

IDENTIFYING CHILD PHYSICAL ABUSE: AN OVERLOOKED ISSUE IN DENTISTRY

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ABSTRACT

Objectives: To determine the dental practitioner's knowledge, attitude, and behavior towards child physical abuse in dental teaching hospitals of Peshawar.

Methods and materials: An analytical cross-sectional study was executed in the two dental teaching hospitals of Peshawar using convenience sampling. The data was gathered by self-administered, structured questionnaire completed by 127 house officer, 147 trainees and 32 faculty members. Chi-square test was used to analyze association between categorical variables.

Results: Out of 320 questionnaires, 306 were returned with complete evaluation yielding a response rate of 95.6%. In the present study, 69.6% of the respondents displayed sufficient knowledge while 11.1% had poor knowledge on the topic of child physical abuse. Almost 83% of dental practitioners had positive attitude towards the importance of detecting and reporting cases of child physical abuse to legal authorities and 60.5% of dentists strongly agreed that training on child physical abuse should be provided in workplace. Only 11.1% of the respondents had suspected a cases of child physical abuse in their past professional life and only 3.2% of them had reported their suspicion to legal authorities.

Conclusion: Dental practitioners have inadequate knowledge about the circumstances in which they should report suspected cases of physical abuse to legal authorities as well as to which legal authorities such cases should be reported. Majority of dentists stated that there is lack of training regarding this topic and showed positive attitude towards dental practitioners' role in documenting, identifying, and reporting cases of child physical abuse.

Key words: Child abuse, Knowledge, Attitude, Practice, Physical abuse. Dental teaching hospital

INTRODUCTION

Child abuse is one of the most significant global public health problems and is a very serious violation of child's basic rights.¹ Head and face being the most common sites for physical violence. Dental setups are generally the primary contact points for victims of physical abuse. Therefore, they have a major role in diagnosing and reporting child physical abuse victims.²

According to the largest data compiled on child

abuse, published by United Nations Children's Fund (UNICEF), suggests that globally around 6 in 10 children between age 2 and 14 are physically punished by their caregivers regularly.³ In 2014, approximately 23% children were physically abused worldwide, according to World Health Organization (WHO).⁴

Child physical abuse as defined by Centers for Disease Control and Prevention (CDC), is the intentional use of physical force against a child that can or has the potential to cause physical injury.⁴

Child physical abuse is any kind of non-accidental injury inflicted on a child. In most cases, the abusers are family members and known to the victim.³ Due to abuse, the child feels worthless, it harms the health, well-being, normal social, & psychological development, and causes permanent emotional dam-

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age.¹ Domestic violence, step-parent, substance use in family or by child, working status, and running away from home were found to be significantly associated with physical abuse to children.⁵ Physically abusive parents emphasize that their actions are just ways to discipline their children.⁶

Abuse to child can have a serious effect on their physical and mental health and is known as a global phenomenon¹⁰ but only a few studies have evaluated the prevalence and different aspects of child physical abuse.¹¹ Dental literature addressing child physical abuse is the main source for dental professionals to enhance their knowledge in this regard.¹² A research about child physical abuse which included dentists as well as doctors practicing in public and private hospitals across Pakistan concluded that, 78.3% of healthcare professionals agreed on the importance of detecting and documenting child physical abuse, 58% didn't take any action in suspected cases. While 52% reported inadequate knowledge about referral procedures.¹⁰

Despite the fact, society is aware of the problem more than ever, health professionals in all areas still feel hesitant to deal with it. Dentists, especially oral surgeons, and pediatric dentists are more favorable to identify child abuse. Besides abusive caretakers hardly ever take the victim to the same physician, but in the case of dentists, they are not cautious.⁷ Almost 50 to 75% of all physical abuse injuries relate to lesions in the mouth region, face, and neck.⁵ The most common injury sustained by children is bruising. Other injuries such as burns, contusions, lacerations of buccal mucosa, tongue, lips, gingiva, palate, frenum, avulsed, displaced, or fractured teeth, fracture of the jaw, and facial bone may be observed.³

There is a continuing relationship between dentists and their pediatric patient and their families, as a patient is often given multiple dental visits in a month. This provides an opportunity for the dentist, to assess the child's physical as well as mental status and observe their family environment. The main problem in understanding child abuse is that it is difficult to get a response from a child on such sensitive issues because they are unable to completely understand the different aspects of abuse and to speak about their experience.⁵

Dental practitioners are in a special position that helps to suspect, report, and diagnose cases of

abuse, the knowledge, and attitudes of a dentist is an important factor in fulfilling their duty.⁶ A standard protocol must be followed comprising of clinical evidence collection, inquiring about history of suspected injury, all relevant information must be documented, photographs, radiographs, and impressions where required.⁸

In 1970, organized dentistry was the first to address the dentist's role of dentist in child abuse and neglect. American Dental Association in 1993, required in reporting and recognition of perioral signs of child abuse were added to its Principles of Conduct and Code of Ethics. Approved by ADA House of Delegates under a resolution, the code states: Dentist shall be bound to become familiar child abuse perioral signs and reporting to proper authorities in harmony with the law of the state.⁹ However, amongst dental professionals, a lack of education and awareness about child physical abuse is observed. Studies related to this problem suggest that, for example, dental students feel they are not well prepared for their role in identifying and suspecting cases of child physical abuse. Likewise, in diagnosing and reporting child abuse, general dentists report uncertainty and low self-confidence due to a deficient level of knowledge. The dental practitioners who have been trained about child abuse signs are five times more likely to report about it in comparison to dentists who are not.³

MATERIALS AND METHODS

Data for this analytical cross-sectional study was collected from October to November 2020 in two dental colleges of Peshawar. Ethical approval was given by Ethical Review committee, Gandhara University (No. GU/Ethical committee/2020/175). The target population were house officers, trainees and faculty working in dental teaching hospital. Dental practitioners who refused to sign the informed consent were excluded from this study. Participants were selected using convenience sampling, a total of 306 questionnaires were received, comprising of 127 house officers, 147 trainees and 32 faculty members. No questionnaires were excluded due to inappropriate responding. Data was gathered from participants by means of a self-administered questionnaire. The questionnaire was based on a previous study. The questionnaire was pilot tested by sending questionnaire to 25 dental practitioners to review it

for validity, confusions and misunderstanding and to mention additional comments. Accordingly, the questionnaire was altered. The investigator personally dealt with the participants, so any possibility of the same participant filling questionnaire more than once is eliminated.

The questionnaire comprised of four sections and included 15 closed ended questions. The first section inquired about participants personal information (age in years and gender) and professional background including type of practice (private / Government sector) and designation (house officer, trainees, and faculty). The second section consisted of 8 questions to evaluate knowledge of dentists towards child physical abuse. In the third section, dentists' attitude towards child physical abuse was assessed based on 7 questions in which they were asked to indicate agreement on a Likert's scale from strongly agree to strongly disagree. The fourth section assessed dental practitioners' behavior when they suspected child physical abuse case in their workplace. It comprised of 3 questions including information about the main factors of under reporting, experience about suspecting and reporting their suspicion to legal authorities, and the last question was about their workplace providing them with procedures regarding suspicion of child physical abuse. The research protocol was approved by the ethical committee of Sardar Begum Dental College. The data was analyzed using IBM SPSS 20. Chi Square test was used to check association between different variables and p values were generated.

RESULT

Out of the 320 questionnaires sent to dental practitioners, 306 (95.6%) respondents returned their completed evaluations. 180 (58.8%) of the respondents were female and 126 (41.2%) were males with a mean age of 26.6 years (sd 3.66, range 23 to 63 years). 92.8% of the respondents were between the age 23-30, 5.8% between 31-40 years and 1.3% between 41 to 63 years of age. The demographic characteristics of respondents are presented in Table No. (1)

The dentists were asked eight different questions, to evaluate knowledge of dentist's regarding child physical abuse. A 16-point scoring was carried out to classify dentist's knowledge into 3 categories, each correct answer was counted 2 points. The categories

are as such: poor (0-4), insufficient (5-10) and sufficient (11-16). The results are shown in Figure No. 1.

The participants were asked about the signs of child physical abuse in first question, out of 306 participants 117 (38.2%) Correctly identified the signs of child physical abuse, while 189 (61.8%) respondents were not able to correctly identify signs of child physical abuse.

In second question, participants were asked about what action they would first take if they suspected a child physical abuse cases in their workplace, only 22.9% responded correctly. 32% said that they would ask the child and parents about the symptoms and signs they noticed, 14% said they would document their suspicion and sign/symptoms in the child's file ,14.1% said that in the next visits they would monitor the case they would monitor the case, 16% said that they would check the consistency of child and parent explanation with the clinical findings and 0.2% said they would do nothing.

In response to question, ,36.3% answered hospital administration, 36.9% said police, 11.4% answered ministry of health and 15.4% said they don't know about which legal authority to approach in case of child physical abuse suspicion.

Figure no.2 shows the response of the participants when they were asked about the circumstances in which dentist should report their suspicion to legal authorities.

The next four questions assessed dentist's knowledge about social indicators of physical abuse. The respondents were given to choose whether the given statement was true or false. 65.4% of the participants correctly marked the statement 'abused children tell someone soon after the abuse' false.52% correctly marked false the statement 'child physical abuse is associated with poverty'. Majority of the participants (82%) correctly marked true the statement 'the abuser is someone the child knows well'. However, 59.5% of participants marked true the statement 'the best method to deal with cases of child physical abuse is to confront the parents directly', which is incorrect.

The attitudes of dentists are shown in the table no (ii). Majority of the respondents (83%) strongly agreed to the statement that it is important to detect and report child physical abuse cases. Most of the

physical abuse cases.

Out of the 306 respondents, only 34 (11.1%) dental practitioners had suspected child physical abuse case in their clinic or hospital environment, and only 10 (3.2%) of them had reported at least a suspected case to legal authorities. 88.23% had never suspected a case of child physical abuse in their clinics or hospital. A high percentage of house officers suspected a case of child physical abuse in their past dental practice ($P = 0.028$). When asked what action they took when they suspected a case of child physical abuse in past, the response of the participants is shown in Figure No.3.

In terms of training regarding child physical abuse, 76.1% dentists stated that their workplace didn't provide them with procedures to be followed in case a child is being physically abused and 19% stated that they don't know if their workplace provided training on procedures to be followed in suspected cases of child physical abuse.

DISCUSSION

Based on our knowledge, it is the first study conducted in Peshawar regarding dental practitioner's role in reporting and detecting cases of child physical abuse. Participants showed strong interest on this issue which is evident from the 95.6% response rate. On the contrary, a survey of dentists carried out in Egypt, the response rate was only 9.1% which is very low comparatively.¹³ 92.8% of the candidates were between age range 23-30 years which represents that freshly graduated dentists are eager to learn and educate themselves about child physical abuse.

Dental practitioners displayed deficient knowledge regarding common signs of child physical abuse. Only 38.2% of the respondents identified all signs of child physical abuse correctly. In comparison, to an investigation performed in Jordan, most of the dentists correctly identified the indicators of child physical abuse.¹⁷ Majority participants (69.6%) displayed insufficient knowledge when asked questions about child physical abuse. This clearly shows that there is a dire need to include topic of dentists' role in child physical abuse in dental school curriculum or provide training via seminars and workshops etc.

When questioned, what action they would take if they suspected child physical abuse case in their workplace, most of them responded that they would

inquire parents and child about the sign/symptoms they noticed and report to legal authority or hospital administration. Where as according to study in Saudia Arabia the most common actions taken were asking the child or parent about the observed sign and symptoms , documenting the sign/symptoms and their suspicion in patients file.⁴

Dental practitioners exhibited sufficient knowledge when inquired about which legal authority to report their suspicion of child physical abuse. Only 15.4% of the dentists said that they had no idea to which legal authorities they should report their suspicion. A survey on dental students in UAE concluded that 22% of them were unaware to which legal authority they should report suspected cases of child physical abuse.¹⁴

When participants were questioned in which circumstances dentist are supposed to report to their suspicion to legal authorities, approximately half of the participants (54.6%) answered correctly. This result is in contrast with the study conducted in Saudi Arabia, where the participants displayed inadequate knowledge in which conditions, they should report legal authorities about their suspicion. However, study in Saudi Arabia also concluded that, majority of the trainee medical officers and consultants were aware about circumstances in which they should report their suspicion to legal authorities ($P=0.003$)⁴ No such association was found in our study relating knowledge about circumstances in which dental practitioners are supposed to report their suspicion to rightful authorities and designation of dentist working in a dental teaching hospital.

When dental practitioners were inquired about social indicators of abuse, most of them selected correct answers for each statement except, the best method of dealing with such cases is to confront child's parents directly. Majority of the participants wrongfully believed that victim child tells someone soon after abuse.¹⁵ Interestingly, previous studies in Saudi Arabia and Jordan on dental students and dentists concluded that majority of them believed that abuse was associated with poor socio-economic status & poverty (75% and 60%, respectively)^{16,17}

No association was found between knowledge about child physical abuse and practice type, gender, and age. While according to survey done in Saudi Arabia it was concluded that being older, female

and practicing in government institute enhanced the prospects of having better knowledge about child physical abuse.⁴

In terms of attitude of dental practitioners towards child physical abuse, majority of the dentists agreed on the importance of documenting, detecting, and reporting cases of suspected abuse to legal authorities. The result is in correspondence to other studies executed in Jordan¹⁷ and Greece.¹⁸ Most of the dentists said that the number of materials related to child physical abuse presented at their dental school is deficient. Majority dental practitioners stated that training on child physical abuse should be provided at dental teaching hospitals.

Participants were also asked about the main reason for under reporting of cases of suspected child physical abuse. 41.5% stated fear of anger from parents and other family members, & 27.5% stated that they had inadequate knowledge about referral procedures. It is suggested from this result, that proper guidelines should be made by health care authorities about referral procedures. So, in future dental practitioners can tackle such challenging issues in their workplace. While according to a survey in Egypt, a higher number of participants felt that inadequate history and uncertainty about diagnosis were the main reasons of under reporting their suspicion.¹⁹ According to a study in UK stated that reason of underreporting of child abuse cases was uncertainty about diagnosis followed by lack of knowledge about referral authorities and fear of violence in family towards the child.¹⁴

When participants were questioned if they have ever come across a child in which they suspected physical abuse in their past professional life, 11.1% of them had suspected a case of child physical abuse in their dental practice and only 3.2% of them reported their suspicion to the legal authorities. However, studies executed in Brazil and Jordan concluded that approximately 86% and 56% respectively had previously suspected child physical abuse case, whereas 10% and 11% had referred suspected case to authorities.¹⁸

A higher number of house officers had suspected child physical abuse cases. This might be due to the reason that house officers are the first one to examine patients when they visit hospital OPD. On contrary, in Saudi Arabia a study concluded that a

high proportion of pediatric dentistry consultants and post graduate students had suspected child physical abuse cases in their workplace.⁴

76.1% of the respondents stated that their workplace didn't provide them with procedures to be followed in cases of child physical abuse. While a study on dentists, in eight Arab countries, 19.3% had received training to deal with cases of violence.²

In the present study, convenience sampling method was used, so it is unlikely to be representative of the population. Participants were asked about past events, so there might be recall bias in the reported data.

CONCLUSION

This study concluded that majority of dental surgeons in teaching dental hospitals of Peshawar had inadequate knowledge about child abuse. They were unaware about their role in detection and reporting of child abuse. Only a few suspected cases of child abuse were reported to legal authorities. Majority of dentists stated that they had never received any training regarding child abuse nor they were aware about their legal obligations as a health care provider.

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