[Downloaded free from http://www.ijofo.org on Saturday, April 9, 2022, IP: 171.78.149.155]

Original Article

Knowledge, Attitudes, and Professional Responsibilities among Southern Indian Dental Residents Regarding Child Abuse: A Cross-sectional Survey

Madhuri Bandi, Sreekanth Kumar Mallineni, Sivakumar Nuvvula

From the Department of Pedodontics and Preventive Dentistry, Narayana Dental College and Hospital, Nellore, Andhra Pradesh, India

ABSTRACT

Aim: This study aims to assess the knowledge and attitudes about indicators, legal issues, professional responsibilities, and reporting mechanisms toward child abuse among South Indian dental residents.

Methods: A self-administered structured questionnaire comprising of 15 questions, was distributed to 170 dental residents belonging to three private dental teaching institutions in South India. The data collected was descriptively analyzed using Pearson Chi-square test.

Results: A total of 158 dental residents responded to the distributed questionnaires, with a response rate of 93%. Among them, 55% were females (n = 87) and the males were 45% (n = 71), with majority of the participants (n = 82) above 23 years of age (52%). Greater part of respondents (95%) in this study has the knowledge about the indicators of child abuse; 13% suspected a case of child abuse although only 62% of them had reported the incident. Most of the dental residents (85%) knew about legal issues and professional responsibilities but knowledge related to the reporting mechanisms was lacking. Almost 85% desired further training on the identification and reporting mechanisms for suspicious cases of child physical abuse.

Conclusion: Knowledge on the indicators of child abuse is inadequate among the dental residents, and most of them did not recognize or report a case. The reasons might be due to limitations in lecture-based learning which was not practiced in clinical settings. Therefore, more comprehensive education on the topic of child abuse including recognizing and reporting procedures should be reinforced in clinical settings.

Received: June, 2017.
Accepted: July, 2017.

KEY WORDS: *Attitude, child abuse, dental resident, knowledge*

Introduction

Child abuse may be defined as "an act of failure on the part of a parent or caretaker which may result in death, serious physical or emotional harm, sexual abuse or exploitation; which presents an imminent risk of serious harm." Child abuse has become a social problem prevalent globally, and it is observed in all ethnic, professional, religious, and social areas. In recent times, the community has become gradually responsive child abuse.[1] Nonetheless, in developing countries such as India, most of these cases are unnoticed or undocumented.[2] According to the survey reported by Indian Ministry of Women and Child Development, 2007,[3] two-thirds of children suffer child abuse; 53.2% children face different forms of sexual or emotional abuse. Data on offences and crimes against children are lacking. The reason might be due to unreported crimes against children, and some crimes are not even covered under existing legislations.

Nearly, 65% of injuries inflicted in reported child abuse cases occurred in the orofacial region. Among all the health-care specialists, dentists are in the most key position to recognize child abuse and neglect, as most of the signs of physical abuse involve the orofacial region and are accessible during dental examination.[4] Injuries to the upper lip and maxillary labial frenum may be distinctive in severely abused children. Furthermore, few studies reported that children in the abused group showed a higher level of plaque, gingival inflammation, and decayed teeth.[5,6]

Often the abuser evades returning the abused child to the same physician for obtaining treatment. However, dentists have an ongoing relationship with the patients and their family members, as they do not appear to avoid regular visits to the same dentist. Therefore, dentists have an opportunity to perceive the physical and the psychological state of the children, as well as the family environment.[4]

Address for correspondence:
Dr. Sreekanth Kumar Mallineni, E-mail: drmallineni@gmail.com

Access this article online

Quick Response Code:

Website: www.ijofo.org

DOI: 10.4103/ijfo.ijfo_12_17

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: 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.

[Downloaded free from http://www.ijofo.org on Saturday, April 9, 2022, IP: 171.78.149.155]

A prior study from the United States[7] found that 36% of the dentists surveyed had suspected the victims of child abuse, and only 19% had reported suspected child abuse to the authorities. In the developing countries, it is difficult to provide such statistical information due to the lack of knowledge and responsibility.[8] The suspected child abuse and neglect findings raise queries concerning dentists' rationale for not reporting these cases. Early studies from the Indian states of Karnataka[9] (medical professionals) and Gujarat[10] (medical and dental graduates) reported inadequate knowledge and experience regarding child abuse and neglect among health-care professionals. Furthermore, none studies were reported on legal issues, professional responsibilities, and reporting mechanisms child abuse in India. Hence, the present study addresses on the knowledge and attitudes about indicators, legal issues, professional responsibilities, and reporting mechanisms toward child abuse.

Methods

A self-administered, structured close-ended questionnaire comprising of 15 items was distributed to the dental residents of three private dental institutions in Southern India. The questionnaire was prepared in English version based on previous studies.[1,2] The validity of the questionnaire was performed with 10 pediatric dentists, comprehensiveness, and clarity of the final version of questionnaire was set based on the recommendations. The questionnaire was composed of four sections. In the first section knowledge (Q. No. 1–8) about the indicators of child abuse was included. The second section (Q. No. 9–10) included knowledge about their cognition/diagnosis of child abuse. The third section (Q. No. 11–14) included knowledge about the legal issues and reporting procedures of child abuse cases. The fourth section (Q. No. 15) includes the need for education and training in recognizing and reporting on child abuse.

The dental residents were asked to duly complete the questionnaire. Discussions on the topic among them were strongly discouraged to ensure accurate representation of their knowledge in relation to child abuse. The average time given to answer the questionnaire was 10 min. The data collected was tabulated, and descriptive statistics were performed using Statistical Package for the Social Sciences software version 21.0 for Windows (SPSS Inc., Chicago, IL, USA) for analysis. The influence of demographic characteristics (age and gender) on the knowledge was analyzed statistically using Pearson Chi-square test.

Results

Overall, 170 subjects were involved in the study, among them, responses from 158 (93%) were obtained for analysis, and the rest were excluded (5 did not return and 7 did not answer all the questions). Among them, 55% were females (n = 87), while males were 71 (45%) and 52% of participants were above 23 years [Table 1].

Knowledge about indicators of child abuse

Responses on eight questions regarding the knowledge of the physical indicators of child abuse were represented as Figure 1. Most respondents were able to identify the indicators of child abuse. When the dental students were asked whether bruises on the cheek may indicate slapping or grabbing of the face, 87% responded confidently. They recognized that, bruises usually occur in areas overlying bony prominences (48.7%), avulsed or discolored teeth (39%), 52% disagreed that bruises noted around the neck are usually associated with accidental trauma, wounds at different stages of healing (50.6%), burns associated with the shapes of hot objects (68.4%), and bite marks (54.4%) are often associated with child abuse.

Table 1: The summary of distribution of respondents by gender and age

Criteria	Participants (%)
Age	
≥24 (24-26)	82 (51.9)
≤23 (21-23)	76 (48.1)
Gender	
Male	71 (44.9)
Female	87 (55.1)

Most of the respondents (94.9%) said that they have the knowledge of all forms of child abuse, they recognized bruises on the cheek (86.7%), avulsed or discolored teeth (38.6%), bruises circumscribing the neck (31%), wounds at different stages of healing (50.6%), burns in the shapes of hot objects (84%), and bite marks (84%) are often associated with child abuse. Nevertheless, 51.9% conflicted that bruises noted around the neck are usually associated with accidental trauma.

Knowledge of social issues related to child abuse or neglect

Fifty-eight percent respondents believed that child abuse is more prevalent in particular socioeconomic groups. A large majority 64.8% of the respondents were unaware that, most abused children are not confined to poor families. Although 42.4% knew that abuse and neglect are not confined to poor families. Only 13.3% of the respondents suspected a case of child abuse, although only 61.9% of them had reported the incident. Among 86.7%of students who have never recognized a suspicious case of child abuse, 59.1% reported they were able to recognize a suspicious case, whereas 40.9% reported that they could not [Figure 2].

Knowledge of reporting procedures and legal requirements for suspected child abuse

The majority (85.4%) of the respondents knew that dental health-care professionals are required by law, to report suspected cases of child abuse or neglect whereas, very few of them (14.6%) do not know. However, only 48.7% knew the exact mechanisms for reporting child physical abuse. Greater proportions of them (75.9%) think that identity of a dentist reporting child abuse remains confidential [Figure 3].

Need for further education and training in recognizing and reporting child abuse

The majority of respondents (84.8%) felt that they need further training regarding identification and reporting mechanisms for suspicious cases of child physical abuse [Figure 4].

[Downloaded free from http://www.ijofo.org on Saturday, April 9, 2022, IP: 171.78.149.155]

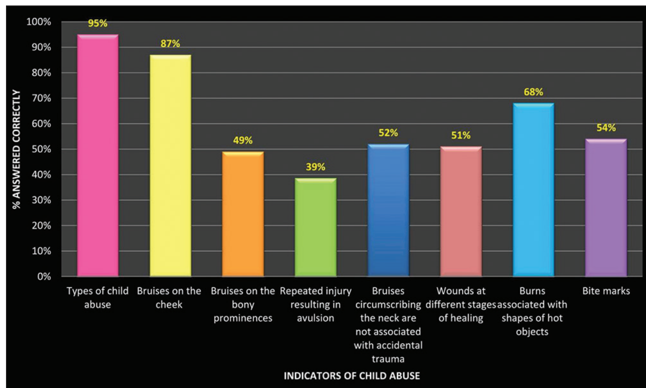

Figure 1: Response rate regarding the knowledge about indicators of child abuse

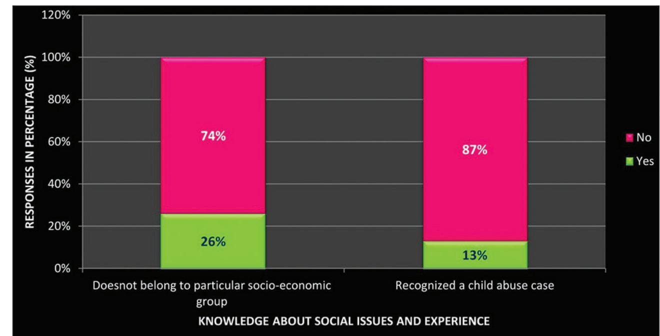

Figure 2: Response rate regarding the knowledge about social issues and experience related to child abuse

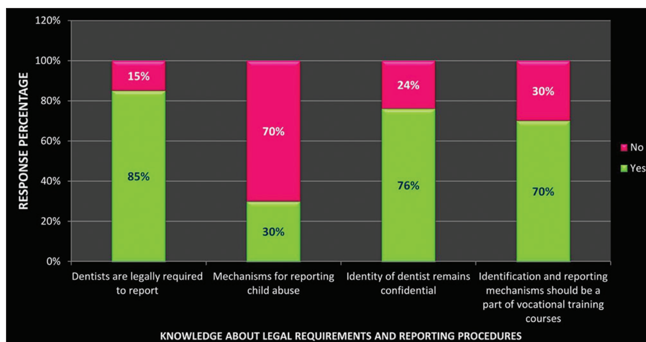

Figure 3: Knowledge on reporting legal procedures and requirements for suspected child abuse

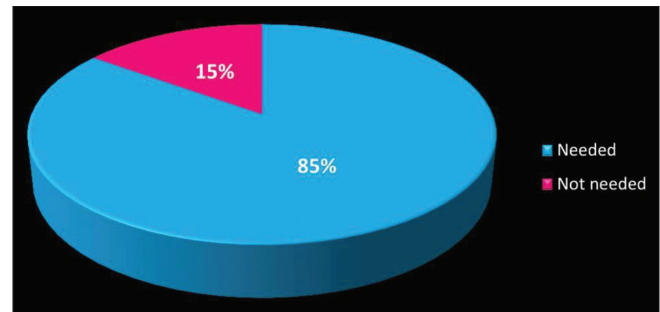

Figure 4: Dental residents suggested for need of further education and training in recognizing and reporting child abuse

Discussion

This cross-sectional study was conducted to explore the knowledge and ability of dental residents in South India to recognize and report child abuse and to assess their educational needs regarding child abuse. Questionnaires were distributed personally to avoid discussions among the respondents or to possibly correct their answers to questions which may result in inaccurate results.

Indicators of physical abuse were recognized by most of the dental residents (87%). Similarly, Jordanian study[11] found that indicators of child abuse were recognized by almost 97% of dentists. Hashim and Al-Ani[12] also reported similar response regarding the indicators of child abuse among the United Arab Emirates (UAE) dental students. The knowledge about indicators on child abuse found to be varying with experience.[13] Contrarily, A study[10] conducted with medical and dental professional reported that there is a lack of knowledge in identifying the signs of physical abuse. The similar response among the medical professionals of North Karnataka they neglected the importance of this topic.[9] In the present study, merely 5.9% knew that child abuse is not confined to the particular socioeconomic group. Similarly, UAE study showed that only 40.3% of the students responded appropriately. This indicates that the students were unaware of the effect of socioeconomic factors on the child abuse.

Only 13.3% had recognized a case of child abuse, of which only 61.9% have reported the incident rest of them (49.1%) were able to recognize a suspicious case. Likewise, Owais *et al*.[11] found 70% of them claimed that they were able to identify the cases whereas, 24% were not confident that they could recognize a case of child abuse. The reason for such least rate might be due to lack of exposure to such cases, uncertainty about diagnosis or lack of sufficient knowledge about reporting mechanisms which influence dental resident's decision to report a case of suspected child abuse.

In the present study, 85.4% of the dental residents were aware of their responsibility to report suspected cases. A similar response was reported among dental students in a Jordanian study.[14] The majority of them (75.9%) thought that identity of a dentist reporting child abuse remains confidential, however, only 48.7% knew the mechanism to report suspected cases (where and how). Professional fears and lack of adequate knowledge on legal requirements and reporting mechanisms act as barriers in identifying and reporting abuse.[15] In a study, reported among the dentists in Jordan, the rate of child abuse and neglect cases was reported to be extremely low and the reason might be due to lack of adequate knowledge to recognize such cases.[14] Many Studies in the existing literature in agreement with these findings.[2,11,12,15-17]

In the present study, participants predominantly (84.8%) felt that further training on identification and reporting mechanisms for suspected child abuse cases is essential at the graduate level. Most of them did not receive proper training in recognition and reporting child abuse except mere lecture-based learning.[12,15,16,18] The three private colleges were chosen because these are the only available colleges nearby our institute and this is considered to be a limitation for the present survey. Therefore, further comprehensive education

[Downloaded free from http://www.ijofo.org on Saturday, April 9, 2022, IP: 171.78.149.155]

and training that incorporates recognition and reporting of the suspected cases of child abuse[19,20] as well as reinforcing the same in clinical settings which might be beneficial for all dental students.[16]

Conclusion

Knowledge on the indicators of child abuse is inadequate among the dental residents, and most of them did not recognize or report a case. The reasons might be due to limitations in lecture-based learning and was not trained and practiced in clinical settings. Therefore, further comprehensive education on child abuse including recognizing and reporting procedures should be reinforced in clinical settings. Dental residents should focus further on the process of recognizing and reporting child abuse to offer better care for the child abuse victims.

Recommendations

- Comprehensive education and training is needed including mechanisms to recognize and report the suspected cases of child abuse rather than lecture-based learning
- Continuing dental education programs on the child abuse topic should be implemented.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. John V, Messer LB, Arora R, Fung S, Hatzis E, Nguyen T, *et al.* Child abuse and dentistry: A study of knowledge and attitudes among dentists in victoria, Australia. Aust Dent J 1999;44:259-67.
2. Ramos-Gomez F, Rothman D, Blain S. Knowledge and attitudes among California dental care providers regarding child abuse and neglect. J Am Dent Assoc 1998;129:340-8.
3. Kacker L, Varadan S, Kumar P. Study on Child Abuse. India: Ministry of Women and Child Development, Government of India; 2007. p. 104-5.
4. 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.
5. Montecchi PP, Di Trani M, Sarzi Amadè D, Bufacchi C, Montecchi F, Polimeni A, *et al.* The dentist's role in recognizing childhood abuses: Study on the dental health of children victims of abuse and witnesses to violence. Eur J Paediatr Dent 2009;10:185-7.
6. Valencia-Rojas N, Lawrence HP, Goodman D. Prevalence of early childhood caries in a population of children with history of maltreatment. J Public Health Dent 2008;68:94-101.
7. Kassebaum DK, Dove SB, Cottone JA. Recognition and reporting of child abuse: A survey of dentists. Gen Dent 1991;39:159-62.
8. ShaluR, Kaur M, Kaur S. Dental perspective: Recognition and response to child abuse and neglect in Indian setting. J Indian Acad Oral Med Oral Radiol 2011;23:57-60.
9. 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.
10. Deshpande A, Macwan C, Poonacha KS, Bargale S, Dhillon S, Porwal P, *et al.* Knowledge and attitude in regards to physical child abuse amongst medical and dental residents of central Gujarat: A cross-sectional survey. J Indian Soc Pedod Prev Dent 2015;33:177-82.
11. Owais AI, Qudeimat MA, Qodceih S. Dentists' involvement in identification and reporting of child physical abuse: Jordan as a case study. Int J Paediatr Dent 2009;19:291-6.
12. Hashim R, Al-Ani A. Child physical abuse: Assessment of dental students' attitudes and knowledge in United Arab Emirates. Eur Arch Paediatr Dent 2013;14:301-5.
13. Jordan A, Welbury RR, Tiljak MK, Cukovic-Bagic I. Croatian dental students' educational experiences and knowledge in regard to child abuse and neglect. J Dent Educ 2012;76:1512-9.
14. Al-Jundi SH, Zawaideh FI, Al-Rawi MH. Jordanian dental students' knowledge and attitudes in regard to child physical abuse. J Dent Educ 2010;74:1159-65.
15. Lazenbatt A, Freeman R. Recognizing and reporting child physical abuse: A survey of primary healthcare professionals. J Adv Nurs 2006;56:227-36.
16. Thomas JE, Straffon L, Inglehart MR. Knowledge and professional experiences concerning child abuse: An analysis of provider and student responses. Pediatr Dent 2006;28:438-44.
17. Sonbol HN, Abu-Ghazaleh S, Rajab LD, Baqain ZH, Saman R, Al-Bitar ZB, *et al.* Knowledge, educational experiences and attitudes towards child abuse amongst Jordanian dentists. Eur J Dent Educ 2012;16:e158-65.
18. Manea S, Favero GA, Stellini E, Romoli L, Mazzucato M, Facchin P, *et al.* Dentists' perceptions, attitudes, knowledge, and experience about child abuse and neglect in Northeast Italy. J Clin Pediatr Dent 2007;32:19-25.
19. Ivanoff CS, Hottel TL. Comprehensive training in suspected child abuse and neglect for dental students: A hybrid curriculum. J Dent Educ 2013;77:695-705.
20. Shapiro MC, Anderson OR, Lal S. Assessment of a novel module for training dental students in child abuse recognition and reporting. J Dent Educ 2014;78:1167-75.