

EVALUATION OF THE KNOWLEDGE OF GRADUATE DENTISTRY STUDENTS IN THE DIAGNOSIS OF CHILD ABUSE

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Abstract: **INTRODUCTION:** To assess the knowledge of undergraduate Dentistry students in diagnosing child abuse is extremely important, as these professionals play a fundamental role in the early identification and notification of cases of child abuse. From this assessment, we can better understand the gaps that exist and the need for more comprehensive training to ensure that these future professionals are prepared to act in accordance with child protection laws, thus contributing to a safer and more compassionate environment for children. **GOAL:** assess dentistry students' knowledge about diagnosing child abuse and related regulations. **METHODOLOGY:** A literature review was carried out using the LILACS, PubMed and Scielo databases, with the descriptors "students," "child abuse" and "dentistry" combined by the Boolean operator AND. The sample included complete articles published from 2013 to 2023. Initially, we found 60 studies: 14 in LILACS, 44 in PubMed and 02 in Scielo. We selected 07 articles that met the inclusion and exclusion criteria, distributed among 02 from LILACS, 04 from PubMed and 01 from Scielo. The main reason for exclusion was the lack of relevance to the scope of this review, as many addressed surgical techniques and the use of the buccal fat pad. **RESULTS:** Research highlights dental students' lack of familiarity with child maltreatment regulations. Furthermore, a lack of knowledge was demonstrated, both by students and professionals, regarding the diagnosis of these cases. Uncertainty in the diagnosis and fear in reporting these cases were also observed, emphasizing the need for additional training. **CONCLUSION:** Significant deficiencies in dental students' and dentists' knowledge of legislation and practices related to the diagnosis of child abuse are evident. This highlights the urgency of more comprehensive education and

specialized training in identifying, reporting and preventing these cases.

Keywords: Students, Child abuse, Dentistry.

INTRODUCTION

The Ministry of Health considers abuse to be any action or omission that harms the well-being, physical and psychological integrity or freedom of child development (HINGEL et al. 2021). This definition serves as a starting point for understanding the severity of this global challenge, which is influenced by socioeconomic, cultural and ethnic factors. The consequences of child abuse are particularly severe in children, due to the delicate stage of their development, impacting both their behavior and their psychological well-being. This vulnerability is aggravated by the physical fragility of children, making them more susceptible to feelings of anger and negative emotions (MATOS et al., 2023). Surprisingly, most abuse occurs in the home environment, where children are expected to feel safe (BUSATO; PEREIRA; GUARÉ, 2018).

Identifying child maltreatment is crucial to preventing future problems and breaking the cycle of violence that can cause lasting harm to children. The diagnosis depends on the recognition of physical, sexual signs and/or behavioral changes, in addition to analyzing the history of the act of violence reported by the victim or third parties. Professionals must be careful when checking for physical injuries, considering their origin and evolution. A complete and sensitive examination is essential to effectively identify child abuse (LEONARDI et al., 2021).

Dental surgeons play a crucial role in identifying and reporting these cases, as the majority of injuries occur in the head region, as indicated in studies (DE LIMA; PIERI, 2021). Significant orofacial injuries include bruises, deviation of the mouth opening,

lacerations, burns, bruises on the cheeks that suggest aggression by punches or slaps, as well as the presence of ulcers in the corner of the mouth (DE SOUZA, 2017). From an ethical perspective, the Dental Code of Ethics (CEO) establishes a fundamental duty of the Dental Surgeon to “care for the health and dignity of the patient”. Failure to comply with these ethical principles may result in sanctions ranging from warnings to revocation of professional practice (SALAZAR; VELOSO, 2021).

However, it is worrying to note that a significant number of these cases remain underreported (MOGADDAM et al., 2016). This is due to several factors, such as the lack of skills in identifying these cases, the fear of getting involved in complex situations and the lack of knowledge appropriate regulations and procedures for reporting such situations. This underreporting can be attributed, in part, to academic training, where these topics are generally covered in a limited way in some disciplines. This does not provide future dentists with the comprehensive understanding necessary to effectively deal with these situations (SALAZAR; VELOSO, 2021).

In recent times, we have observed an alarming increase in the incidence of child abuse, emphasizing the crucial role of the entire society in the fight against these atrocities and in reporting them (DA SILVA et al., 2021). Therefore, adequate training for future dentists is essential so that they can recognize the signs of child abuse and know how to act in these delicate situations. Through solid knowledge of the physical and behavioral indicators that may suggest abuse, these professionals can play an active role in protecting children and reporting cases to the competent authorities. Furthermore, raising awareness among undergraduate Dentistry students about the importance of

this issue can contribute to the creation of a network of professionals who are more aware and attentive to signs of child abuse, which, in turn, can lead to greater detection and prevention of these cases.

Therefore, the present study aims to investigate the level of knowledge of Dentistry students on this topic. Furthermore, this study seeks to discuss the evidence found in the literature, contributing to a better understanding of the issue and sensitizing the dental profession to the importance of the topic. This, in turn, must encourage more primary studies in this area, promoting a broader and more effective approach to this social problem.

METHOD OR METHODOLOGY

This is a narrative-type literature review. The search for scientific articles was carried out in the following bibliographic databases: Latin American and Caribbean Literature in Health Sciences (Lilacs), PubMed and Scientific Electronic Library Online (SciELO) in August 2023. To identify relevant works, strategies were used search using the English terms “Students,” “Child abuse” and “Dentistry” combined using the Boolean operator AND. The inclusion criteria established for sample selection were the following: articles must be complete, available online, have been published between 2013 and 2023 and be written in Portuguese, English or Spanish. As exclusion criteria, incomplete articles with more than ten years of publication, course completion works, dissertations, theses, books and book chapters, as well as duplicate articles were considered.

In the first analysis, the titles and abstracts of the articles obtained were evaluated. Those who met the search criteria were selected for a full reading to assess their eligibility. After searching the databases, a total of 60 studies were identified, 14 in Lilacs, 44 in PubMed

and 02 in Scielo. From this process, 07 articles were selected that met the inclusion and exclusion criteria, 02 from Lilacs, 04 from PubMed and 01 from Scielo.

The main exclusion criterion was the objective of the studies, as many of the articles captured did not meet the objective of this review, which was to analyze the knowledge of dentistry students in relation to child abuse. Furthermore, some articles were not available in full online and appeared repeatedly in databases.

RESULTS AND DISCUSSIONS

Of the seven scientific articles selected, there was a significant predominance of the publication language in English, representing 71.4% of the total. Furthermore, the research conducted in the selected databases resulted in the choice of works published in journals with Qualis classification, highlighting categories A (57.1%), B (28.6%) and C (14.3%). These results highlight not only studies aimed at evaluating the knowledge of dentistry students, but also for already trained dental surgeons. Table 1 presents the data and main characteristics of the selected studies in detail, providing a comprehensive view of the research reviewed.

It is essential that both students and dental surgeons are aware of the laws and regulations related to child abuse. By understanding these standards in their jurisdiction, professionals and future professionals can act in accordance with the law, protecting children's interests appropriately. This not only contributes to the safety and well-being of children, but also strengthens the integrity of the dental profession as a whole.

However, as evidenced by research conducted by Matos et al. (2013), when asked about the legal implications for dental surgeons in cases of suspected or confirmed child abuse, half of the students in the study

sample stated that they were unaware of these implications, and the majority of professionals also declared a lack of knowledge. The research concludes that, for the most part, undergraduate students and dental surgeons are still not familiar with the legal and practical aspects related to reporting abuse against children and adolescents. In line with this, research carried out by Meyer, Lehmann and Schüler (2023) demonstrated that national and regional child protection guidelines are, for the most part, unknown to both dentistry and medical students. More than half of those interviewed were not aware of the sources of notification in cases of mistreatment. The study also showed that knowledge about how to deal with suspected cases was significantly lower than knowledge about the diagnosis.

It is vital to note that reporting maltreatment is crucial to stopping harmful behaviors by perpetrators and protecting children and adolescents. The Child and Adolescent Statute makes this notification mandatory, subject to financial penalties of 3 to 20 minimum wages, which can double in case of repeat offense (BRASIL, 1990). However, several factors have contributed to the lack of practice of this notification by professionals, including uncertainty in the diagnosis, lack of knowledge of the relevant laws and the fear of getting involved in delicate situations (MATOS et al., 2013). This highlights the urgency of more comprehensive education and specialized training, as knowledge and proper application of child protection laws are essential to ensuring the well-being of children and adolescents in our society.

In contrast, research conducted by Hazar Bodrumlu, Avsar and Arslan (2018) with dental students in Turkey revealed a different reality. Just like in Brazil, in Turkey, health professionals have a legal obligation to report suspected cases to the competent authorities. Failure to comply with these obligations or

Numbering	Title in Portuguese	Main Author/Year	Review	Qualis
01	Self-reported knowledge, attitudes, and practices of final-year dental students regarding child abuse: A multicenter study.	DUMAN, C./ 2021	International Journal of Paediatric Dentistry.	A1
02	Assessment of dental students' knowledge and attitudes towards child abuse in Turkey.	HAZAR BODRUMLU, E./2018	European Journal of Dental Education.	A3
03	Assessment of the knowledge of undergraduate dentistry students x dental surgeon in diagnosing child abuse.	MATOS.F. Z/2013	Revista Brasileira de Odontologia.	B3
04	Child abuse and neglect: A comparative study between the competencies of dentistry and medical students in Germany.	MEYER, L. M./2023	European Journal of Dental Education.	A3
05	Dentists and dental students need more information related to child abuse.	MOURA, A. R./2015	Medical Express	C
06	Knowledge of dentistry students about child abuse.	SILVA JUNIOR, M. F./2015	Rev Odontol Bras Centra	B4
07	Knowledge Levels and Educational Experiences Among Dental Graduates in Saudi Arabia Regarding Child Abuse and Neglect: A National Study.	SULIMANY, A. M./2021	Children-Basel	A4

Table 1. Presentation of the characteristics of the articles included in the narrative review.

Source: Authors, 2023.

delays in carrying out this action may result in penalties. Surprisingly, the majority of students demonstrated that they were aware of their ethical responsibility in protecting children from child abuse. They also recognized the importance of training health professionals regarding child abuse and agreed that dentists must be legally responsible for reporting cases of child abuse. These results indicate that future dentists in Turkey are not only willing to take on the role of protecting children against abuse, but also have a more in-depth knowledge of the laws related to these cases in their country of professional practice. Despite having a broader understanding of the regulations in these cases, the research also revealed gaps in students' knowledge about child abuse. According to the researchers, this deficiency can be attributed to the fact that although students were exposed to the topic of child abuse in the classroom, this knowledge was not adequately reinforced in clinical settings. It is crucial that the curriculum for dental students offers comprehensive training that combines classroom teaching with practical experiences in clinical settings.

This will enable future professionals to not only understand the regulations surrounding child abuse, but also become empowered to identify, report and effectively deal with these cases in real-world dental care situations.

Many university students often face difficulties in dealing with situations of suspected abuse, which in turn can trigger considerable challenges in identifying and properly addressing cases involving child abuse and neglect. In line with this concern, a cross-sectional study conducted by Sulimany et al. (2021) involving 1,552 dental students undergoing internships revealed significant deficiencies in most students' knowledge about identifying cases of abuse. Surprisingly, more than half of participants were not aware that palatal petechiae can serve as indicators of sexual abuse. Furthermore, the survey showed that less than 40% of participants felt confident in their ability to identify cases of abuse, and only 9.7% of them knew where to report such cases.

Continuing this issue, a study coordinated by Duman et al. (2021) assessed knowledge of child abuse in dentistry students from 11

colleges around the world, covering continents such as Africa, Asia, North America, Europe and Oceania. The results revealed significant gaps in students' knowledge regarding the recognition of mistreatment. They demonstrated a lack of confidence in the accurate identification of such cases and uncertainty regarding reporting procedures in their regions. A positive point of the study was that the majority of participants were able to identify orofacial indicators of physical abuse, demonstrating a solid basis for developing skills in this area of oral health. However, a lack of adequate training can undermine future dentists' confidence in accurately diagnosing and reporting cases of abuse in their clinical practices. This has led many students to express a desire to receive additional formal training on the subject. These results highlight the importance of improving the education and training of dental students, not only to improve their knowledge about abuse, but also to increase their confidence and awareness of the importance of adequate reporting of these cases. Such an initiative is essential to protect the well-being of children and ensure a more effective approach to identifying and preventing abuse.

The study by Moura et al. (2015) highlights essential findings regarding the awareness and education of students and dentists in identifying mistreatment in the head and neck regions. Notably, although most students recognized that the area most susceptible to injury in cases of abuse is the head and neck, many students marked the arms as the correct alternative. When it comes to teaching, approximately 60% of fifth-year students say that the topic was covered during their training. However, among practicing dentists, 48% reported never having received relevant information on the subject during graduation. These data highlight an unsatisfactory scenario, emphasizing the failure in the

effective transmission of knowledge to dentists. This gap prevents the dentist from assuming his fundamental role in tracking and reporting these cases.

The cross-sectional research carried out by Silva Junior et al. (2015) with students from the 5th to the 9th period at ``Universidade Federal do Espírito Santo`` revealed that the majority of students did not receive information about child abuse during their training. The results indicated that the main concern of academics in suspected cases of abuse was to identify only clinical signs during clinical care. However, traumatic injuries can have a variety of causes, with only a minority related to abuse. Furthermore, the students were wrong to identify the arms as the region most affected in cases of child violence. A worrying aspect of this study was that only a minority of students stated that they would report a suspicious case to the Child Protection Council. However, most academics expressed a desire to receive information on how to appropriately identify and refer cases of child maltreatment. This highlights the immediate need for broader education and specific training. Not only to improve the understanding of future dentists, but also to reinforce their confidence and awareness about the relevance of correctly reporting cases of child abuse.

To face these challenges, it is essential that educational institutions include specific training to prepare students to deal with these sensitive situations, contributing to their professional development and the protection of children. Furthermore, it is vital that regulatory bodies and health authorities implement guidelines that require the inclusion of this training in health course curricula, ensuring that future professionals are ready to identify, report and deal with cases of child maltreatment in accordance with the best practices and ethical guidelines. This approach promotes the integrity of the

healthcare professions and meets ethical and legal child protection obligations, contributing to a safer and more compassionate society for all future generations.

CONCLUSION OR FINAL CONSIDERATIONS

After an in-depth analysis of the studies and discussions of the results, the lack of knowledge on the subject addressed is evident, in addition to the lack of preparation for the protocol to be followed under suspicion of child abuse, by some Dentistry students and professionals.

It is notable that the dentist has a primary role in these cases, affecting the lives of children and adolescents who require special attention. In this sense, the search for improved knowledge on the subject must be essential for responsible professional performance.

In a complementary way, the contribution of Universities to the training and alerting of future dental surgeons about the correct conduct to follow in these cases is essential, given the importance of the professional's role in correct detection and notification

to the authorities. Furthermore, the lack of knowledge on the subject such as: location of the injury and the correct procedure to follow in a situation of child abuse makes the dentist unable to assume his role in tracking and reporting cases.

The conclusions of this study have significant implications for the professional future of Dentistry students, requiring an academic scope more focused on lectures and inclusion of the topic covered in subjects during the curriculum. However, it is worth highlighting that research must continue to investigate the levels of knowledge of professionals and students on how to deal with cases of child abuse diagnosis. Thus, future studies can monitor the evolution of students' mastery of this topic, as well as training in the conduct to be followed in situations of child abuse. By filling these gaps in knowledge, research can improve studies and professional responsibility on the part of oral health professionals, providing insights that will optimize the quality of life of both the dentist and victims who are going through difficult situations.

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