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ORIGINAL ARTICLE

Evaluation of Knowledge, Attitudes and Practices of Dentists in Sari, Iran toward Child Abuse

ANAHITA LOTFIZADEH, MORTEZA DARABINIA, AZAM NAHVI, Ebrahim Nasiri, Zahra Tebbi

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Correspondence to:

Zahra Tebbi,
Faculty of Dentistry, Mazandaran University of Medical Sciences, Sari, Iran

E-mail: zahratebbi78@gmail.com

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ABSTRACT

Objective: One aspect of child abuse is physical abuse, and the dentists will be able to identify and prevent further harm to the child due to the nature of their job. This study aimed to investigate the knowledge, attitude, and actions of dentists in Sari, Iran towards child abuse in 2019-2020.

Study Design: The present study is a cross-sectional study whose statistical population is dentists. Sampling was done in simple randomized and the population study was 249 dentists. The calculated sample size was 151 dentists by the Cochrane formula.

Place and Duration of Study: This study was conducted in Sari, Iran in the years 2019-2020.

Material and Methods: The data collection tool was a researcher-made questionnaire. The questionnaire had an appropriate face and content validity and appropriate reliability. After distributing and collecting the questionnaires, the collected data were entered into SPSS16 statistical software and analyzed.

Results: 85.6% of the dentists had an average score attitude towards child abuse and 90.4% of the participants had moderate knowledge about the symptoms of child abuse; The results also show that participants had poor knowledge of child abuse laws and only 4.8% of dentists had reported child abuse so far.

Conclusion: This study shows that dentists' performance towards child abuse has been poor and that more training is needed on this issue both on-campus and off-campus after graduation; because identifying and reporting such cases is the professional and human duty of every dentist.

Key Words*: Child abuse, Dentists, Attitude, Knowledge, Practice*

INTRODUCTION

Child abuse is one of the most horrific occurrences that a child may experience. This phenomenon has been happening in every society and is as old as human history.[1,2] World Health Organization's (WHO) definition of child abuse includes any injury or threat to children's physical or mental health and welfare by their parents or legal guardian. Child abuse consists of physical abuse, sexual abuse, mental abuse, exploitation, and neglection of children.[3,4] Although child abuse occurs in all social classes, studies show that this phenomenon mostly happens in families which suffer economically.[5] Experiencing or even witnessing child abuse can

influence physical, mental, communicational, educational, nutritional, and learning aspects. Consequently, it may also have a negative impact on other essential activities for a child's normal growth.[6-8] Various studies show that approximately 50%-75% of physical child abuse cases include trauma to the mouth, head, and face, since these areas are the most accessible in conflicts, and the head represents a human's being.[1,9,10]

Studies show that facial injuries with rupture of mucosa in the internal part of the upper lip near the frenum and tearing of the lips from the gum area happen in approximately half of the child abuse cases; also tooth fracture, bruising of the mouth, oral ulcers, maxillary and mandibular fracture, and burning of the mouth are significant signs of child abuse.[11] Many sexual child abuse cases can be detected through the oral cavity. Neglect in health affairs related to teeth is one of the most common kinds of maltreatment toward children. Although children's parents and guardians avoid revisiting the previous doctor or the emergency unit, to which they had been referred to treat injuries caused by child abuse; it seems that they do not avoid visiting the same dentist. Therefore, it is expected that a dentist's role in reporting child abuse be more than what it is.[12,13] Head and face injuries caused by child abuse are the main reasons of disability and death of a child.[14] Despite a dentist's important role in detecting child abuse, only 1% of cases were reported by dentists. Approximately 20% of kids who were killed due to child abuse, had been visited by health care workers one month prior to their deaths.[10,15] Child abuse reporting rules remove the condition of confidentiality between the patient and therapist because, dentists are in charge of reporting child abuse and therefore have to report suspicious cases.[16] In Iran, child abuse can be reported to the Welfare Organization by dialing 123. The Welfare Organization of the country uses social workers in the form of social service emergencies in cooperation with the municipality or village administration and law enforcement to identify, accept, support, maintain and empower children and adolescents; also any report to these organizations must be referred to the country's welfare organization. Child abuse prevalence has not been evaluated in Iran until now.[17] Although the role of various organizations and individuals in dealing with child abuse has been identified, there is not any official statistics of the number of child abuse cases but it is estimated that for every child abuse case that is reported, at least another 20 cases remain hidden.[18] In 2016 the head of the Social Emergency Center of the Welfare Organization of the country said: In total, about 24,000 cases of child abuse were reported to the Welfare Social Emergency last year[19] and with the approval of the bill to protect children and adolescents, more attention is expected to be paid to this matter. Given the role of dentists in identifying and reporting child abuse, the purpose of this study is to evaluate the attitude of dentists towards child abuse, their knowledge about child abuse signs and laws related to reporting child abuse, sources of information, and subsequent use of this information by dentists in the diagnosis and reporting of child abuse.

MATERIAL AND METHODS

This study is a descriptive-analytical study. the population study was the dentists working in private and public offices who were a totally of 249 active dentists in Sari, Iran. Sampling was done by a simple randomized sampling method. The calculated sample size was 151 dentists by the Cochrane formula. The data collection tool was a researcher-made questionnaire that was designed by using the information mentioned in the other studies.[5,8,11,13,16] For determining the face and content validity, the questionnaire was provided to dental experts and the necessary changes were made. For final confirmation, a preliminary study was performed in the presence of 20 dentists who were not included in the study sample. The internal consistency of the questionnaire using Cronbach's alpha was calculated to be 0.7 for attitude, 0.89 for awareness toward signs of child abuse, 0.82 for sources of awareness, 0.73 for awareness of child and adolescent protection bill, and 0.87 for actions taken toward child abuse. This shows appropriate internal coordination of the questions. To determine the reliability of the questionnaire the method of performing the unit test was conducted again after 3 weeks in the presence of 20 dentists. The coefficient obtained from the retest for the following subscales was: attitude 0.74, awareness toward child abuse signs 0.90, source of

awareness 0.85, awareness of child and adolescent protection bill 0.70, and actions taken toward child abuse 0.76. This questionnaire includes a part for demographic information, 5 questions for evaluating attitude, 17 questions for evaluating awareness of child abuse signs and 5 questions for evaluating sources of awareness, 6 questions for evaluating awareness of child and adolescent protection bill, and 9 questions for evaluating the dentist's action taken toward child abuse. All the questions were designed using the information given in authoritative articles.[5,8,11,13,16] In order to distribute the questionnaires, the list of dentists and their addresses were first received from the Sari Medical System Organization, the capital of Mazandaran province, and the data collection form was sent to 151 dentists who were randomly selected, in person. After initial explanations, the forms were provided to them. The dentists were assured that the information obtained from the questionnaires would be kept anonymous. Questionnaires were completed by dentists by the self-administered method. The time given to dentists to complete the questionnaire was up to one week later after distributing the questionnaires. The questionnaires were collected after completion, the descriptive information was reported using the mean number, frequency, and percentage, and the obtained data were analyzed and studied with the help of SPSS 16 statistical software.

RESULTS

From 151 distributed questionnaires, 104 questionnaires were completed (response rate = 69%). 61 participants (58.7%) were male, and 43 participants were female.17 participants (16.3%) were single and 87 participants (83.7%) were married. The average age of the participants was 40 ± 9.4 years old respectively. The mean number of their work experience was 13.5 ± 8.1 years with a minimum of 1 year and a maximum of 35 years. The mean score of participants' attitude toward child abuse was 15 ± 2.6 and the minimum and maximum scores were 8 and 22 respectively. 9.6% had a poor, 85.6% had an average and 4.8% had a good attitude toward child abuse. Findings show that there is no statistically significant difference between the attitudes of men and women (p-value <0.349). Although the mean score of participants' attitude toward child abuse had a small statistical difference between men (14.9 ± 2.6) and women (15.2 ± 2.7) (p-value <0.539), there was a significant difference between single and married participants (p-value = 0.028). There was also a statistically significant difference between distinct educational levels towards child abuse (p-value <0.006) (table 1).

TABLE 1: Frequency of attitudes towards child abuse in single, married, general dentists and specialized dentists

	Low (percent distribution)	Average (percent distribution)	High (percent distribution)
Single	23.5	64.7	11.8
Married	6.9	89.7	3.4
General dentists	8.5	85.4	6.1
Pediatric dentists	50.0	50.0	0
Others	0	100.0	0

The mean score of participants' awareness towards child abuse signs was 61.1 ± 9.6, with a median of 61 and minimum and maximum scores of 27 and 85 respectively (table 2).

Fisher's exact test showed that the degree of awareness did not have any significant difference between general and specialized dentists (p-value<0.53) (table 2).

TABLE. 2: Frequency of participants' awareness level toward child abuse signs

	Low (%)	Moderate (%)	High (%)
Awareness of all participants	8 (7.7)	94 (90.4)	2 (1.9)
Awareness of general dentists	7 (8.5)	75 (91.5)	0
Awareness of specialized dentists	1 (4.5)	19 (86.4)	2 (9.1)

The mean numbers of awareness towards child abuse signs in general dentists and specialized dentists are 60.2 ± 9.9, and 64.5 ± 9.9 respectively (p-value <0.062). This difference is not considered to be statistically significant.

Findings also showed that the mean scores of dentists' awareness towards child abuse signs do

not have a notable difference between men (60.1 ± 8.2) and women (62.6 ± 11.2) (p-value <0.186). Fig 1 demonstrates. The extent to which dentists use the main sources available for information on child abuse.

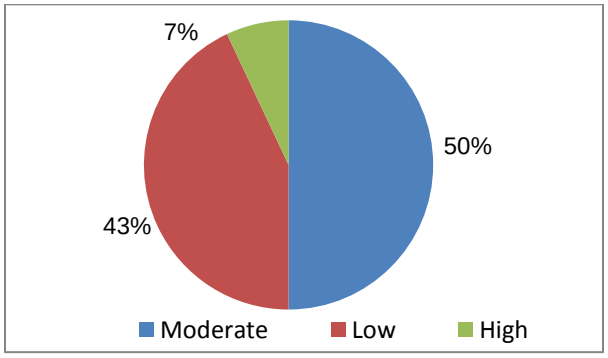

Fig 1: The extent to which dentists use the main sources available for information on child abuse

Findings shown in fig 1 reveal that most of the participants in terms of using available resources to gain awareness were in the weak to moderate category. There was not any noteworthy difference between men and women in terms of using awareness sources (p-value <0.823).

TABLE 3: The effect of different sources in increasing dentists' awareness of child abuse

Source of knowledge	Percent abundance (%)
University courses	26.0
An article, Brochure, Journal	46.1
Iranian Dental Association	11.6
Congress and conference	21.2
PANDA programs (is geared toward dental professionals to advise them of their legal responsibility to report suspected cases of child abuse and neglect)	7.7

Findings showed that the participants' awareness of child abuse laws is not sufficient (table 4).

Consequently, there is not any consequential difference in terms of awareness toward child abuse laws between men and women (p-value = 0.286), but there was a significant difference in terms of awareness toward child abuse between (p-value = 0.001) general dentists and specialized dentists, specialized dentists had a higher score (7.7) than the general dentists (6.7). They also implicate, that the participants did not take any appropriate actions towards child abuse (table 5).

TABLE 4: Dentists' awareness of child abuse laws

Legal awareness questions	Correct n (%)	Incorrect n (%)
Require reporting child abuse based on job duties	18 (17.3)	86 (82.7)
Punishment for misdiagnosis and reporting of child abuse	26 (25.0)	78 (75).0
Legal and life security in case of reporting suspicious cases	4 (3.8)	100 (96.2)
How to report suspicious cases	20 (19.2)	84 (80.8)
Preserving the identity of the reporter	23 (22.1)	81 (77.9)
Punishment of someone who finds out about child abuse due to his / her job but does not report it	4 (3.8)	100 (96.2)

TABLE 5: Participants' actions towards child abuse

Items related to the actions of dentists	Yes n(%)	No n (%)
Seeing a suspected case of child abuse	26 (25)	78 (75.0)
Reporting a suspected case	5 (4.8)	99 (95.2)
Recording child abuse symptoms in the patient's history	4 (3.8)	100 (96.2)
Familiarity with reporting methods	16 (15.4)	88 (84.6)
Follow up on a suspected child abuse case	9 (8.7)	95 (91.3)
Sharing a suspected case with other dentists, university or hospital	13 (12.5)	91 (87.5)
Sharing a suspected with health care centers, police, helpers or child's school	6 (5.8)	98 (94.2)

DISCUSSION

From the 151 distributed questionnaires, 104 participated in this study .The response rate was 69 percent, and given the culture of this community, the issue of child abuse is unpleasant, and they may generally not be interested in reflecting on their views, and considering that from an ethical point of view, it was not mandatory for dentists to participate and continue to cooperate in the study, so approximately 31% were not

interested in completing the questionnaire after observing it.

In this study, the dentists who participated in the questionnaire had an average attitude towards child abuse. 90.4% of participants had a moderate awareness of child abuse signs. 50% of participants stated that their level of gaining information about child abuse before and after graduation was moderate. However, 43.3% stated that they had received enough information. The results show that the dentists do not have enough knowledge of child abuse laws, and many dentists did not follow the right protocols in dealing with child abuse and reporting it.

Findings indicate that there are no significant dissimilarities in the mean sources of attitude between men and women, as well as between single and married participants. In terms of attitude, the poor attitude was less reported in married than single dentists, which can be because married people pay more attention to matters related to children and tend to read more about them.

Regarding average attitude, the number of married dentists with this view is more than single dentists. Nonetheless, several single dentists had a better attitude towards child abuse than married ones. Another noteworthy point is that, contrary to popular belief that pediatric dentists have a more desirable attitude towards children because of the time they spend with them and the education they have received, general dentists are ahead of pediatric dentists in both average and good attitudes, even though it is expected for pediatric dentists to have a better attitude towards child abuse.

Awareness of most of the participants towards child abuse was moderate (90.4%) and only 1.9% of participants were well educated on the matter. In the study which was done among Jordanian dentists only 3% of all participants had answered all the questions about physical indicators correctly.[20] The awareness of participants in this study compared with the study which was done among Kerman's interns was lower, which could be because of interns working in the hospital and their exposure to certain types of injuries and their education.[15]

In the study done among Australian dentists approximately all responders had diagnosed child abuse signs correctly (97%).[11] The mentionable reasons are that they pay more attention to child abuse in their courses and in Australia, child abuse is paramount and is dealt with more seriously.

In this study, there is no statistically significant difference between men's and women's awareness of child abuse. But in the studies which took place among dentists and dental graduates in Saudi Arabia women had diagnosed child abuse signs better than men.[21]

The findings of this study showed that the difference in the educational level between a general and specialized dentist makes no difference in justifying this result. It can be concluded that teaching the symptoms of child abuse in universities or specialized courses is not enough. In this study, 26% of responders stated that their current knowledge was obtained in university. while in the study conducted in Turkey, 67.9% gained their knowledge from other sources.[22] Meanwhile, in the research done in Italy, 91% of participants claimed they hadn't passed any educational courses about child abuse.[23]

Results show that dentists don't have an appropriate level of awareness towards child abuse laws (table 4), and only 18% of participants were aware that all oral health care providers are required to report child abuse. Concurrently, only 25% of participants knew that if dentists misdiagnose a child and report the case as child abuse, they would not be legally charged, since it is better to report any suspicious cases than not reporting at all. Given that failing to report the abuse could further endanger the child and even lead to his/her death. In addition, few participants (3.8%) were aware that they would be offered legal and personal protection by authorities in cases where they had reported child abuse. Meanwhile, in the study conducted in California, 64% of respondents knew that reporting child abuse is under the oral health service duty act, which could be attributed to the attention paid to the rights of children and adolescents in America in recent years. Furthermore, 50% were aware of the personal and legal security that is offered to the case reporters, which is more than the current

study. In the study done in California, 59% of respondents were unaware of the punishment for not reporting child abuse, this result was 96.2% in the present study.[13] In the study which was undertaken among southern Indian dental residents, 85% of the participants had enough knowledge about legal issues and professional responsibilities.[24]

In June 2020, the child and adolescent protection bill was approved in Iran after 11 years. According to this bill, anyone who is aware of child abuse or witnesses its occurrence must report it or prevent it, provided that he/she does not pose a similar or more serious threat to him/herself or others. If someone is obliged to report or ask for help due to his/her job or can help effectively but does not help, he/she will be punished and the reporters' identity would not be disclosed except with their consent. Although, findings show that only 25% of dentists have reported they had evaluated an abused child and only 4.8% of them had reported it. Moreover, 15.4% believed that they knew how to report child abuse. Based on the findings, dentists' measures towards child abuse were not desirable. The results obtained from the studies undertaken in Saudi Arabia, Southern India, Croatia, and Jordan show that the dentists had a poor performance in reporting child abuse, while in the study undertaken in Norway 42.5% of respondents demonstrated that they had reported their concern to children's welfare system in the period 2012 to 2014.[24,25]

It is important to take into account that according to the laws specified in their job and basic human duties, dentists are responsible to report child abuse cases and preventing severe incidents for abused children as these children are not able to save themselves and their life easily falls victim to child abuse and irresponsibility of the dentist, health care workers and other people in their lives, Therefore, measures should be taken to increase the capacity of dentists concerning the issue of child abuse.

CONCLUSION

Given the low legal awareness of dentists about child abuse and improper performance of dentists when dealing with child abuse cases, it is desired for this issue to be addressed in dental courses in the future, and for more emphasis to be placed on dental students' education on the matter. It is also hoped that this issue will be given more importance in the Iranian Dental Association and that more attention will be paid to this issue in meetings, conferences, and retraining to highlight the role of dentists in the management of this important matter.

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Authors' affiliation

Anahita Lotfizadeh, Zahra Tebbi
Faculty of dentistry

Morteza Darabinia,
Department of Islamic Thoughts, Faculty of Medicine

Azam Nahvi,
Dental Center

Ebrahim Nasiri,
Department of Anesthesiology, Faculty of Allied Medical Sciences

Mazandaran University of Medical Sciences, Sari, Iran

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