Original Article

Knowledge and Information Resources about Child Abuse among Government and Private Dental Practitioner in Uttar Pradesh, India

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Abstract

Background and Aim: To evaluate knowledge, attitude, and information sources about child abuse and neglect (CAN) among dentists in Varanasi district of Uttar Pradesh state, India. **Subjects and Methods:** A cross-sectional online survey was carried out of dentist working in government and private hospitals in the Varanasi district, Uttar Pradesh State, India (n = 674). The structured questionnaire was sent through electronic mail that contained the consent form, instructions for filling, and returning the questionnaire. The data obtained were systematically compiled and the Chi-square test was applied to test the association. The significance level of $P \leq 0.05$ was applied. **Results:** A maximum number of dental practitioners from the government (81.97%) and private sector (85.98%) were aware of the child protection law. A significant number of government and private dental practitioners were satisfied with their knowledge (p = 0.0092); however, 83.79% suggested that the continuing education programs/courses were important tool to update their knowledge. The girl child was maximum sufferer (p = 0.0056) of CAN. Only 14.08% of practitioners acted on the suspected cases, and a statistical significant relation was observed between the government and private dental practitioners for not taking any action on child abuse and neglect (p = 0.0010). **Conclusions:** Data from this study may provide a useful contribution to the current limited knowledge about the familiarity of dental practitioners with child maltreatment and their skills to recognize and manage CAN cases in their practice. The majority of dental practitioners knew about the child protection law in India, but they were reluctant to report such cases due to the fear of anger from the parents and family of the child. Continuing education programs/courses were the most preferred method for increasing the knowledge regarding CAN. They should report the CAN cases to local legislators and health authorities so to prevent child abuse and neglect from ever occurring.

Keywords: *Child abuse, child neglect, dental practitioner, India*

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Introduction

Child abuse and neglect (CAN) is defined as every kind of physical, emotional, sexual abuse, neglect or negligent treatment, or commercial or other exploitation ensuing in potential or actual harm to the child's health, development, survival, or dignity in the context of a relationship, trust or power.[1] India is home to about 19% of the world's child population and 18% among them are below 18 years.[2] Children and adolescents in our society are mainly maltreated because they are physically and psychologically weak and dependent on adults. There has been little understanding of the trends, extent, and magnitude of the child abuse and neglect problem till 2007 in India. A survey conducted by the government of India stated that 53% of children suffer

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some kind of abuse. Children between 5 and 12 years were found to be more at risk, and the most vulnerable were those homeless on the streets, recruited for child labor, and those in institutional care.[2,3]

Every day, the safety and welfare of some children across the country is constantly threatened by abuse and neglect. Intervening efficiently within the lives of those children and their families is not the solitary responsibility of any single organization or a specialized group, but rather should be a shared communal concern. Healthcare professionals, especially dental practitioners, are in a unique position for the diagnosis of child abuse and neglect as 50-67% of physical injuries occur in the oro-facial region and are easily assessed.[4,5] Furthermore, child neglect is often followed by poor oral health. The quality of the medical education regarding CAN is an important aspect in increasing the revealing facts and documentation of child maltreatment. However, research analysis from different parts of the world has indicated that healthcare providers fail to report suspected cases of abuse, mainly due to lack of knowledge and various reasons such as social and cultural factors.[1,5,6] Moreover, recently a study from Gujarat state, India reported that dental residents were not prepared in detecting and managing cases related to CAN.[4] Therefore, the present cross-sectional study was planned, and to our knowledge, this is the first study to evaluate and compare the knowledge, attitudes, and experience of dentists in private and government hospitals regarding child abuse and neglect in Varanasi District, Uttar Pradesh State, India.

Material and Methods

The present study was a questionnaire-based cross-sectional survey of dental practitioners in private and government hospitals in Varanasi, Uttar Pradesh, India, conducted between January and June 2019. The ethical committee approval was obtained from the Institutional Ethics Committee prior to conducting the study. Six hundred and seventy-four dental practitioners, who had a basic undergraduate degree of Bachelor of Dental Surgery working in private and government hospitals located in Varanasi district of Uttar Pradesh state, were randomly selected to participate in the study. A convenient sampling method was performed. Inclusion criteria were all registered dentists in Varanasi district and those who gave informed consent. Exclusion criteria were those who have not given informed consent.

The questionnaire was written in the English language, piloted in a small group of dental practitioners and validated after making a few adjustments. The questionnaire was sent via electronic mail that contained the consent form, survey questionnaire, and instructions for filling out and returning the questionnaire. The questionnaire comprised of two sections: the first part collected the social and demographic characteristics of dental practitioners, and the second part had eight dichotomous questions and one single select multiple choice question depicting knowledge, attitude, and experience regarding CAN. Out of the eight dichotomous questions, two questions were further divided into the single select multiple choice question based on a yes/no response. Two reminder emails were sent after two and four weeks subsequent to the initial distribution of the questionnaire to maximize the response rate and a two-month deadline was set to complete and return the questionnaire.

Statistical analysis

The questionnaire data were collected and entered into the Microsoft excel sheet. All scores were calculated; data analysis was performed using SPSS (Statistical Package for Social Sciences) for Windows 16.0 SPSS Inc. Chicago, IL, USA. The Chi-square test was used to compare the categorical data, and the significance level for the statistical test utilized in this study was set at $P < 0.05\%$.

Results

Demographic characteristics of the respondents

A total of 674 dental practitioners were included in this survey, out of which only 611 formed the final sample size. Eight practitioners were not in clinical trials, 14 practitioners could not be reached, 20 practitioners returned an incomplete questionnaire, and 21 practitioners did not return the questionnaire. Out of 611 practitioners, 233 (38.1%) were from the government, whereas 378 (61.9%) were from private hospitals. The mean age of the study group was found to be 42.3 ± 7.5 years. Out of 611 respondents, 273 (44.7%) were females, and 338 (55.3%) were males. A total of 213 (34.9%) practitioners who participated in the survey had less than five years of experience, whereas a total of 398 (65.1%) practitioners had more than five years of experience in the field of their work.

Knowledge of child abuse and neglect

Table 1 shows the responses of dental practitioners working in government and private hospitals to the different questions regarding knowledge. The dental practitioners from both the government (77.68%) and private (81.75%) accounted that the rate of CAN is higher in the state of Uttar Pradesh. Moreover, maximum practitioners from both the sectors (70.37%) stated that the trend of CAN has increased in the

Table 1: Showing knowledge among the government and private hospital dental practitioners regarding child abuse and neglect

	Yes	No	χ^2	Df	*P*
1. Is rate of child abuse and neglect higher in Uttar Pradesh?					
Govt. Hospital	181 (77.68%)	52 (22.32%)	1.25	1	0.2636#
Pvt. Hospital	309 (81.75%)	69 (18.25%)			
Total	490 (80.2%)	121 (19.8%)			
2. Whether the trend in child abuse and neglect has been increased over past 10 years?					
Govt. Hospital	158 (67.81%)	75 (32.19%)	1	1	0.3173#
Pvt. Hospital	272 (71.96%)	106 (28.04%)			
Total	430 (70.37%)	181 (29.63%)			
3. Are you aware of child protecting act in India?					
Govt. Hospital	191 (81.97%)	42 (18.02%)	1.47	1	0.2253#
Pvt. Hospital	325 (85.98%)	53 (14.02%)			
Total	516 (84.45%)	95 (15.55%)			

Chi-square test applied. #Non-significant

Table 2: Attitude among the government and private hospital dental practitioners regarding child abuse and neglect

	Yes	No	χ^2	df	*P*
1. The state government should be more involved in preventing child abuse and neglect.					
Govt. Hospital	198 (84.98%)	35 (15.02%)	11.64	1	0.0006*
Pvt. Hospital	275 (72.75%)	103 (27.25%)			
Total	473 (77.41%)	138 (22.59%)			
2. Are you satisfied with your knowledge regarding child abuse and neglect?					
Govt. Hospital	173 (74.25%)	60 (25.75%)	6.79	1	0.0092*
Pvt. Hospital	241 (63.76%)	137 (36.24%)			
Total	414 (67.76%)	197 (32.24%)			
3. Do you feel any need for further education in your knowledge regarding child abuse and neglect in children?					
Govt. Hospital	201 (86.27%)	32 (13.73%)	1.41	1	0.2351#
Pvt. Hospital	311 (82.28%)	67 (17.72%)			
Total	512 (83.79%)	99 (16.21%)			

Chi-square test applied. *Significant. #Non-significant

past 10 years. A majority of the practitioners from the government (81.97%) as well as the private sector (85.98%) were aware of the child protection law in India.

Attitude toward child abuse and neglect

Table 2 shows the attitude of the dental practitioners working in government and private hospitals regarding CAN. The majority of the dental practitioners from both sectors felt that the state government should be actively involved in preventing CAN and the result was found to be statistically significant (p = 0.0006). A considerable number of government and private dental practitioners were satisfied with their knowledge of CAN (p = 0.0092). However, 83.79% (512/611) of the practitioners felt the need for further education regarding CAN. The majority of these dental practitioners (n = 512) suggested continuing education programs/courses to be the most and self-study to be the least appropriate method for updating knowledge regarding CAN [Figure 1]. Figure 2 shows the outlook of the government and private dental practitioners regarding people who sexually abuse children and the majority of them consider acquaintances/friends to be commonly involved in these cases.

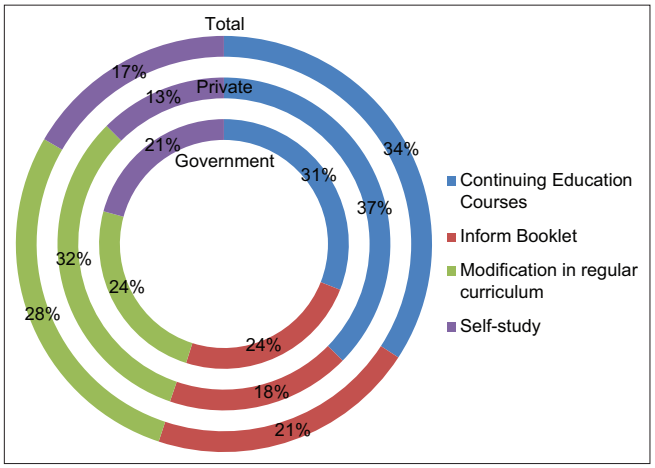

Figure 1: Showing suggestions about source to update knowledge regarding child abuse and neglect of private and government practitioners

Table 3: Experience of government and private hospital dental practitioners regarding child abuse and neglect

	Yes	No	χ^2	df	*P*
1. Are girls more likely to notice abuse than boys?					
Govt. Hospital	205 (87.98%)	28 (12.02%)	7.67	1	0.0056*
Pvt. Hospital	298 (78.83%)	80 (21.17%)			
Total	503 (82.32%)	108 (17.68%)			
2. Whether any action was taken by you on suspicion of child abuse and neglect?					
Govt. Hospital	47 (20.17%)	186 (79.83%)	10.77	1	0.0010*
Pvt. Hospital	39 (10.31%)	339 (89.69%)			
Total	86 (14.08%)	525 (85.92%)			

Chi-square test applied. *Significant

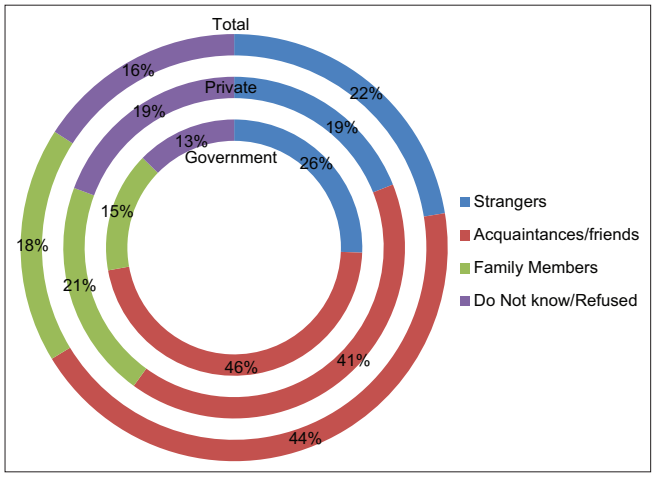

Figure 2: Showing the outlook of the government and private dental practitioners regarding the people who sexually abuse children

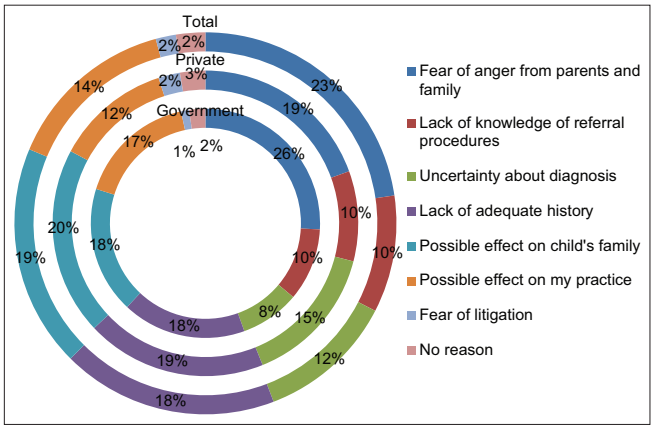

Figure 3: Showing the different reasons cited by the 525 practitioners for not reporting the suspected cases of CAN

Experience regarding child abuse and neglect

Table 3 shows the experience of dental practitioners working in government and private hospitals regarding CAN. The girl child is the maximum sufferer as perceived by both the government (87.98%) and private (78.83%) practitioners, and the result was found to be statistically significant (p = 0.0056). Only 86 (14.08%) out of 611 practitioners had acted on the suspected CAN cases and a statistical significant relation was seen between the government and private dental practitioners for not taking any action on child abuse and neglect (p = 0.0010). Figure 3 shows the different reasons cited by the 525 practitioners for not reporting the suspected cases of CAN and the fear of anger from the parents and family of the child was the most common reason for not reporting such cases.

Discussion

Child abuse and neglect (CAN) is one of the major causes of pediatric mortality and may result in adverse lifelong consequences on children's physical and mental well-being.[7] Evidence suggests that half of the world's child brides live in South Asia and roughly 44 million children are engaged in child labor across the region.[8] Injuries involving orofacial region (injuries to the mouth, lips, tongue or cheeks, fractures of the maxilla and mandible, oral burns, and maxillary labial frenum) of children strongly corroborate with CAN, dentists role in recognizing such cases becomes even more vital.[9] Various researches around the world substantiate that dentists do not play their responsibility in addressing this issue.[5,10]

The present study revealed that approximately 68% of the dentists were satisfied with the knowledge regarding CAN. Moreover, a statistical difference was observed in the knowledge of dentists working in government and private hospitals. The results were in agreement with Mohanan,[10] Al-Dabaan,[11] and Sathiadas[12] who reported that the level of knowledge regarding the forms and indicators of CAN is good among dental practitioners. However, the results of the present study were opposite to the findings of Sulimany,[6] Bodrumlu,[7] and Cukovic-Bagic[13] who stated that there was lack of knowledge and uncertainty in recognizing and reporting CAN cases. Most of these studies cited that the main reason for the lack of awareness regarding CAN cases was the application of theoretical knowledge to the clinics.

India is a signatory to the Convention on the Rights of the Child (CRC) adopted by the UN General

Assembly in 1992 prescribing standards for securing the fundamental rights for children. Since then, the Indian Government has been taking continuous steps against child abuse and neglect that includes Juvenile Justice (Care and Protection) Act 2000 (amended in 2006), Prohibition of Child Marriage act (2006), Formation of the National Commission for Protection of Child Rights (2005), National Plan of Action for children (2005), Goa Children (amendment) Act 2005, Child Labour (Prohibition and Regulation) Act, 1986 (two notifications in 2006 and 2008), which expanded the list of banned and hazardous processes and occupation, Integrated Child Protection Scheme (2009), various legislations such as Right to Education Bill (2009), Prevention of children from Sexual Offences (POCSO Act 2012).[14]

Therefore, it becomes very important for healthcare professionals to be familiar with the child protection acts and medico-legal aspects of child abuse. In the present study, approximately 85% of the dentists were aware of the child protection act in India, which was approximately double in number with the finding of Deshpande[4] who reported that 60.7% of medical residents and 48.8% of dental residents were aware of Indian laws pertaining to child abuse and protection. Furthermore, Mohanan[10] stated that 45% of dental professionals lack knowledge of the referral procedures of CAN.

Various studies stated that the perpetrators of child sexual abuse are frequently well-known to the family and this fact should be inferred clearly by all healthcare workers to avert potential perpetrators from initiating abuse.[15-17] The present study revealed that approximately 44% of the dental practitioners consider the acquaintances/friends to be commonly involved in such type of cases; however, Sathiadas[12] reported that 23% of healthcare professionals in their study did not know the characteristic features of the perpetrators. Also, in the present study, 82.32% of dental professionals believe that girls are more likely to be abused than boys. However, an investigation on child abuse in India reported that 54.68% of physically abused children were boys, though in correctional institutions, girls were at high risk of physical abuse.[14]

Dental practitioners might be the first responders in CAN cases, which place them in an ideal position to report abuse. Unfortunately, various investigations have revealed that dentists are hesitant to report such cases even in the presence of suspicions of mistreatment.[5,10,13] In the present study, only 14% acted on the suspected CAN cases and a statistical significant relation was seen between the government and private dental practitioners for not taking any action on child abuse and neglect. Various research conducted across the world also reported similar results to the present study and a persistent differential between the rate of suspected CAN cases and low level of reporting these cases was evident in all these studies.[2,10]

There can be multiple reasons for not reporting suspected cases of CAN. The respondents in the present study cited fear of anger from the parents and family as the most common reason for not reporting such cases. Similarly, this was the most cited barrier to referral in studies by Bodrumlu,[7] Al-Dabaan,[11] and Azizi[18]. The second most common reason reported in the present study was the possible effect on a child's family, which was also outlined by 58.8% of the respondents in a study performed in Saudi Arabia, 18.29% of the respondents in the present study cited the next reason to be lack of adequate history, and it was also the major cause given in the studies performed by Deshpande[4] and Kural[9] for not reporting the cases to the authorities. Possible effect on their practice was also a major factor for not reporting suspicious cases, which was similar to the findings of Paul.[2] Fear of litigation was the least common reason for not reporting their suspicions, and this finding was consistent with research done by Al-Dabaan.[11] Results of present study were in accordance with the findings of other studies that showed dental practitioners are usually aware of the presence of child abuse and of related law and legal process, but they are reluctant to report the abuse due to social issues such as fear of threats, retaliation by the family of the child, fear of family's dissatisfaction, fear of isolation and stigma in children, the breakdown of the family structure, fear of worsening the situation of children, repetition of the abuse of children, and uncertainty about the children's future.[18]

Azizi[18] reported that the probability of dentists reporting child abuse was allied with the dentist's exposure to continuing education and concluded that the quality of dental education and mandated training regarding CAN has become an important aspect in augmenting the detection and recognition of child maltreatment. Numerous foreign investigations revealed that dental professionals are in need of additional learning in the field of CAN identification, management, and reporting.[19] The present study showed that even though the dentists were satisfied with their knowledge, but a huge number (83.79%) felt the need for further education to update their knowledge regarding CAN. Similar findings were also reported by Kural,[9] Al-Dabaan,[11] and Al-Buhairan,[19] where 92.9%, 69.3%, and 86.5% of respondents, respectively, emphasized the need for education on CAN by attending a continuing education

program and workshops on child abuse. Continuing education programs and courses were also the most suggested method of improving knowledge in the present study. Sathiadas[12] reported that 93% of the healthcare professionals wanted some form of continuing education program on child abuse. The topic of child abuse most frequently occurs in classroom settings and might not be reinforced in clinical learning. Therefore, more formal education and training with additional emphasis on the topic using problem and situation-based learning might be beneficial for all dental professionals.

Limitations

The findings of this cross-sectional study are based on self-reports that may be subject to over-estimation. Dental practitioners who lack knowledge about CAN or how to approach the reporting of abuse may feel uncomfortable answering this survey and may choose not to participate.

Conclusion

Dental practitioners from both government and private hospitals had satisfactory knowledge but there was low reporting of cases. The most common reasons were fear of anger from the parents and family of the child. Continuing education programs/courses are the preferred method for increasing the knowledge regarding CAN. Multidisciplinary approaches and management with long-term follow-up of CAN cases are suggested.

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Conflicts of interest

There are no conflicts of interest.

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