Int J High Risk Behav Addict 2014;3:e21861.

23. Somani R, Kushwaha V, Kumar D, Khaira J. Review paper child abuse and its detection in the dental office. J Indian Acad Forensic Med 2011;33:361‑5.

24. Child Welfare Information Gateway. Long‑Term Consequences of Child Abuse and Neglect. Washington, DC, U.S: Department of Health and Human Services, Children’s Bureau; 2013.

25. Saini N. Child abuse and neglect in India: Time to act. Jpn Med Assoc J 2013;56:302-9.

26. Anand U. Soon You May Land in Jail for Beating Child. New Delhi: The Indian Express; 2014.

27. Manavazhagan D, Ahmed N, Uma Maheswari TN. Dental neglect in pediatric patients among Indian population: A review of case reports. Int J Forensic Odontol 2016;1:4-5.

28. Chopra A, Gupta N, Rao NC, Vashisth S. Harbingers of child abuse and neglect: A qualitative study of public health nurses' assessments of oral health in preschool children. BMC Pub Health 2013;4:64-8.

29. Vijayan A, Jayarajan J, Fathima B N, Shaj F. Detecting child abuse and neglect—are dentists doing enough to identify the dirty secret? Int J Prev Clin Dent Res 2014;1:85-92.

30. Vidhale G, Gondhane AV, Jaiswal K, Barai M, Naphde M, Patil P. Role of dentist in child abuse and neglect: An Indian perspective. Int J Dent Med Res 2015;1:224-5.

31. Azevedo MS, Goettems ML, Brito A, Possebon AP, Domingues J, Demarco FF, et al. Child maltreatment: A survey of dentists in Southern Brazil. Braz Oral Res 2012;26:5-11.