

Original article

Knowledge, Attitude, and Possible Barriers of Dental Practitioners Regarding Child Abuse in Benghazi, Libya

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Abstract

Child abuse can be understood as the intentional harm or mistreatment of a child under the age of 18. Notably, this can be in the form of physical, emotional, and sexual abuse. It can also be seen as neglect as well. To highlight, dental practitioners are healthcare professionals who interact with children frequently. Therefore, dentists play an important role in identifying and responding to signs of child abuse. In Libya, more research needs to be conducted into how dental practitioners are detecting and reporting cases of child abuse that occur during clinical practice. This study aims to evaluate the knowledge and attitude of dental practitioners in Benghazi, Libya, regarding child abuse, identify the barriers that prevent the reporting of suspected cases in practice, and to increase the awareness of that issue. This study was an observational cross-sectional study. The sample size consisted of 250 dental practitioners in Benghazi, Libya. Questionnaires were utilized for data collection. Data was sorted and collected through descriptive analysis. Findings illustrated that dentists in this sample would profit from completing more formal training on child abuse and how to report cases of child abuse in practice. This study also found that the major barriers faced when reporting child abuse cases were the fear of inflicting more harm on the child. Minimal research in Libya has been conducted to investigate the knowledge and attitudes of dentists about child abuse. Understanding healthcare professionals' perceptions and reporting practices can increase awareness and improve future dental training programs on child abuse.

Keywords. Child Abuse, Dental Abuse, Child Neglect, Child Protection.

Introduction

Child abuse refers to any intentional harm or mistreatment of a child under the age of 18. This can take various forms such as physical abuse, emotional abuse, sexual abuse, and physical neglect [1]. Additionally, child abuse and neglect (CAN) is considered a widespread issue that affects millions of children across the globe [2]. Moreover, CAN is linked to long-term physical, psychological, and behavioural consequences [3]. The World Health Organization (WHO) has defined CAN as, "every kind of physical, sexual, emotional abuse, neglect or negligent treatment, commercial, or other exploitation. That results in actual or potential harm to the child's health, survival, development, or dignity in the context of a relationship of responsibility, trust, or power" [4]. The frequency of abuse and the child's age determine the possibility of permanent harm to the child's physical and mental health [2].

To detect physical and sexual abuse, an extensive intraoral and perioral examination is necessary in all suspected cases. When a child is physically abused, they frequently sustain blunt trauma from an item such as kitchen tools, hands, fingers, or burning liquids. Moreover, avulsed teeth and jaw fractures are also triggered by abuse. Further clinical indicators include soft tissue contusions or lacerations to the tongue, buccal mucous membrane, hard and soft palate, gingival mucous membrane, or frenulum [5].

In cases of sexual abuse, the oral cavity is the most common site in children. It can be seen as unexplained erythema or petechiae on the palate. Particularly at the junction of the hard and soft palate. This may indicate a sign of sexual abuse, as well as oral syphilis in prepubertal children, which is considered to be a pathognomonic sign. Additionally, bite marks may indicate physical or sexual abuse [6].

Dental neglect is defined as a guardian's failure to seek necessary treatment to maintain oral health and function. In the presence of pain and infection, a health professional needs to initiate intervention if they consider a parent negligent. A health care practitioner must appropriately warn the parent about the child's condition, the necessary treatment, and the access mechanism [7].

Dental practitioners are healthcare professionals who interact with children and their families on a regular basis. Therefore, they play a crucial role in identifying and responding to signs of child abuse [8]. Furthermore, between 50% and 77% of all documented child abuse cases had head, face, and mouth injuries. Notably, this is a region that dentists routinely examine. Considering these facts, dentists are in a unique position to spot child physical abuse and report suspected cases of CAN [9]. However, dentists still

appear hesitant to report such cases [10]. There are a variety of reasons for their hesitancy, including their lack of knowledge of where to report, fear of making a false accusation that would damage the dentist's relationship with the family, and anxiety about the child's experience with statutory agencies' intervention [10,6,11]. This research aims to evaluate the knowledge and attitudes of dental practitioners in Benghazi, Libya, regarding child abuse. Moreover, to investigate the barriers that prevent the reporting of suspected cases of child abuse.

Methods

Study design and setting

This observational cross-sectional study aims to evaluate the level of knowledge and attitudes towards child abuse among dental practitioners in the private and public sectors in Benghazi, Libya. Furthermore, to explore the barriers that prevent the reporting of suspected cases.

Data collection

Our study sample included randomly selected dentists working in Benghazi. Consent was obtained from participants prior to receiving the questionnaire, and the purpose of the study was discussed with the participants. This questionnaire was made using a collection of previously modified questionnaires from similar studies [18, 20]. The questionnaire consisted of 18 closed-ended questions. The questions were divided into four main parts: the first part (section I) gathers information about the demographic data; the second part (section II) is about the knowledge and awareness of dentists regarding the topic of child abuse; and the third part (section III) is about their attitude and behaviour as dental practitioners, asking the practitioners if they need further training on identifying and reporting child abuse cases. The final part (section IV) requests that the participants identify the barriers that prevented them from reporting such cases. A sample size of 250 dentists was obtained. After completing the questionnaires, the data were handed over to the investigator. Here, all the data collected was given to statisticians to be subjected to statistical analysis. Frequencies and percentages were calculated and explained through descriptive analysis.

Data analysis

The data were processed using the PSPP statistical software, version (1.4.1).

Results

For this study, a total of 250 Libyan dentists responded to the survey that was distributed in Benghazi, Libya. The distribution of gender in our data, based on the demographic characteristics of the respondents, most of the dentists who completed the survey were female at 58.4% (146 dentists). While males comprised a lower percentage at 41.6% (104 dentists) (Table 1).

Table 1. Gender distribution

Gender	Frequency	Percent %
Male	104	41.6%
Female	146	58.4%

Regarding the distribution of the age groups within the study. The dentists who were 25 years old or less comprised 38.0% of the sample size. Notably, this was the largest age group. The 26-35 years old age category ranked as the second largest age group at 36.8%. The 36-45 years old age group was the third largest group at 17.6%. Lastly, the 46-55 years old age group accounts for the smallest percentage among all age groups at 7.6%. Overall, the sample population highlights that the majority of study participants are younger, specifically either 25 years old or less (Table 2).

Table 2. Age Distribution

Age	Frequency	Percent %
25 years or less	95	38.0%
26-35 years	92	36.8%
36-45 years	44	17.6%
46-55 years	19	7.6%

Regarding the participants' type of degree and experience as shown in Table 3, overall, the majority of participants, at 65.2%, stated they have a BDS/DDS degree. The participants who had completed an MSc in the study were 21.2%. Notably, the smallest group in terms of degree type was PhD graduates at 13.6%. In terms of experience, most respondents, at 60.4%, said they had been dentists for less than 10 years, while 22.8% of participants had 11-20 years of experience in the dentistry field. Moreover, participants with 21-30 years of experience as a dentist were 12.4% of the sample. Lastly, the smallest group with 31-40 years

of experience in the study was 4.4%. This sample data illustrates that most dentists within the study only had a BDS/DDS degree and are newer to the field.

Table 3. The distribution of the degree types and experience

Variables		Frequency	Percent %
Type of degree	BDS/DDS	163	65.2%
	MSc	53	21.2%
	PhD	34	13.6%
Years since working in dentistry	10 or less	151	60.4%
	11-20	57	22.8%
	21-30	31	12.4%
	31-40	11	4.4%

However, regarding the knowledge and awareness amongst dentists towards physical and social signs of child abuse. To illustrate, as shown in Table 4, when participants' knowledge about child abuse in dentistry was tested and they were asked about maltreatment syndrome, 73.2% of participants knew that maltreatment syndrome included both child abuse and neglect. Therefore, 26.8% of participants answered this knowledge question incorrectly. To add, when participants were asked about the different types of child abuse, 81.6% of dentists in the study knew that child abuse included physical, emotional, and sexual abuse. Overall, 18.4% of participants answered this question wrong. Moreover, dentists were also asked if they had received formal training on child abuse. The majority of the sample answered no, at 68.4%, and only 31.6% stated they have had training. The data regarding the knowledge of dentists about child abuse in this sample size suggest that most dentists are aware of the syndromes and types of child abuse. However, it also highlights that many dentists in this sample have not been trained on child abuse in dentistry, which demonstrate a gap and a need for improvement in this area of training.

When interpreting the level of awareness amongst dentists towards physical and social signs of abuse, participants were asked about a dentist's role in identifying child abuse and neglect. To highlight, 85.6% were aware of this role, while 14.4% of participants were not aware. Participants were also asked if they were aware of the difference between child abuse and neglect, and 80.0% of them responded with they were aware. Notably, 20% of participants were unaware of the difference. The survey also asked participants if they knew about the physical signs of child abuse. The table illustrates that 65.6% were aware of the signs, while 34.4% of participants were not aware. Overall, the data suggests that dentists in this sample have a fair level of awareness about the signs of abuse in children. However, there is room for improving awareness strategies for dentists to detect physical and social signs of abuse in their child patients.

Lastly, participants were asked how they think an abused child would behave at a dental clinic. To highlight, 59.2% of participants thought a child would be uncomfortable with physical contact. Moreover, 27.2% believed a child experiencing abuse would be sullen/stoic/withdrawn. Furthermore, 16.0% of dentists within the study answered that they would not know how the child would behave. While 12.8% believed the child would be manipulative and 12.0% of participants thought the child would be cooperative.

This data suggests that most participants believed the child would be uncomfortable. However, the participants' responses varied, and dentists in this sample thought children who have experienced abuse would demonstrate several signs indicating they may be undergoing abuse (Table 4).

Table 4. The Knowledge and awareness of participants about the physical and social signs of child abuse

Variables		No.	%
Are you aware of the role of a dentist in identifying child abuse and neglect?	No	22	8.8%
	Yes	214	85.6%
	Not sure	14	5.6%
Are you aware of the difference between child abuse and neglect?	No	31	12.4%
	Yes	200	80.0%
	Not sure	19	7.6%
Maltreatment syndrome includes	Child abuse	40	16.0%
	child neglect	27	10.8%
	Both a & b	183	73.2%
The types of child abuse include	Physical abuse	21	8.4%
	Emotional abuse	15	6.0%
	Sexual abuse	10	4.0%
	All	204	81.6%
Do you know about the physical	No	38	15.2%

signs of child abuse and neglect identified in the oral cavity?	Yes	164	65.6%
	Not sure	48	19.2%
According to you, what is the expected /observed behavior of a child in a dental clinic who has experienced abuse/neglect	Co-operative	30	12.0%
	Sullen, stoic or withdrawn	68	27.2%
	Uncomfortable/skittish with physical contact	148	59.2%
	Manipulative	32	12.8%
	Not sure	40	16.0%
Did you receive any formal training on child abuse	No	171	68.4%
	Yes	79	31.6%

Table 5 showcases the attitudes of participants towards reporting abuse cases and their need for formal training programs for child abuse detection. To expand, the attitudes of participants were tested when asked if they believed dentists were legally required to report child abuse cases. Notably, 63.6% of participants said yes. Furthermore, dentists in the sample were also asked if there were any legal consequences for not reporting cases of child abuse. To illustrate, only 38.0% said yes. Lastly, participants were questioned if they felt they needed further training in recognizing and reporting child abuse. Notably, 67.6% reported yes to this question. Overall, this data suggests that this sample believes that dentists should report child abuse in Libya, but a fair number of participants still had hesitancy in doing so. This indicates a gap in dentists in this sample reporting such cases. Moreover, this data also suggests that most dentists would like more formal training about reporting and recognizing child abuse. This highlights a need to implement a more robust training program in this sector. When analyzing the behavior of dentists about recognizing and reporting child abuse, participants were asked about if they had ever suspected cases of child abuse during their practice. To highlight, 42.8% reported that they have. Notably, if participants answered yes, they were then asked if they had reported the case of child abuse. Overall, 71.6% reported they did not report the case. While only 28.0% reported the case of child abuse, they encountered during their practice. To illustrate, the data for this sample suggests that many dentists have not encountered child abuse that occurs in practice. However, this data also highlights that there is a fair amount of child abuse cases occurring in practice. Moreover, most of these abuse cases have not been reported. Overall, this presents a gap in the necessary procedures for reporting child abuse cases.

Table 5. The attitudes of respondents towards reporting abuse cases and their perceived need for training programs in child protection

Variables	No.	%
Have you suspected any cases of child abuse during your dental practice?	No	119 47.6%
	Yes	107 42.8%
	I don't know	24 9.6%
If yes, have you reported your concerns about those child abuse cases?	No	77 71.6%
	Yes	29 28.0%
	I don't know	1 0.4%
Do you think that dentists are legally required to report child abuse cases in Libya?	No	36 14.4%
	Yes	159 63.6%
	I don't know	55 22.0%
Are there any legal consequences for not reporting child abuse?	No	64 25.6%
	Yes	95 38.0%
	I don't know	91 36.4%
Do you feel that you need further training on how to recognize and report child abuse?	No	37 14.8%
	Yes	169 67.6%
	I don't know	44 17.6%

Regarding the barriers that dentists face while reporting suspected child abuse, the most common barrier that prevented dentists from reporting child abuse cases was the fear of family violence to the child at 54.0%. While fear of family violence to the self, illustrated to be the second most common barrier that hinders dentists from reporting at 39.6%. Notably, this was followed by the lack of certainty about diagnosis at 29.6%. Furthermore, the lack of knowledge of referral procedures was also a barrier at 29.2%. Overall, the rest of the participants chose not to want to interfere at 10.8% and having a negative impact on their practice at 8.0%, which prevented them from reporting cases of child abuse. This sample highlights that the main barrier for dentists reporting suspected cases of child abuse in their practice is fear of causing more harm to the child (Table 6).

Table 6. Barriers to reporting suspected cases of child abuse.

Variables		No.	%
What barriers preclude you from reporting child abuse cases?	Lack of certainty about diagnosis	74	29.6%
	Fear of family violence to the child	135	54.0%
	Fear of family violence to self	99	39.6%
	Lack of knowledge of referral procedures	73	29.2%
	Not wanting to interfere	27	10.8%
	Negative impact on your practice	20	8.0%
	others	24	9.6%

Discussion

Child abuse is a terrible act that affects children physically and psychologically. Unfortunately, it is prevalent in every society. Dentists are more likely to encounter such circumstances in their regular practice. However, due to a lack of knowledge, such cases usually remain unreported. The purpose of this study was first to explore the knowledge and attitudes of dental practitioners in Benghazi, Libya, regarding child abuse; second, to investigate the barriers that prevent the reporting of suspected cases of child abuse in practice; and finally, to increase the awareness of child abuse in Libya. The study was an observational cross-sectional study, utilizing the methods of questionnaires for data collection.

In our study, when participants were tested on their knowledge of maltreatment syndrome, 73.2% answered correctly. Although most dentists answered correctly, 26.8% were incorrect. Furthermore, when asked about what the different types of child abuse were, 18.4% of the sample were incorrect. Notably, when participants were asked about if they received formal training, 68.4% of dentists said no. This finding of the current study indicates that there was a lack of knowledge in some areas related to child abuse, as has been reported by other researchers in similar studies [18, 21]. Also, the large percentage of dentists who did not receive any training programs can play a role in why several participants were unable to answer knowledge questions about child abuse in pediatric patients. Current literature highlights the gaps in educational parties in Libya's oral health care system [22]. There is a substantial need to improve the oral health care system to meet the needs of children. This can be done by implementing stronger training systems in dental schools to improve the quality of work post-graduation [22]. Overall, the findings in our study support the current gap in child protection training systems for dentists in Libya.

Our study also explored the attitudes of dentists about reporting cases of child abuse in their practice. To highlight, when participants were asked if they suspected child abuse during their career, 42.8% answered yes; this percentage was comparable in Jordan and Turkey [19, 14], while a lower percentage was demonstrated in the United Arab Emirates [18]. However, overall, of the participants who have witnessed child abuse in their practice, only 28.0% reported the case of abuse. It appears that some dentists in the sample do believe they can recognize child abuse; however, the gap lies in reporting the case of child abuse. A study conducted in Turkey asked 212 pediatric dentists about if they suspected child abuse in their practice [14]. Notably, 43.9% said yes, but only 12.7% of them reported it. Overall, the low rate of reporting child abuse involves dentists' scarce knowledge and training on the matter and a lack of information about referral procedures [14]. In the end, our study also showcases those dentists may be able to detect child abuse, but the action to take after detection still needs more development. This was also consistent with other research conducted in Saudi Arabia and the United Arab Emirates, which found that the rate of reporting child abuse cases was extremely low [2, 12].

Our study aimed to uncover the major barriers that may hinder the reporting of child abuse cases for participants. Notably, the imminent barrier found was participants being afraid of causing more harm to the child by reporting the case. To highlight, 54.0% of participants answered 'fear of family violence to child' when asked about what may hinder them from reporting a child abuse case. Moreover, 39.6% also answered 'fear of family violence to self' as a barrier. Overall, the participants in this sample believed that reporting the cause of child abuse may cause the child more harm, rather than benefiting the child. These findings are in line with a cross-sectional study done in Belagavi, where the barrier that was found to hindered dentists from reporting child abuse was consequences to the child [17], and also consistent with Al-Dabaan et al in Saudi Arabia [2]. While in the United Arab Emirates, the main barrier to reporting suspected abuse cases in the present study was the uncertainty about the diagnosis [18].

In the findings of this study, the majority of the respondents (67.6%) felt that they needed further training on how to recognize and report child abuse. Similar findings were reported by Hashim et al. [18], AlBuhairan et al. [21], and Al-Dabaan et al. [2]. While there is ongoing literature about the knowledge and attitudes of child abuse in dentistry, few studies have been conducted in Libya. Our research addresses this gap and further explores the largest barriers to combating reporting child abuse cases in the dental practice. Overall, there needs to be further research developed about child protection training programs in dentistry in Libya. Our study is a positive step forward in raising awareness about the topic. The results of this study can be used to implement future training program initiatives.

Conclusion

In the end, the lack of formal training about child abuse may have an impact on the knowledge and attitudes participants had about child abuse. Moreover, several barriers were found that could have influenced why child abuse was underreported within our study sample. Firstly, this study aimed to explore the knowledge and attitudes of dental practitioners in Benghazi, Libya, towards child abuse. Secondly, the study investigated the barriers that prevented the reporting of suspected cases. The study found that many dentists believed they had encountered child abuse during practice, but were not reporting the case of child abuse. This can be correlated to most dentists not having formal training about child protection procedures. Therefore, they did not know how to report child abuse cases in practice. The study also uncovered that the biggest barrier to reporting child abuse was fear of inflicting the child with more harm.

Conflicts of Interest

The authors declare no conflicts of interest.

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