Review Article

Child Abuse and Neglect – Role of Dentist

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Abstract

The following article gives a brief idea of child abuse and the role of the dentist in its early intervention. Child abuse is the world's greatest silent crime. It is any kind of physical, sexual, emotional abuse, or neglect resulting in actual or potential harm that may extend to the length of life. Child abuse and neglect (CAN) is a global phenomenon. While systems of laws and legislatures are set in place for such a heinous crime, India is still in a position that it has a long way to go to help and protect such children. The prevalent role of a dentist in the oral health care of a child helps to acknowledge a victim of abuse. Dentists are one of the few personnel who come in direct contact with the victim and can help salvage them. On detecting any unexplained or inexplicable bruise or injury on the child's body, the patient should be questioned and the parent or caregiver cross-examined. The apparent damage can be eliminated with prompt attention and action on the part of the dentist. The willful silence of a dentist makes them an indirect accomplice to the perpetrator of abuse. No known victim of CAN should go unreported or unspoken.

Keywords: Child abuse and neglect, Child abuse, Role of dentist.

Introduction

Child abuse is a matter of the major concern in our society. It is pervasive and ubiquitous globally. The points on the line of economic status are so far apart leading to pronounced intricacy of lifestyle which can be a considerable reason of concern for the increase in child abuse and neglect (CAN) in India. CAN is defined as every kind of physical, sexual, emotional 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, trust, or power.[1] (WHO - 1999). The CAN definition includes: (1) the consequences of deliberate action (physical, sexual, or emotional abuse) or (2) the consequences of an omission (neglect). Any act of abuse or neglect on the part of a kid, particularly an infant, represents a risk to the kid's life, health, and development, as well as their growth potential.[1]

In the 1970s, the organized dentistry first addressed the dentist's responsibility in preventing CAN. The American Dental Association (ADA) did not include mandatory detection and reporting of perioral indicators of child abuse in its Principles of Conduct and Code of Ethics until 1993. Dentists must be required to become familiar with the perioral indications of child abuse and to report suspected cases to the competent authorities in accordance with state legislation, according to a resolution endorsed by the ADA House of Delegates.[2]

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The American Academy of Pediatric Dentistry defined dental neglect as the willful failure of a 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. Indeed, many dentists who regularly treat children assert that management of dental neglect is part of daily practice.[3]

Types of Child Abuse

Child abuse is the maltreatment done to children below 18 years by adults that causes harm to them. This includes physical abuse, emotional and psychological abuse, and sexual abuse as well as neglect.

Physical abuse is a non-accidental physical injury caused to a child by the deliberate use of intensive force. It includes beating, punching, poisoning, suffocating, forcing excessive physical stress, burning, or any means to harm the child. This can be clinically manifested as bruises, welts, burns, broken bones, or unexplained injuries. The clinical condition of the seriously physically abused child by

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parents or caregivers is called — Battered child syndrome [Table 1].[4]

Emotional abuse is an act carried out to control the child through manipulating, criticizing, or humiliating by the parents or caregivers. The effects may not be directly visible at the moment but are intellectually present. They have a deep-seated impact on the child's mind which makes them doubt their self-esteem, also affecting their thought process and perception of reality. It can have consequences such as isolation, depression, anxiety, and suicidal tendencies. Sexual abuse is a sexual activity that is carried out by an elder either by force or threats. The perpetrators intimidate the child for their gratification. It involves but not limited to penetrative or non-penetrative sexual contact, exhibitionism, fondling, inappropriate touching, showing pornographic content, or exploitation of child for prostitution. It can display both physical as well as behavioral indicators.

Neglect is the failure of the parent or the caregiver to meet a child's basic physical as well as emotional needs. There are four types of neglect: Physical neglect, medical neglect, emotional neglect, and educational neglect. Neglect is difficult to recognize and can show long-term consequences. It can also result from factors such as poverty, unemployment, young maternal age, family stress, or health problems that can be completely unintentional.

Can in India

According to the census 2011, India has a population of 121.1 million people, with 13.59% (16.45 million) in the 0–6 year age group and 30.76% (37.24 million) in the 0–14 year age group.[6] The vulnerability of children to different types of abuse is increasing as a result of significant changes in demographic, socio-cultural beliefs, psychological, and socio-economic factors. The Ministry of Women and Child Development is responsible for ensuring that children's rights and development are upheld. Various policies and programs, schemes, Laws and Acts have been made by the Government for the protection and security of child rights.

1. "Protection of Children from Sexual Offences Act," 2012, the POCSO Act, 2012 is a comprehensive law to provide for the protection of children from the offences of sexual assault, sexual harassment, and pornography, while safeguarding the interests of the child at every stage of the judicial process by incorporating child-friendly mechanisms for reporting, recording of evidence, investigation, and speedy trial of offences through designated special courts[7]
2. Juvenile Justice (Care and Protection of Children) Act, 2015, an Act to consolidate and amend the law relating to juveniles in conflict with law and children in need of care and protection, by providing for proper care, protection, and treatment by catering to their development needs, and by adopting a child-friendly approach in the adjudication and disposition of matters in the best interest of children and for their ultimate rehabilitation through various institutions established under this enactment.[8]

Other such steps taken by the Government include:

- Prevention of Child Marriage Act, 2006
- Formation of the National Commission for Protection of Child Rights, 2005
- National Plan of Action for Children (2016)
- Right to Education Act, 2009
- Child Labor (Prohibition and Regulation) Act, 1986
- Integrated Child Protection Scheme (2009) [Table 2].

The number of children who are sexually solicited while using the internet, as well as the large number of victims who never reveal their sexual abuse from within and outside the family, may not be accounted for in the data. Children who do not disclose might be between 30% and 87%.[14] Fear of indignity, guilt, community denial, associated socio-cultural stigma (especially if the abuse occurs in context with the family), a communication gap between parents and children about this issue, and inability to trust government bodies are all factors that contribute to underreporting of child sexual abuse (CSA) in India.[15]

Role of Dentist - Are we Doing Enough?

Dentists can play a crucial role in the detection and prevention of child abuse. As he can be the first person to be encountered after the abuse or can come up against during a routine dental check-up. Pediatric dentists are most commonly to run across such cases and can help in the protection of the abused child, provided they have the knowledge and training to diagnose such cases. Furthermore, they are in the position to notice the behavioral changes in the child and observe the parent-child relationship.

Due to a lack of expertise and suspicion, the majority of dentists fail to spot such incidents. The major constraints, according to a 1986 survey, are ignorance about the problem and a lack of awareness.[16] Other factors include apprehension about dealing with outraged parents or becoming involved, an unwillingness to accept that parents are negligent, or concern of financial repercussions in the form of patient loss. Dentists who have been trained to spot signs of abuse and neglect are 5 times more likely than dentists who have not been trained to do so to file a complaint.[17] Sonbol and others identified uncertainty regarding referral protocols as a matter of prime concern that kept dentists from reporting suspected cases. According to the Harris *et al*. and Cairns *et al*., — lack of clarity regarding the diagnosis was the second most prevalent obstacle to referral.[18]

Clinical Aspect of can - what to Search for?

At reception

It is the first place where the behavior of the child and the parent-child relationship can be noticed in brief. The maltreated or abused child generally exhibits an overly vigilant or

Table 1: Physical and behavioral indicators of child abuse[5]

Physical indicators	Behavioral indicators
Unexplained genital injury	Regression in behavior, school performance, or attaining developmental milestones
Recurrent vulvovaginitis	Acute traumatic response such as clingy behavior and irritability in young children
Vaginal or penile discharge	Sleep disturbances
Bedwetting and fecal soiling beyond the usual age	Eating disorders
Anal complaints (e.g., fissures, pain, and bleeding)	Problems at school
Pain on urination	Social problems
Urinary tract infection	Depression
STI	Poor self-esteem
Pregnancy	Inappropriate sexualized behavior
Presence of sperm	

STI: Sexually transmitted disease

Table 2: Total number of cases registered in the past 5 years in India

Year	Under "protection of children from sexual offences act," 2012	Under "Juvenile justice (Care protection of children) Act," 2015
2015	14,913[9]	1457[9]
2016	36,022[10]	2253[10]
2017	32,608[11]	2452[11]
2018	39,827[12]	2030[12]
2019	47,335[13]	1958[13]

nonchalant type of behavior. These kids will avoid eye contact. The physique of the child should be observed for the signs of malnutrition. Any noticeable unexplained injuries or bruises on the body should be made note of. This brief interaction can be inconclusive and difficult to assert that the child is abused but a crucial step in the identification of the victim undergoing such atrocity

At chair-side

The dentists are in a unique position where they can suspect as well as to detect child maltreatment. There can be different dentofacial manifestations of physical abuse, sexual abuse, and neglect

Intraoral signs

- The oral manifestations of the physical abuse include abrasion and laceration of soft tissue such as to lips, gingiva, tongue, alveolar mucosa, tonsils and back of the oral cavity, hard and soft palate, and frenum. There can be fracture, dislocation, or avulsions of the tooth. Maxillary and mandibular fractures of unexplained origin are observed
- Hematoma, ecchymosis, lacerations, scars from the previous trauma, burns by hot food or cigarettes can be seen on the lips. Commissures may be bruised or scared due to gagging with rope or cloth[19]
- A severe form of physical abuse could be attributed to the evident laceration of the labial and lingual frenum. Abrasion and laceration of gingiva, tongue, palate, the floor of the mouth by food, or burning flatware caused by aggression or forced feedings[20]
- Pulpal necrosis leading to a discolored tooth may be seen as a result of the previous trauma. There can be multiple fractures, dislocation, and avulsion of teeth of unexplained origin which cannot be correlated with the developments of the traumatic incident[21]
- Early or the previous fracture signs might be evident on the mandible and maxilla localized to condyles, mandibular ramus, and mandibular symphysis.[22] Nasal fractures occur most frequently (45%), followed by mandibular fractures (32%), and zygomatic maxillary complex and orbit fractures (20.5%).[23]

In prepubertal age, the presence of ulcers, erythema, pseudomembranous, or purulent lesions that indicate signs of oral and perioral sexually transmitted diseases might be suspected of being sexual abuse.[2]

- Erythema, ulcers, pseudomembranous, or papular-vesiculobullous lesions in the lips, tongue, palate, and nose-pharynx are all signs of gonorrhea. Oral and perioral gonorrhea in preadolescents, detected with suitable culture methods and confirmatory tests, is pathognomonic of sexual abuse[24]
- Condyloma acuminate, caused by the human papillomavirus, appears as a single or several pedunculated lesions that resemble cabbage and are indicative of CSA. Papules on the lips might be an indication of syphilis. A positive test of *Treponema pallidum* clearly suggests a case of sexual assault, as it is extremely infrequent in children[23]

- Erythema and petechiae of unknown origin observed on the intersection of the soft and hard palates or the floor of the mouth can be definite signs of forced oral intercourse.[25]

Extraoral signs[26]

- Examine the head and neck for asymmetry, swelling, and bruises; look for evidence of hair tugging on the scalp; and look for scars, tears, and abnormalities on the ears
- Look for varied-colored bruises and abrasions, which indicate different phases of healing. Inspect the skin for characteristic pattern marks made by belts, ropes, hangers, or cigarettes
- Examine the middle third of the face for bilateral bruising around the eyes, petechiae (small red or purple spots containing blood) in the sclera of the eye, ptosis of the eyelids, or a deviated gaze, a bruised nose deviated septum or blood clot in the nose
- Check for bite marks, which might be the consequence of an adult's or another child's outburst of rage. Bite marks in areas that cannot be the result of self-inflicted wounds are never accidental
- A high percentage of childhood burns are due to abuse (2–35% overall; up to 45% for genital and perineal burns). Scald burns (from contact with hot liquids) and thermal burns (contact with hot objects) are the two types of burns most commonly found in mistreated children. The most prevalent abusive object burns are cigarette burns. These often create a strongly delineated, circular eschar with a tissue response collaret encircling it.[27]

Bite Mark Evidence

Bite marks are significant indicative of child abuse. It is notable evidence to identify the perpetrator inflicting abuse on the victim. This is one of the features that can be seen on the victim as well as the perpetrator signifying attempts of self-defense against the abuse. Bite marks are found in ovoid, elliptical, or semicircular patterns. Three predominant mechanisms associated with the production of bite marks are; tooth pressure, tongue pressure, and tooth scrape.[28]

There are seven types of bite marks: [29]

- Hemorrhage (a small bleeding spot)
- Abrasion (non-damaging mark on the skin)
- Contusion (ruptured blood vessels and bruise)
- Laceration (near puncture of skin)
- Incision (neat punctured or torn skin)
- Avulsion (removal of skin)
- Artefact (bitten off piece of the body).

A time spectrum of bites may reflect repetitive abuse, with bite marks that are healed, healing, and fresh. It is observed that the bite-marks seen in infants are mostly a punitive reaction to crying or soiling, while in childhood they tend to be a function of assault or defense rather than being punitive. Sexually oriented bite marks occur more frequently in adolescents. Bite marks may appear anywhere on the body but tend to be centered on the cheek, neck, arm, shoulder, thighs, buttocks, or genitalia.[30]

Dental Neglect

Dental neglect is defined by the American Academy of Pediatric Dentistry as the — willful failure of a 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.[31]

Poor oral hygiene, halitosis, early childhood caries, or else untreated dental caries with rapid progression, extending on more than half of the teeth found in the oral cavity, odontogenic infections (recurrent and previous abscesses), periodontal disease, and aphthous lesions as a result of a nutritional deficiency status are all clearly identifiable oral signs of neglect.[32]

Documentation and Intervention

Accidental trauma depicts very different types of injuries as compared to the ones due to maltreatment. Whenever a dentist comes across any unexplained injuries, it should be questioned to the child as well as parents individually. The answers must be carefully noted and checked for the resemblance between both the answers. It should be made sure that the answers must match and explain the injury. If the injuries are not consistent with the explanation, they should be suspected of child abuse and documented. Detailed documentation reports should be made on the location, clinical appearance, and severity of the injury. Photographs and radiographs of the area of interest must be included in the report as they can serve as potential evidence. In these types of cases the authorities, social workers and the patient's physician should also be consulted. If any such case is encountered, it is the responsibility of the dentist to consider suspicion, carry out appropriate documentation, and take necessary follow-up steps.

Reporting Suspicion

Whenever such a case is reported, the parents or caretakers do not have to be told when a report is filed. In general, it is recommended that parents not be told because this may result in an angry interaction, putting the dentist, the office staff, or the kid in danger. In addition, if the incidence is addressed with the parents, the dentist may be persuaded not to report it.[33]

The dentist can report such instances to the child helpline 1098 or the police directly. Aside from making a police report, a child rescue organization can be contacted. Authorities will undertake an investigation after the report is submitted, and relevant steps will be taken depending on the findings of the inquiry.

Conclusion

Child abuse is a heinous crime committed against a defenseless individual who has no method of defending themselves, and

it should not be pardoned or condoned. Recent updates in the laws have shed light on situations that have been deeply ingrained in society for a long time but are still insufficient. Spare the rod, spoil the child‖ such concepts encourage these kinds of abuses which need to be abolished and abandoned. If a child's mind is subjected to such acts of monstrosity at a young age, the victim will suffer from psychological trauma that will last a lifetime, resulting in incorrect perceptions of what is right and wrong. The child may battle with despair, self-harm, insecurity, and skepticism for the rest of his or her life.

Pinpointing a child at risk of abuse is a multidisciplinary approach. Dentists are one of the many professionals that work to protect children who are at potential risk of being abused. They can take a proactive role in ensuring the victim's safety by detecting and reporting mistreatment early on. It is critical to have a thorough understanding of how to spot a patient who has been abused by looking at the clinical picture given by the patient's behavior and other symptoms visible on physical examination. They should be trained to deal with such situations and be aware of the right protocols for reporting them to the relevant authorities. It is the dentist's duty to keep up with the recent updates in the case.

Although not all suspicions of child abuse prove to be correct, they nonetheless merit serious consideration and prompt action. Medical treatment, therapy, and counseling can help children and families heal sooner if the abuse is discovered and stopped. To avoid further physical and psychological stress, these instances must be addressed with haste and care, because as it is said bruises fade but the pain lasts forever. It is fundamental to empathize with the sufferer by putting ourselves in their shoes. Every child should be listened to, shielded, and aided. Such cases need both actions and compassion, that is, action against the perpetrator and compassion for the victim, though it will never be enough.

References

1. Kirankumar SV, Noorani H, Shivprakash PK, Sinha S. Medical professional perception, attitude, knowledge, and experience about child abuse and neglect in Bagalkot district of North Karnataka: A survey report. J Indian Soc Pedod Prev Dent 2011;29:193-7.
2. Vidhale G, Godhane 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.
3. Kittle PE, Richardson DS, Parker JW. Two child abuse/child neglect examinations for the dentist. J Dent Child 1981;48:175-80
4. Pezeshki A, Rahmani F, Bakhtavar HE, Fekri S. Battered child syndrome-a case study. Emerg (Tehran) 2015;3:81-2.
5. World Health Organization, Child Sexual Abuse. Available from: https://www.who.int/violence_injury_prevention/resources/publications/en/guidelines_chap7.pdf [Last accessed on 2021 Jun 01].
6. Ministry of Statistics and Programme Implementation, Government of India. Children in India-a statistical Appraisal. India: Government of India; 2018. Available from: http://www.mospi.nic.in/sites/default/files/publication_reports/Children%20in%20India%202018%20%E2%80%93%20A%20Statistical%20Appraisal_26oct18.pdf [Last accessed on 2021 Jun 02].
7. Ministry of Women and Child Development, Government of India. POCSO-model Guidelines; 2013. Available from: https://www.wcd.nic.in/sites/default/files/POCSO-ModelGuidelines.pdf [Last accessed on 2021 Jun 02].
8. Ministry of Law and Justice, Government of India. Juvenile Justice (Care and Protection of Children) Act; 2015. Available from: http://www.cara.nic.in/PDF/JJ%20act%202015.pdf [Last accessed on 2021 Jun 02].
9. National Crime Records Bureau, Government of India. Crime in India-2015. Available from: https://www.ncrb.gov.in/sites/default/files/crime_in_india_table_additional_table_chapter_reports/Chap ter%20 6-15.11.16_2015.pdf [Last accessed on 2021 Jun 01].
10. National Crime Records Bureau, Government of India. Crime in India-2016. Available from: https://www.ncrb.gov.in/sites/default/files/Crime%20in%20India%20-%202016%20Complete%20PDF%20291117.pdf [Last accessed on 2021 Jun 02].
11. National Crime Records Bureau, Government of India. Crime in India-2017. Available from: https://www.ncrb.gov.in/sites/default/files/Crime%20in%20India%202017%20-%20Volume%201_0_0.pdf [Last accessed on 2021 Jun 02].
12. National Crime Records Bureau, Government of India. Crime in India-2018. Available from: https://www.ncrb.gov.in/sites/default/files/Crime%20in%20India%202018%20-%20Volume%201_3_0_0.pdf [Last accessed on 2021 Jun 02].
13. National Crime Records Bureau, Government of India. Crime in India-2019. Available form: https://www.ncrb.gov.in/sites/default/files/CII%202019%20Volume%201.pdf [Last accessed on 2021 Jun 02].
14. Carson D, Foster J, Tripathi N. Child sexual abuse in India: Current issues and research. Psychol Stud 2013;58:318-25.
15. Choudhry V, Dayal R, Pillai D, Kalokhe AS, Beier K, Patel V. Child sexual abuse in India: A systematic review. PLoS One 2018;13:e0205086.
16. Kassebaum DK, Dove SB, Cottone JA. Recognition and reporting of child abuse: A survey of dentists. Gen Dent 1991;39:159-62.
17. Tsang A, Sweet D. Detecting child abuse and neglect-are dentists doing enough? J Can Dent Assoc 1999;65:387-91.
18. Vasa AA, Sahana A, Sekhar KR, Rajaram B, Vemulapalli S. Dental Graduates Awareness of Child Abuse and Neglect (CAN). J Adv Med Med Res 2015;9:1-7.
19. Rupp RP. The dentist's role in reporting suspected child abuse and neglect. Gen Dent 2000;48:340-2.
20. Needleman HL. Orofacial trauma in child abuse: Types, prevalence, management, and the dental profession's involvement. Pediatr Dent 1986;8:71-80.
21. Giusti G, Marigo M, Lunardi L, Del Vecchio S. Trattato di medicina legale e scienze affini. CEDAM. 1999;3:783-806.
22. Costacurta M, Benavoli D, Arcudi G, Docimo R. Oral and dental signs of child abuse and neglect. Oral Implantol (Rome) 2016;8:68-73.
23. Mulliken JB, Murray JE. Facial fractures in children. Plast Reconstr Surg 1977;59:15-20.
24. American academy of pediatrics committee on child abuse guidelines for the evaluation of sexual abuse of children: A subject review. Pediatrics 1999;103:186-91.
25. Schlesinger SL, Borbotsina J, O'Neill L. Petechial hemorrhages of the soft palate secondary to fellatio. Oral Surg Oral Med Oral Pathol 1975;40:376-8.
26. Mathur S, Chopra R. Combating child abuse: The role of a dentist. Oral Health Prev Dent 2013;11:243-50.
27. Lukefahr JL. Child Abuse and Neglect. Texas: University of Texas Medical Branch; 2008.
28. Vale GL. Dentistry, bite marks and investigation of crime. J California Dent Assoc 1996;25:29-34.
29. Lessig R, Wenzel V, Weber M. Bite mark analysis in forensic routine case work. Exp Clin Sci Int Online J 2006;5:93-102.
30. Wagner GN. Bitemark Identification in Child Abuse Cases. United States: American Association of People with Disabilities; 1986.
31. American academy of pediatrics committee on child abuse and neglect; American academy of pediatric dentistry; American academy of pediatric dentistry council on clinical affairs Guideline on oral and dental aspects of child abuse and neglect. Pediatr Dent 2009;30:86-9.
32. Blain SM. Abuse and neglect as a component of pediatric treatment planning. J Calif Dent Assoc 1991;19:16-24.
33. Chiodo GT, Rosenstein DI. Child abuse in Oregon: The dentist's responsibility. J Oreg Dent Assoc 1984;54:21-4.