

Awareness and Professional Responses in Managing Cases of Child Abuse and Neglect (CAN) among Dental Students, General Dentists, and Pedodontists of Bengaluru City, India

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ABSTRACT

Aim: The aim is to assess the awareness and professional responsibilities of pedodontists, general dentists, and dental students concerning suspected child abuse and to explore their professional experiences with this issue.

Material and methods: A cross-sectional questionnaire study was conducted among 400 conveniently selected general dentists, pedodontists, and dental students in Bengaluru city. Self-administered, structured, both open- and closed-ended questionnaires were used to elicit information about their experience (if any) with suspected/confirmed cases of Child Abuse and Neglect (CAN). Responses to open-ended items were grouped based on common responses. Descriptive statistics and Chi-squared tests were used to analyze the data.

Results: About 15.6% suspected a case of CAN based on physical indicators, and 8% reported a confirmed case of CAN that was based on conflicting history from child to parent. Counseling of both child and parent, followed by a proper recording of history, was the action taken for suspected cases. In addition, counseling of parents followed by reporting to concerned authorities was done for confirmed cases. About 18.4% observed a change in the child's behavior that was predominantly scared and submissive. Counseling of the child/parent/caretaker was the preferred approach, followed by reporting to concerned authorities. Pedodontists preferred to create public awareness, and dental students preferred to report to concerned authorities.

Conclusion: The exposure to a suspected or confirmed case of CAN was very less in the present study. Not many participants who encountered a child abuse case opted to report it to higher authorities and rather focused on counseling the parent/family. The role of pedodontists was found to be crucial since most reported cases were from their end; however, dental students showed a greater interest in managing a case of CAN. There is a need to create more awareness regarding the management of CAN cases among dentists and students.

Clinical significance: CAN is a major problem around the world that can have long-term adverse effects on Children. The first step in intervention is awareness and identification of CAN cases.

Keywords: Child abuse, Child abuse and Neglect (CAN), Child counseling, Cross-sectional study, Pedodontists.

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INTRODUCTION

Child Abuse and Neglect (CAN) is a major problem of concern in the world, including India. It is often a hidden phenomenon with the child suffering in silence.¹ Child abuse is generally defined as nonaccidental injury, sexual abuse, emotional abuse, or trauma inflicted on a minor.² The World Health Organization has defined "child abuse" as a violation of the basic human rights of a child, constituting all forms of physical, emotional ill-treatment, sexual harm, neglect, or negligent treatment, commercial or other exploitation, resulting in actual harm to child's health, survival, development, or dignity in the context of a relationship of responsibility, trust, or power.³

Physical, sexual, emotional, and neglect are common subtypes of child abuse that can have long-term adverse effects.⁴ Victims are at a higher risk of experiencing social problems, harbor feelings of low self-esteem with depression, and usually experience a higher incidence of substance abuse.⁵ The manifestation of child abuse varies among children, the child's stage of development, the severity of abuse, and other factors in the child's life.⁶

The prevalence of child abuse cases in India is high, though exact numbers are hard to estimate due to the under-reporting of cases. The Ministry of Women and Child Development reported that two out of every three children were physically abused, and every second child who reported faced emotional abuse.¹ The reasons for

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under-reporting could be a lack of or insufficient knowledge about professional responsibilities, legal provisions, and, more importantly, not knowing how to proceed if they encounter a case of child abuse.⁷

Since most physical abuses have orofacial manifestation (both intraoral and extraoral),⁸ dentists are in a unique position to identify a suspected case of child abuse based on a common pattern of

indicators which can be physical and/or behavior. In addition, pedodontists (pediatric dentists) are another group of specialists who are in contact with the child and their families. They also play a major role in identifying abuse and counseling both parent and their child.

There is a large population of children in India, and given their vulnerability arising from growing socio-economic variations, it is essential that dental students are sensitized to such social problems. The purpose of this study was to assess the awareness and professional responsibilities of pedodontists, general dentists, and dental students concerning suspected child abuse and to explore their professional experiences with this issue.

MATERIALS AND METHODS

Study Design and Setting

A cross-sectional questionnaire study was conducted among pedodontists, general dentists, and dental students of Bengaluru City, Karnataka, India. The ethical clearance was obtained from the Institutional Ethical Committee of Vokkaligara Sangha Dental College, Bengaluru, India.

Study Population and Participants

Pedodontists and general dentists who had private practice and/or were employed in dental colleges formed the study population. In addition, dental students studying in various dental colleges in Bengaluru city were also included. A convenient sample of 400 participants was conveniently selected subject to inclusion and exclusion criteria. The participants were selected for the study if they provided written informed consent after they were explained about the nature of the study. Individuals who did not provide informed consent and dental students in the first, second, and third years were excluded from the study. The study was conducted in accordance with the Declaration of Helsinki.

Survey Instrument

The data was collected through a self-administered, prestructured questionnaire designed for the stated objectives. The content validity was established by subject experts and pilot tested on a sub-sample that was not included in the final study. The questionnaire consisted of two sections. Section I included participants' demographic and background details like age, gender, and status of professional education (pedodontist/general dentist/dental student). One item was included to elicit the setting from which they have been educated about CAN. Section II included seven items (two items were open-ended if the response was "yes," and the other two were open-ended in general) that elicited information like participants' experience (if any) with a suspected and/or confirmed case of child abuse, the signs and/or indicators that led them to suspect and/or confirm, whether they reported the same to anyone, did they inform the same to the parents and referred the child to a specialist. Items were also included to know if the respondents observed any change in behavior of the suspected/confirmed child abuse and what is the ideal way to deal with such a situation.

The study participants who were employed/studying in dental colleges were approached after prior permission was obtained from the concerned authorities of the institutes. The students were approached personally at the end of their lectures or clinical postings. Faculties were approached in their department, and those in exclusive private practice were approached in the evening. The

questionnaires were distributed after briefly stating the objectives of the study. A time of 5 minutes was given to them, and upon completion, the questionnaires were immediately taken from them. Confidentiality and anonymity of their responses were assured, and no incentive of any sort was provided to any study participants. Every study participant had an opportunity to withdraw from the study if they did not wish to participate. Incomplete questionnaires were excluded from the analysis.

Categorization of Responses

Since items one, two, six, and seven were open-ended, it was decided to categorize responses before the analysis. This categorization was based on common responses received (Table 1).

Statistical Analysis

The data was entered in a Microsoft Excel spreadsheet (Microsoft Office 2010, Microsoft Corp., United States of America). The data was then analyzed using Statistical Package for Social Sciences (SPSS) (SPSS version 17.0, SPSS Inc, Chicago, Illinois, United States

Table 1: Categorization of responses from study participants

<i>Categories</i>	<i>Responses</i>
Signs/indicators	Physical indicators Behavioral indicators Background history Conflicting history from parent to child
If yes, your action and response	Report to concerned authorities and documentation Child/parent counseling and treatment of dental problem Aghast/shocked/pity History
Confirmation of child abuse	Physical indicators Conflicting history from child to parent Behavioral Indicators Clinical examination History
If confirmed, your action and response	Restricted to dental treatment Child counseling Parent counseling Report to concerned authorities and documentation Treat with care
The behavior of a child different from normal child	Stoic or shy or quiet Withdrawn or apprehensive/submissive/scared Not appreciable/varied
Ideal way to respond	Identification/documentation/make the child comfortable Counseling of parents or family or caretaker Child counseling Create public awareness Treatment of dental problems with care Report to concerned authorities Refer to specialist Legal action others

of America) for descriptive statistics. Chi-squared test was used for categorical data, and the level of significance was set at $p < 0.05$.

RESULTS

The total number of participants was 400. After applying the inclusion and exclusion criteria (including incomplete questionnaires), responses from 250 questionnaires were included for analysis, accounting for a response rate of 62.5% (250/400). The frequency distribution of background details and demographics is presented in Table 2. It was found that 64% were females and 36% were males. A majority of these participants were dental students and general dentists, whereas only 20% (50/250) were pedodontists. Around <50% of participants were female among dental students, pedodontists, and general dentists. The mode of getting educated in a classroom setting was reported by 81.6% (204/250), which included every dental student. In addition, 40% of pedodontists were educated in both classroom and clinical settings (Table 2).

Overall, only 15.6% (39/250) of participants suspected that the child was abused, with more responses from pedodontists that were statistically significant ($p = 0.001$) (Table 3). About 82% (32/39) resorted to physical indicators to suspect child abuse, with more responses from pedodontists (42.8%; 15/32). Counseling both the child/parent and recording history was the preferred approach, with the majority of responses from pedodontists (Tables 3 and 4).

Similarly, only 8% (20/250) of participants confirmed having come across an abused child, with more responses from pedodontists that were statistically significant ($p = 0.001$) (Table 3). The confirmation was based on conflicting history between the child and the parent and history. In response, a majority of

participants counseled the parent and the child and reported to concerned authorities, with more efforts from pedodontists (Table 5).

It was found that a majority of participants did not report to concerned authorities or report to the family, and neither referred the child to a specialist. However, among those who reported, it was found that 24% of pedodontists reported the same to the family, and 10% referred the child to a specialist. About 18.4% (46/250) of participants noticed a change in the behavior of the child, with 34.7% (16/46) reporting the child to be scared and submissive, followed by quiet and withdrawn. A large number of these observations were made by pedodontists.

It was observed that 43.6% of participants preferred counseling (parent/child/caretaker), 38% preferred reporting it to concerned authorities, and 36% preferred treating the dental problem with care. Only 8% and 5.6% preferred to take legal action and create public awareness (Fig. 1). Pedodontists' preference was more toward creating public awareness, followed by documentation and identification of such child patients. However, dental students preferred taking legal action and treating the dental problem with care, while general dentists preferred to refer the child to a specialist and counsel the child (Fig. 2).

DISCUSSION

Child abuse and neglect (CAN) is a global problem with serious life-long consequences.⁹ The present descriptive cross-sectional study was taken up to assess awareness and professional experience concerning child abuse among pedodontists, general dentists, and dental students in Bengaluru, India.

Table 2: Distribution of study participants according to gender, mode of education, and groups

		Dental students n (%)	Pedodontists n (%)	General dentist (n) (%)	Total
Gender	Males	34 (34)	22 (44)	34 (34)	90
	Females	66 (66)	28 (56)	66 (66)	160
	Total	100	50	100	
Mode of education	Classroom	100 (100)	28 (56)	76 (76)	204
	Clinical	0	2 (4)	15 (15)	17
	Both	0	20 (40)	9 (9)	29
	Total	100	50	100	

n, frequency; %, percentage

Table 3: Suspected and confirmed cases of abuse reported by participants according to groups

Group	Suspected cases		Total	χ^2	p-Value
	Yes	No			
	n (%)	n (%)			
Dental students	7 (7)	93 (93)	100	29.211	$p = 0.001^*$
Pedodontists	20 (40)	30 (60)	50		
General dentist	12 (12)	88 (88)	100		
Total	39 (15.6)	211 (84.4)	250		
Confirmed cases					
Dental students	1 (1)	99 (99)	100	24.18	$p = 0.001^*$
Pedodontists	12 (24)	38 (76)	50		
General dentist	7 (7)	93 (93)	100		
Total	20 (8)	230 (80)	250		

Level of significance at $p < 0.05$; n, frequency; %, percentage; *statistically significant at $p < 0.01$ using Chi-squared test

Table 4: Indicators used as parameters and responses to a suspected case of abuse

Indicators	Dental students	Pedodontist	General dentists	Total
	n (%)	n (%)	n (%)	
Physical indicators	5 (15.6)	15 (46.8)	12 (37.5)	32
Behavioral indicators	1 (33)	2 (67)	0	3
Conflicting history	1 (33)	2 (67)	0	3
Background history	0	1 (100)	0	1
Total	7	20	12	39
<i>Responses</i>				
Report to concerned authorities	0	1 (50)	1 (50)	2
Documentation	0	2 (67)	1 (33)	3
Child/parent counseling	5 (31.25)	8 (50)	3 (18.75)	16
Treatment of dental problem	0	3 (50)	3 (50)	6
Aghast/shocked/pity	0	3 (60)	2 (40)	5
History	2 (29)	3 (43)	2 (29)	7
Total	7	20	12	39

Table 5: Indicators used as parameters and responses to a confirmed case of abuse

Indicators	Dental students	Pedodontist	General dentists	Total
	n (%)	n (%)	n (%)	
Conflicting history from child and parent	0	6 (85.7)	1 (14.3)	7
Behavioral indicators	0	2 (75)	1 (25)	3
Physical indicators	0	1 (25)	2 (75)	3
Clinical examination	1 (50)	1 (50)	0	2
History	0	2 (40)	3 (60)	5
Total	1	12	7	20
<i>Response</i>				
Child counseling	0	2 (75)	1 (25)	3
Parent counseling	0	4 (57.1)	3 (42.9)	7
Restricted to dental treatment	1 (25)	2 (75)	0	3
Report to concerned authorities	0	3 (75)	1 (25)	4
Dental treatment with care	0	1 (25)	2 (75)	3
Total	1	12	7	20
	0	6 (85.7)	1 (14.3)	

n, frequency; %, percentage

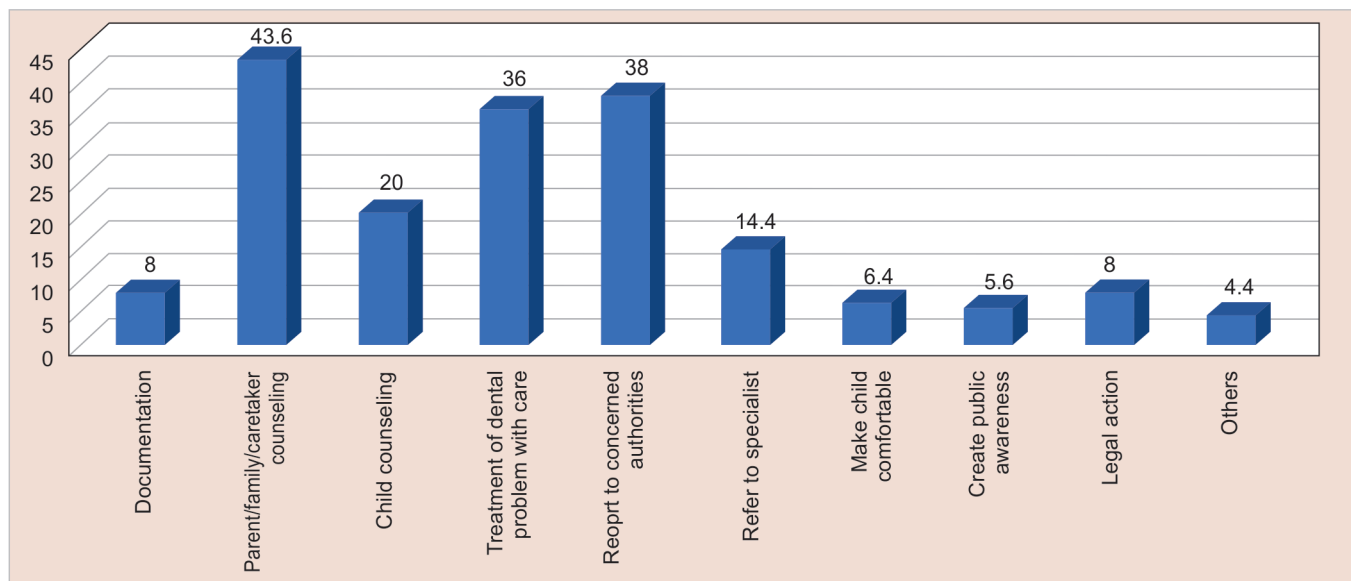


Fig. 1: Overall study participants' response toward an ideal and comprehensive way of dealing with child abuse and neglect in a clinical setting

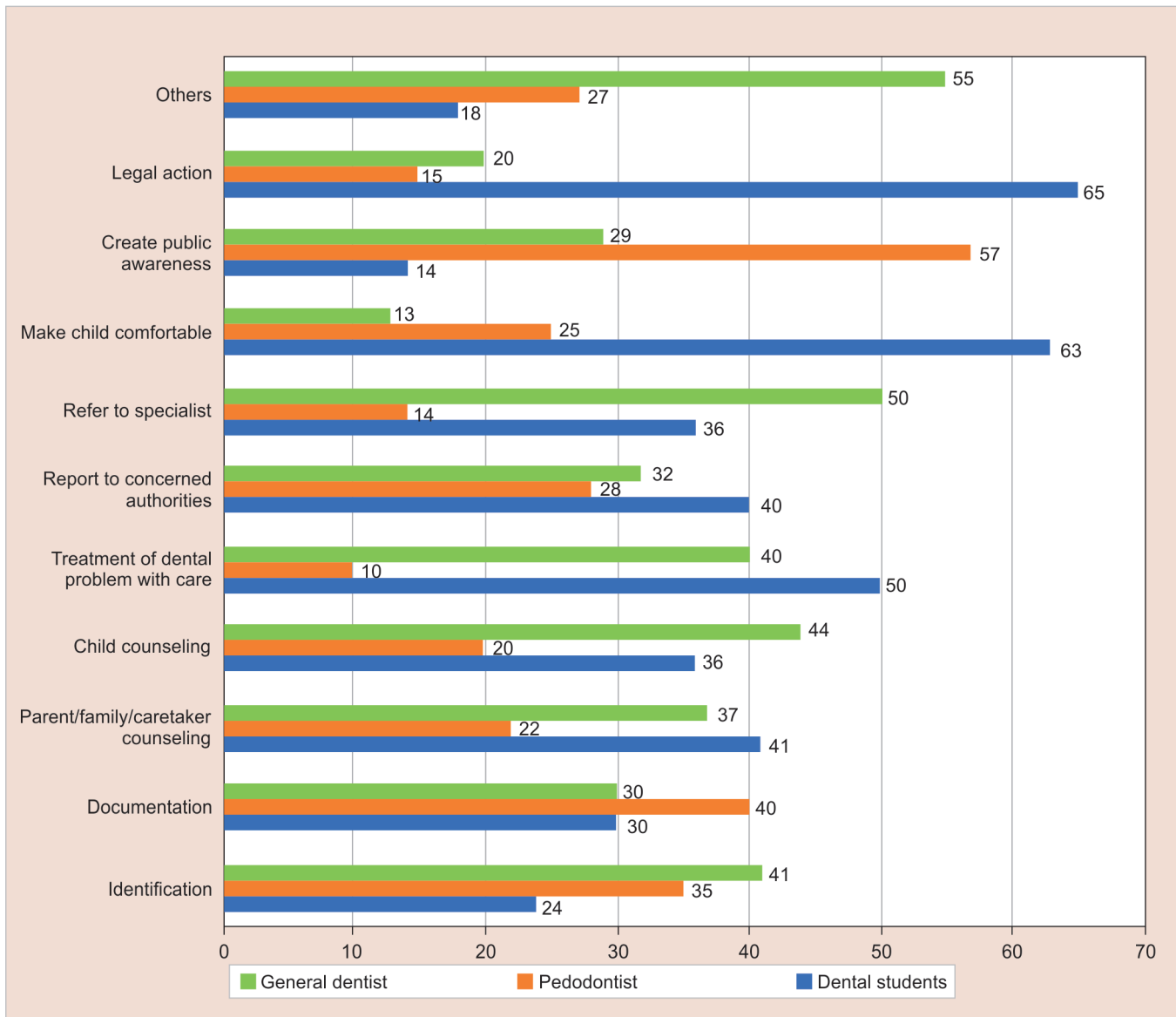


Fig. 2: Study respondent's perception toward an ideal and comprehensive way of dealing with child abuse cases in a clinical setting

The problem of child abuse is prevalent in India, as in many other countries. India is home to 19% of the world's children, and it is estimated that every second child is exposed to sexual abuse and violence.¹⁰ Given the high prevalence of child abuse in India and the high percentage of oral and facial wounds as a result of child maltreatment,^{11,12} it is crucial for dental healthcare providers to be well-educated about CAN.

The present study reported that about 81% of participants are getting to know about CAN from a classroom setting that included all dental students, the majority of pedodontists, and general dentists. While 40% of pedodontists were aware of CAN from both classroom and clinical settings, only about 15% of general dentists knew about CAN from their clinical setting. This difference in proportions could be attributed to the different core competencies of each sub-group. It can be justified that, in an Indian scenario, child patients reporting to any dental school are first screened by postgraduate students, and any child with injury and/or requiring behavioral management is usually managed by them under the guidance of a faculty. Therefore, undergraduate

dental students are limited to those child patients not requiring intensive management. This, however, is in contrast to a study reported in the literature where 41% of dental students learned about this topic in a clinical setting¹³ and 16.7% of dental students did not come across this topic.

In the present study, 39 participants (15.6%) came across a suspected case of abuse that constituted about 20 pedodontists who generally come across a greater number of children with dental/orofacial problems because of abuse.^{8,14,15} In addition, 32 study participants relied on physical indicators to suspect a case of abuse, and 16 participants responded by counseling both the child and parent, while seven participants recorded a detailed case history regarding the same. Surprisingly, six participants focused only on dental treatment, and only two participants reported it to concerned authorities. Overall, the proportion of participants who came across cases suspected of abuse is less. The response to reporting it to concerned authorities was even more, less, which can be attributed to a lack of knowledge, concerns about the consequences to children, and confidentiality.¹² The present study

also found that 20 participants reportedly confirmed child abuse cases based on conflicting histories by the child and parent. This was similar¹⁶ and contradicting⁴ to studies reported in the literature. A majority among those 20 participants chose to counsel parents regarding the same.

It was also observed that 12 participants reported the cases to concerned authorities, with the majority being pedodontists. It is essential for healthcare professionals (including dentists) to know that they are legally mandated to report suspected CAN or neglect based on “reasonable suspicion” and are not responsible for any further investigation.¹⁷ Though we did not make any attempt to find out the reasons, we assume that lack of knowledge and other factors mentioned in the previous paragraph are possible reasons.

About 25 participants reported the cases to the child’s family members. However, one needs to be careful since reporting the same to parents depends on the situation. It might put the child in danger since one parent may be the abuser while the other may hide the same. We need to interpret this with caution since Indian parents do resort to tactics (like shouting, creating fear using threats, slapping, beating with a stick, criticizing, restricting movement, etc.) under the guise of discipline.¹⁸ About 15 participants preferred to refer the child to a specialist, with more responses from general dentists. The participants might have suspected a case of abuse yet be doubtful about the diagnosis of CAN and might lack the necessary knowledge and skills to tackle cases with CAN. Therefore, it is extremely important for dental and medical professionals to be equipped with the information needed to determine whether the injury is accidental in nature or a result of abusive behavior toward the child.

It was found that about 18.4% of participants observed a change in the behavior of the child. The most common behavior observed was scared and submissive, followed by shy/quiet and withdrawn. It is noteworthy to mention that pedodontists were in a better position to identify such behavior except for stoic child that was identified by general dentists. The child’s behavior varied in some cases, while it was not appreciable in a few cases. There is scant reference to the behavior of abused children in a dental setting. This question was asked to elicit the probable behavior indicators that may help suspect a case of child abuse.

A hypothetical question was also asked to elicit responses from those respondents who did not handle any case of child abuse. This was done to find out the probable course of action that would be opted under these circumstances. It was found that 57% of pedodontists emphasized the need to create public awareness, and 40% preferred to document such cases, but only 15% responded that they would take legal action. Surprisingly, 65% of dental students responded that they would take legal action, and 63% would make the child feel comfortable. A majority of general dentists preferred to refer the child to a specialist, and 32% would report to concerned authorities. The present study also had a limitation. The sample selected was convenient, and therefore, the results cannot be generalized, and we did not specifically frame our questions that elicit responses to a specific type of abuse.

It can be concluded from the present study that a very less proportion of study participants encountered a case of child abuse. Physical indicators and conflicting history between the child and parent were the criteria that assisted the participants to suspect and confirm a case of child abuse. Unfortunately, not many participants who encountered a child abuse case opted to report it to higher authorities and rather focused on counseling the parent/family. Though pedodontists were at the forefront of suspecting

and confirming a case of child abuse, from the last hypothetical question, it was dental students who showed a greater interest in managing a case of child abuse in every way possible. This opens another avenue for further research to explore the reasons for the same.

Based on the findings of the present study, we recommend that curricular modifications should focus on providing students with concrete educational experiences about the process of detecting and reporting CAN. In view of the high likelihood of oro-dental injuries occurring in association with child abuse, and the low reporting of cases by the dental profession, this study has demonstrated a clear need for dentists to receive further formal training at the levels of undergraduate, postgraduate, and continuing professional dental education in the recognition and reporting of child abuse. The dental profession must become actively involved to recognize every aspect of a child’s life.

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