

Knowledge and Attitudes Towards Child Abuse and Neglect Among Dental Students from North Macedonia

Vesna Ambarkova^{1*} , Lidia Gavic² , Kiro Ivanovski³ , Sonja Apostolska⁴ ,
Tomo Karakamcev⁴ , Elma Demiri⁵ , Jovan Ambarkov⁶ 

Abstract

Introduction. Signs of child abuse and neglect are often found in the orofacial region and, therefore, it is very important for dental students, as future dentists, to recognize and report them.

The aim of the study was to investigate the knowledge and attitudes towards child abuse and neglect among dental students.

Material and Methods. The study was performed at the Faculty of Dental Medicine, Saints Cyril and Methodius University, among all dental students of the six-year undergraduate dental programme. The data were collected between January and February 2022 using a Google Form and shared via available social media platforms. The definition of physical indicators of abuse, awareness regarding legal and ethical issues, students' experience of child abuse recognition were evaluated by a questionnaire.

Results. The questionnaire completion rate was 70%. As many as 20.86% of dental students very rarely received training on recognizing and reporting child abuse and neglect; 79.75% of dental students had never received any information about child abuse during their university education; about 91.41% of students wanted to receive more knowledge about child abuse and neglect. No differences were observed in terms of gender and year of study.

Conclusions. Dental students in North Macedonia are not sufficiently prepared for their role in diagnosing suspected cases of child abuse. An educational program about diagnosing, reporting, and preventing child abuse and neglect should be involved in the curriculum of undergraduate students from North Macedonia.

Keywords

Child Abuse and Neglect; Dental Student's Knowledge; North Macedonia

¹ Department of Pediatric and Preventive Dentistry, Faculty of Dental Medicine, Saints Cyril & Methodius University, Mother Teresa, 1000 Skopje, the Republic of North Macedonia

² Study of Dental Medicine, School of Medicine, University of Split, Soltanska 2, 21000 Split, Croatia

³ Department of Periodontology and Oral Pathology, Faculty of Dental Medicine, Saints Cyril & Methodius University, Mother Teresa, 1000 Skopje, the Republic of North Macedonia

⁴ Dental and Endodontic Diseases Department, Faculty of Dental Medicine, Saints Cyril & Methodius University, Mother Teresa, 1000 Skopje, the Republic of North Macedonia

⁵ Faculty of Dental Medicine, Saints Cyril & Methodius University, Mother Teresa, 1000 Skopje, the Republic of North Macedonia

⁶ Faculty of Medicine, Saints Cyril & Methodius University, Mother Teresa, 1000 Skopje, the Republic of North Macedonia

*Corresponding author: vesna.ambarkova@gmail.com



Copyright ©Vesna Ambarkova, Lidia Gavic, Kiro Ivanovski, Sonja Apostolska, Tomo Karakamcev, Elma Demiri, Jovan Ambarkov, 2023

Introduction

Children have the right to be protected from any form of abuse, neglect, physical and mental violence; they have the right to health care, treatment, and recovery from illness, drinking water, food, and a clean environment. The United Nations Convention on the Rights of the Child was adopted in 1989, and the Republic of North Macedonia has been a signatory to that international agreement since 1993. In 2003, following the ratification of the two optional pro-

ocols, the Government of the Republic of Macedonia committed itself to ensure the fulfilment and protection of children's rights to develop strategies, policies, and practices for the promotion and protection of children's rights. In 1989, Article 19 of the United Nations Convention on the Rights of the Child (UNCRC) defined violence as "all forms of physical or mental violence, injury and abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse" [1].

The World Health Organization (WHO) defined violence as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or a group or community, that either results in, or has a high likelihood of resulting in, injury, death, psychological harm, maldevelopment, or deprivation” [2].

In 1999, at a consultation on the prevention of child abuse, the WHO compared definitions of “child abuse” in 58 countries and made the following definition – “Child abuse or bullying is all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting 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”.

In the Republic of North Macedonia, the Law covers legal regulations on protection of children’s rights by the Law on Healthcare, the Law on Prevention and Protection against Domestic Violence, and the Law on Family. However, no law obliges dentists in our country to report any child abuse they notice in their dental practice, as in Croatia with the Law on Dental Activity.

Child abuse and neglect are a major public health issue throughout the world, including North Macedonia [3]. According to statistics obtained from an epidemiological study on child abuse and neglect in 9 Balkan countries with 2, 586 children aged 11, 13, and 16 years, the rate of exposure to psychological violence was 64.6%, to physical violence – 50.6%, to sexual violence – 7.6%, to contact sexual violence – 3.8%, to feeling of being neglected – 27.47%. The past-year prevalence of schoolchildren’s exposure rate for psychological violence in North Macedonia was 60.21%, for physical violence – 42.40%, for sexual violence – 5.44%, for feeling of neglect – 24.90%, and for positive and non-violent parenting – 83.02% [3].

Training communication skills is very important for dental students handling with dental neglect when they have to educate patients about human papilloma virus as an etiological factor for the occurrence of oral cancer, as well as other difficult clinical situations [4]. Ignoring child (dental) neglect by healthcare workers can cause cognitive and social-emotional adverse events and can prevent the cessation of child abuse. In the literature, there is no definition that accurately describes how many teeth must be affected by caries or how many infections should be diagnosed for “dental neglect” [5]. Dentists play a very important role in identifying child abuse as they may be the first healthcare professionals to examine such victims [6].

Adequate education about child abuse and neglect is necessary for the development of social and communication skills of students as well. Moreover, it is associated with the course of forensic medicine in dental education.

As it has already been mentioned, child abuse remains a very important public health issue worldwide, including North Macedonia. To our knowledge, this is the first study which reports dental students’ knowledge and attitude towards child abuse and neglect in North Macedonia.

This study would like to point out the important role of dentists, especially pediatric dentists, in detecting and

reporting child abuse and neglect as these injuries are often located in the orofacial region.

The aim of this cross-sectional survey was to investigate undergraduate dental students’ knowledge, attitudes, and behaviors towards child abuse and neglect.

Materials and Methods

Study Design

The design of this study followed the guidelines published by the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement [7].

Participants

This cross-sectional survey was carried out among undergraduate students of the Faculty of Dental Medicine, Saints Cyril & Methodius University, between January and February 2022. The questionnaires were distributed to 233 dental students of the six-year undergraduate dental programme and completed by 163 students. The response rate was 70%. The data were collected using a Google Form, the link to which was sent via available social media platforms.

Questionnaire

The questionnaire consisted of twenty-two closed-ended questions adopted and modified from previous studies [8–10]. The closed-ended questionnaire consisted of “yes/no” questions, “true/false/don’t know” questions, and one multiple-choice question. The first section of the questionnaire was related to students’ gender and year of study. Further questions determined their experience of child abuse, assessed their attitudes towards legal and ethical issues, and asked if they wished to receive additional training on child abuse and neglect. The last section of the questionnaire assessed students’ attitudes towards and knowledge of the physical indications of child abuse and neglect. Cronbach’s alpha coefficient of internal consistency was 0.682, which confirmed the satisfactory reliability of the questionnaire translated into the Macedonian language.

Statistical Analysis

All the completed questionnaires were entered into the database and statistically processed using the SPSS software package (IBM Corp., Armonk, New York). Differences in responses related to students’ gender and year of study were examined by the Chi-Square test. Differences in responses related to students’ knowledge with regard to gender were examined using the Mann-Whitney test, while differences in responses related to students’ knowledge with regard to the year of study were examined using the Kruskal-Wallis test. A value of $p < 5\%$ (0.05) was considered statistically significant.

Results

Of all 163 dental students who responded to the questionnaires, 117 (71.78%) were females, 46 (28.22%) were males, and the majority were senior students (Table 1).

Students’ attitudes about child abuse depending on the year of study are presented in Table 2. The summary

Table 1. Number of respondents per year of study.

Year of Study	1 st	2 nd	3 rd	4 th	5 th	6 th	I do not want to answer
N	3	9	18	44	43	42	4
%	1.84%	5.52%	11.04%	26.99%	26.38%	25.77%	2.45%

Table 2. Students' attitudes towards child abuse depending on the year of study.

		Year of Study						p
		1	2	3	4	5	6	
Have you been trained on what child abuse is?	No	2	5	14	38	34	33	0.447
	Yes	1	4	4	6	9	9	
Have you ever received any information on how to recognize and diagnose a possible case of abuse during your university education?	No	1	6	17	35	36	31	0.130
	Yes	2	3	1	9	7	11	
Do you know what dental neglect is?	No	1	3	3	14	13	3	0.070
	Yes	2	6	15	30	30	39	
Are dentists required to report a case of abuse?	No	0	1	0	1	2	0	0.398
	Yes	3	8	18	43	41	42	
Is there a consequence of not reporting a case of abuse?	No	0	1	1	9	4	0	0.459
	Yes	3	8	17	35	39	42	
In case of suspected active physical abuse or abandonment of a minor, do you know where to report?	No	2	2	4	17	21	8	0.050
	Yes	1	7	14	27	22	34	
Do you know what steps to take to report your suspicion?	No	2	3	6	29	31	13	0.002
	Yes	1	6	12	15	12	29	
Do you think you can identify abuse?	No	0	2	4	17	14	9	0.561
	Yes	3	7	14	27	29	33	
Would you like to receive additional training on how to recognize child abuse, as well as a mechanism for reporting possible suspicions?	No	0	3	3	1	3	1	0.052
	Yes	3	6	15	43	40	41	

Table 3. All the students' attitudes towards child abuse.

	Yes	No
Have you been trained on what child abuse is?	34 (20.86 %)	129 (79.14 %)
Have you ever received any information on how to recognize and diagnose a possible case of abuse during your university education?	33 (20.25 %)	130 (79.75 %)
Do you know what is dental neglect?	125 (76.69 %)	38 (23.31 %)
Are dentists required to report a case of abuse?	159 (97.53 %)	4 (2.47 %)
Is there a consequence of not reporting a case of abuse?	144 (88.34 %)	19 (11.66 %)
In case of suspected active physical abuse or abandonment of a minor, do you know where to report?	107 (65.64 %)	56 (34.36 %)
Do you know what steps to take to report your suspicion?	75 (46.01 %)	88 (53.99 %)
Do you think you can identify abuse?	114 (69.94 %)	49 (30.06 %)
Would you like to receive additional training on how to recognize child abuse, as well as a mechanism for reporting possible suspicions?	149 (91.41 %)	14 (8.59 %)

of responses (based on Tables 1 and 2) to the statements exploring participants' attitudes towards child abuse are presented in Table 3.

The difference depending on the year of study was observed only in the students' attitude as to whether they would be able to report abuse (p=0.002) (Table 2). No difference depending on the year of study was observed between the attitudes of students who underwent child abuse prevention training (Table 2).

Students' responses to the knowledge of signs of child physical abuse are listed in Table 4. Correct answers are marked with an asterisk. The questionnaire consisted of 10 questions, with a maximum possible score of 10 points.

The average number of points achieved by the student was 5.94 ± 2.40. According to Bloom's classification, 48

(29.45%) students had good knowledge, 50 (30.67%) students demonstrated moderate knowledge, and 65 (39.88%) students had poor knowledge of recognizing signs of child physical abuse.

There was no difference in the knowledge between male and female students (p=0.829) or between the years of study (p=0.054).

In addition, there was no difference in scores between students who stated that they had received training on child abuse issues and whether they received any information on how to recognize and diagnose a possible case of abuse during their university education (p=0.659).

Table 4. Knowledge of child physical abuse signs among undergraduate dental students from North Macedonia.

Questions	Answer	Number/Percentage
13. Bite marks observed on a child during the normal course of a dental visit should be investigated as a possible indicator of child abuse.	True*	97 (59.51 %)
	False	11 (6.75 %)
	Don't know	55 (33.74 %)
14. Bruises on the cheek may indicate slapping or grabbing the face.	True*	134 (82.21 %)
	False	6 (3.68 %)
	Don't know	23 (14.11 %)
15. Additional bruises usually occur in areas overlying bony prominences.	True*	91 (55.83 %)
	False	6 (3.68 %)
	Don't know	66 (40.49 %)
16. Poor oral health is a part of physical neglect	True*	112 (68.71 %)
	False	22 (13.45 %)
	Don't know	29 (17.79 %)
17. Repeated injury to the dentition resulting in avulsed or discolored teeth may indicate abuse.	True*	104 (63.80 %)
	False	16 (9.82 %)
	Don't know	43 (26.38 %)
18. Bruises on the neck are usually associated with accidental trauma.	True	61 (37.42 %)
	False*	68 (41.72 %)
	Don't know	34 (20.86 %)
19. Burns are often associated with child abuse cases, and they often have shapes of hot objects.	True*	69 (42.33 %)
	False	28 (17.18 %)
	Don't know	66 (40.49 %)
20. If a parent describes a child injury as a self-inflicted injury, child abuse may be indicated.	True*	95 (58.28 %)
	False	13 (7.98 %)
	Don't know	55 (33.74 %)
21. If a parent describes a repeated child injury as an injury made by brothers or sisters, child abuse may be indicated.	True*	96 (58.90 %)
	False	14 (8.59 %)
	Don't know	53 (32.51 %)
22. Which of the following could be indicators of suspected child abuse and neglect?	a) A child psychosomatic complaints	9 (5.52 %)
	b) A child seductive behavior, unusual knowledge of sexual matters, avoiding eye contact	6 (3.68 %)
	c) Untidy appearance, untidy clothes	13 (7.98 %)
	d) Psychosomatic complaints, unusual knowledge of sexual matters, untidy appearance	10 (6.13 %)
	e) All of the above*	112 (68.71 %)
	f) Don't know	13 (7.98 %)

Note: * Correct answers are indicated with an asterix.

Discussion

Despite the high prevalence of child abuse and neglect in developing countries, many cases remain unreported. Therefore, the knowledge, attitude, and experience of dentists regarding child abuse and neglect is critical as they may need to be the first to recognize signs of abuse [11]. The present study is the first study on the dental aspects of child abuse and neglect conducted among dental students in North Macedonia.

In this study, 79.14% of dental students reported a lack of training programs, while 79.75% of students answered that they had never received any information on how to recognize and diagnose a possible case of abuse during their university education. Those results indicated the necessity of adding relevant child abuse content to the curriculum of our faculty. The percentage of students who reported completing training on this issue was 20.86% that was slightly higher than in other studies – 8% in a study of Jordan *et al.* [12] or 2.17% in that of Hazar *et al.* [9].

Several previous studies [8, 9, 12–14] have found that the training of students in this area is still deficient, including insufficient knowledge of the forms, indicators, and symptoms of abused children; therefore, it is necessary to consolidate the theoretical knowledge given during lessons. However, it is important that learning occurs through clinical practice. Dental neglect knowledge is essential for future dentists. In this study, 23.31% of students answered that they did not know what dental neglect was. During their university studies, prospective dental professionals must be trained for this entity and its timely detection.

Only 46.01% of dental students knew what steps to take to report a suspected abuse case. Yet, surprisingly, as many as 88.34% of students were aware of the legal consequences that would follow if a suspicious case was not reported. Child abuse and neglect comes in different forms [1]. For that reason, dental students must be well educated and able to recognize child abuse and neglect in its complexity and in all its varieties.

Dental neglect, as a special subgroup of medical ne-

glect, is the intentional avoidance and/or refusal to provide oral and dental care to achieve non-inflammatory conditions and to establish satisfactory masticatory function [1–3]. Epidemiological findings of oral health status of primary school children from the two municipalities of Berovo and Pechcevo located in the Eastern region of the Republic of North Macedonia, where the decayed, missing, and filled teeth (DMFT) index was more than 6, while the percentage of untreated caries was 82.93%, suggested possible dental neglect [15]. The mean DMFT index of 4.97 among 15-year-old secondary school children from Veles city [16] and mean DMFT index of 3.47 among 12-year-old primary school children from the Eastern region indicated possible dental neglect as well [17]. In an epidemiological study conducted by Ambarkova in 2013, the percentage of untreated caries or the D/DMFT ratio in 396 primary school children was 0.5324 (53.24%) [17].

Compared to results of a study conducted by Al-Ani [18] among dental students from Hamburg, where more than two-thirds (69.6%) of students responded positively when asked whether a dentist was obligated to report a case of abuse, in our study, that percentage was 97.53%.

In a study conducted by Sulimany *et al.*, 60% of dental students from Saudia Arabia had inadequate knowledge of child abuse and neglect and were not satisfied with child abuse and neglect education they received in dental schools [19]. In our study, 39.88% of students had poor knowledge of recognizing signs of child physical abuse; however, 69.80% of students believed they could re-identify abuse. A lot of studies have examined dentists' knowledge and skills in recognizing child abuse and neglect, including dental neglect [14, 20, 21]. In a study conducted by Malpani *et al.* in India, only a small number of dentists identified all the signs of child abuse and neglect although there were many dentists who thought they could handle it [20].

According to Bloom's classification, dental students in our study had insufficient knowledge of some signs of physical abuse. For example, less than half of respondents (41.72%) knew that bruises on the neck were not associated with accidental trauma. Lack of correct answers to questions about diagnostic indicators and signs of physical abuse shown in Table 4 could be the result of the absence of the topics related to child abuse and neglect in the undergraduate curriculum.

Limitations

There are some limitations to the study: firstly, the sample was not random, and the results could not be generalized to all the dental students from five dental schools in the Republic of North Macedonia; secondly, dental students could perceive questionnaires as examinations, with the possibility of searching the media, journals, or textbooks for correct answers, rather than giving their own experience related to child abuse education; finally, it was not possible to determine if the students were colluding when answering the questions, and we don't know if the answers were honest.

Conclusions

According to Bloom's classification, 29.45% of students had good knowledge, 30.67% of students demonstrated moderate knowledge, and 39.88% of students had poor knowledge of recognizing signs of child physical abuse. Almost 98% of participants indicated that dentists were required to report a case of abuse. Only 69.94% of respondents thought they could identify abuse. Furthermore, 88.34% of students agreed that not reporting a case of abuse had consequence. Therefore, the subject that will cover the topics related to recognizing and reporting abused and neglected children from a dental perspective should be part of the curricula at the Dental Faculties in undergraduate and postgraduate education.

By working together with child social protection services, law enforcement institutions, forensic physicians, medical and dental teams, child abuse can be prevented and eliminated.

Ethical Statement

An approval to conduct the study was obtained from the Ethics Committee of the Faculty of Dental Medicine, Saints Cyril & Methodius University.

Informed Consent

The informed consent was obtained from each participant before completing survey.

Acknowledgments

The authors are thankful to all the dental students involved in the study for their cooperation and support.

Data Availability

The data that support the findings of this study are available from the corresponding author, VA, upon reasonable request.

Conflict of Interest

The authors declare no conflict of interest.

Financial Disclosure

The authors declared no financial support.

References

- [1] United Nations. Convention on the rights of the child [Internet]. Geneva, Switzerland: Office of the High Commissioner for Human Rights; 1989 [cited 26 Sep 2022]. Available from: <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>
- [2] World Health Organization. The VPA Approach [Internet]. World Health Organization [cited 26 Sep 2022]. Available from: <https://www.who.int/groups/violence-prevention-alliance/approach>

- [3] Nikolaidis G, Petroulaki K, Zarokosta F, Tsirigoti A, Hazizaj A, Cenko E, et al. Lifetime and past-year prevalence of children's exposure to violence in 9 Balkan countries: the BECAN study. *Child and Adolescent Psychiatry and Mental Health*. 2018;12:1. Available from: <https://doi.org/10.1186/s13034-017-0208-x>
- [4] Walker TWM, Fleming C, Kerai A, Hall S, Rakhra D, Horwood JP, et al. Are dental students well-equipped to deal with difficult communication situations? *British Dental Journal*. 2018;224(3):163–168. Available from: <https://doi.org/10.1038/sj.bdj.2018.44>
- [5] Hartung B, Schaper J, Fischer K, Ritz-Timme S. Care for children with dental neglect: identification of problems and approaches to solving them. *International Journal of Legal Medicine*. 2018;133(2):641–650. Available from: <https://doi.org/10.1007/s00414-018-1938-x>
- [6] Duman C, Al-Batayneh OB, Ahmad S, Durward CS, Kobylínska A, Vieira AR, et al. Self-reported knowledge, attitudes, and practice of final-year dental students in relation to child abuse: a multi-centre study. *International Journal of Paediatric Dentistry*. 2021;31(6):801–809. Available from: <https://doi.org/10.1111/ipd.12781>
- [7] von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *Journal of Clinical Epidemiology*. 2008;61(4):344–349. Available from: <https://doi.org/10.1016/j.jclinepi.2007.11.008>
- [8] Markovic N, Muratbegovic AA, Kobaslija S, Bajric E, Selimovic-Dragas M, Huseinbegovic A, Cuković-Bagic I. Knowledge and attitudes regarding child abuse and neglect. *Mater Sociomed*. 2015;27(6):372-375.
- [9] Hazar Bodrumlu E, Avcı A, Arslan S. Assessment of knowledge and attitudes of dental students in regard to child abuse in Turkey. *European Journal of Dental Education*. 2016;22(1):40–46. Available from: <https://doi.org/10.1111/eje.12242>
- [10] María I, López MI López, Leyda AM, Ribelles M. Knowledge and attitudes about child abuse in dental students. *Odontol Pediatr*. 2020;19(1):19–30. Available from: <https://doi.org/10.33738/spo.v19i1.115>
- [11] Ambarkova V. The role of dentists in recognition of child abuse. *Journal of Dental and Oral Health*. 2016;2(1):e103.
- [12] Jordan A, Welbury RR, Tiljak MK, Cukovic-Bagic I. Croatian dental students' educational experiences and knowledge in regard to child abuse and neglect. *Journal of Dental Education*. 2012;76(11):1512–1519. Available from: <https://doi.org/10.1002/j.0022-0337.2012.76.11.tb05413.x>
- [13] Hashim R, Al-Ani A. Child physical abuse: assessment of dental students' attitudes and knowledge in United Arab Emirates. *European Archives of Paediatric Dentistry*. 2013;14(5):301–305. Available from: <https://doi.org/10.1007/s40368-013-0063-2>
- [14] Cukovic-Bagic I, Dumancic J, Kujundzic Tiljak M, Drvaric I, Boric B, Kopic V, et al. Croatian dentists' knowledge, experience, and attitudes in regard to child abuse and neglect. *International Journal of Paediatric Dentistry*. 2014;25(6):444–450. Available from: <https://doi.org/10.1111/ipd.12151>
- [15] Ambarkova V, Apostolova D, Gothe RM. Dental caries experience among 5 year age children from two municipalities Berovo and Pechcevo in the Eastern Region of the Republic of Macedonia. *Journal of Dental Applications*. 2014;1(4):61–67. Available from: <https://austinpublishinggroup.com/dental-applications/fulltext/jda-v1-id1018.pdf>
- [16] Ambarkova V, Jankulovska M, Arian D, Glavina D, Soleva A. Dental caries experience among secondary school children in the Vardar region of the Republic of Macedonia. *Oral Health & Dental Management*. 2014;13(3):805–810. Available from: <https://www.walshmedicalmedia.com/open-access/dental-caries-experience-among-secondary-school-children-in-the-varadar-region-of-the-republic-of-macedonia-2247-2452.1000678.pdf>
- [17] Ambarkova V, Ivanova V. Dental caries experience among primary school children in the Eastern Region of the Republic of Macedonia. *Oral Health & Dental Management*. 2014;13(1):1–7. Available from: <https://www.walshmedicalmedia.com/open-access/dental-caries-experience-among-primary-school-children-in-eastern-region-of-republic-of-macedonia-2247-2452.1000534.pdf>
- [18] Al-Ani A, Hashim R, Schiffner U, Splieth ChH. Child physical abuse: knowledge of dental students in Hamburg, Germany. *European Archives of Paediatric Dentistry*. 2021;22(6):1057–1065. Available from: <https://doi.org/10.1007/s40368-021-00651-0>
- [19] Sulimany AM, Alsamhan A, Alawwad AA, Aqueel M, Alzaid N, Bawazir OA, et al. Knowledge levels and educational experiences among dental graduates in Saudi Arabia regarding child abuse and neglect: a national study. *Children*. 2021;8(9):724. Available from: <https://doi.org/10.3390/children8090724>
- [20] Malpani S, Arora J, Diwaker G, Kaleka PK, Parey A, Bontala P. Child abuse and neglect: do we know enough? A Cross-sectional study of knowledge, attitude, and behavior of dentists regarding child abuse and neglect in Pune, India. *The Journal of Contemporary Dental Practice*. 2017;18(2):162–169. Available from: <https://doi.org/10.5005/jp-journals-10024-2009>

[21] Aldaham A, Gopalakrishna V, Basheer B, Alzomaili A, Abalhassan G, Almuziri H, et al. Knowledge and attitudes toward child abuse and neglect among medical and dental undergraduate students and interns in Riyadh, Saudi Arabia. *Imam Journal of Applied Sciences*. 2020;5(1):38–46. Available from: https://doi.org/10.4103/ijas.ijas_21_19

Received: 2022-09-26

Revision Requested: 2022-10-30

Revision Received: 2023-01-16

Accepted: 2023-01-20