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Child Abuse and Neglect: Croatian Dental Practitioners' Experience and Knowledge

Gordana Buljan Flander[1], Božidar Nikša Tarabić[2], Ivana Čuković-Bagić[3]

[1]Child Protection Center of Zagreb, Croatia, [2]Centre for Croatian Studies, University of Zagreb, Croatia, [3]School of Dental Medicine, University of Zagreb, Croatia

Abstract – The aim of this study was to assess the experience and knowledge regarding child abuse and neglect (CAN) amongst the Croatian dental practitioners. Self-administered, structured questionnaire was posted to 500 Croatian dental practitioners, 82 (16.4%) of which had returned the questionnaire and were included in the final sample. The results indicate that dental practitioners have low CAN encounter rates in their practice: 52 (63.41%) never, 25 (30.48%) rarely and 5 (6.09%) sometimes. Amongst those who do, the average encounter rate of suspected CAN is M = 2.08 (SD = 1.97, min = 1, max = 8) and M = 1.33 (SD = 0.42, min = 1, max = 10) for the cases where they were sure of it. Although they find themselves confident of their professional role and the role of the other professionals in the case of CAN they seem to fail to fulfil it, with only one of the participants ever reporting a CAN suspicion. In general, participants seem aware of the need and are willing to engage in further education, especially in the field of CAN prevention and recognition of it.

Keywords: child abuse and neglect, dental practitioners, experience, knowledge

e-mail: alcoholism.kbcsm@gmail.com • www.http//hrcak.srce.hr/acoholism

Introduction

Child abuse and neglect (CAN) is defined as: "all forms of physical and emotional ill-treatment, sexual abuse, neglect, and exploitation that results in actual or potential harm to the child's health, development or dignity [1]." Consequences of CAN are severe and long-lasting [2], even leading to death. As an estimate, nearly 53000 children get murdered each year [3].

Abuse rates in Croatia seem to be rather similar to those in western Europe and USA or worse, with additional risk factors such as unemployment, financial problems, poverty, social isolation and stress levels being more common in not fully revived post-war economies [4]. Approximately 16.5% of high school students in Croatia have experienced emotional, 15.9% physical and 13.7% sexual abuse, additionally 4.8% witnessed domestic violence and 2.5% were neglected [5]. These are just the reported cases, while most of CAN still goes unrecognized.

Correspondence to: Prof. dr. sc. Gordana Buljan Flander
Poliklinika za zaštitu djece grada Zagreba, Đorđićeva 26, 10 000 Zagreb
Mob.: +385 98 453 114, e-mail: gordana.flander@poliklinika-djeca.hr

High comorbidity of CAN and orofacial trauma has been scientifically observed for quite some time [6-10,12]. Explicit evidence shows that such trauma is present in 49% [7,8] up to 75%8 of CAN cases. Upon closer examination, bruises on the head, the neck or the face could be seen in 95.2% of the cases [9]. Even the early childhood caries (ECC), observed in 58% [10] of the abused children, could be considered an important and often overlooked clue.

This kind of unique markers give members of dental team an exquisite opportunity to recognize and respond to various signs of physical, sexual and emotional abuse and neglect [6-14]. Although they can play a vital role in early recognition and report around the world, only a small percent of dental students receive any training on the issue of CAN within the scope of their formal education [11]. With usual rates of formal training ranging from around 21% [14] to 35% [11,15], it is not unusual for only 5.5% of dental students, still active in learning process, to be able to define child abuse correctly [16]. Such lack of information is not limited to just students, even the vast majority of practitioners show substantial lack of knowledge regarding the signs pointing to physical and sexual abuse [11-17]. Nevertheless, most of the practitioners seem rather interested, willing to engage, getting further informed and trained both in the field of CAN recognition and reporting of it [6,14,17]. In Croatia, where up until recently, there was no formal education on the issue of CAN, it comes as no surprise that almost 86% of surveyed healthcare practitioners perceive some kind of education in that field as necessary [17].

Proportions of dental practitioners encountering CAN suspicion goes from around 13% [13,14] up to 59% [20], most likely reflecting practitioners' formal education and sensibility towards this issue. In all, at least 50% of practitioners report having CAN suspicions at least once [21].

Although most of the healthcare practitioners think that they are well aware of their professional role regarding child abuse and neglect [17] and their legal (71%) [19] and ethical (80%) [19] obligations, they often seem to fail to report their suspicions even when clear evidence is present.

So why is it that, while all health-care providers are obliged to report any suspected case of child abuse or neglect they often seem to fail to do it? In most of the cases, report rates are low, starting at 1.5% [14] with more recent studies demonstrating up to 20% [19,20] and higher (33.9%) [18], all of which is still considered as under-reporting. The most prevailing reasons for not reporting seem to be the lack of knowledge and confidence, i.e. doubt over the diagnosis [6,8,14,18-20] and not knowing who to and where to report the suspect case [19].

Bearing in mind the previously mentioned aspects of CAN, in the context of dental practice and healthcare in general, the purpose of this research was to determine: a) the Croatian dental practitioners' experience and knowledge related to CAN; and b) the need for further education in this field.

Method

Participants

This study was approved by the Ethical Committee of the Child Protection Center of Zagreb.

Initially, 500 addresses were pooled, using random number tables, from the open access dental practitioners' database Stomatolog.in [22]. Each participant was posted a covering

letter explaining the purpose of the study, a short questionnaire and an envelope with a pre-paid return fee. Eighty two (16.4%) participants returned the filled-in questionnaires and were all included in the final sample, 25 (30.48%) of which were female and 57 (69.51%) male. The majority of participants, 64 (78.04%) had no specialization, 13 (15.85%) had specialization in pediatric dentistry and 5 (6.09%) some other specialization. Their average number of the working years was M=19.1 (SD=10.07).

Measures

The questionnaire used was a modification of the one from the study by Buljan Flander, Čorić and Štimac [17]. It consisted of 13 questions divided into three parts: 1) demographic data; 2) professional experience with CAN; 3) subjective and objective measures of CAN knowledge.

Questions regarding demographic data included: Gender (male, female); Number of the working years; Specialization (no specialization, specialization in pediatric dentistry, some other specialization).

Professional experience with CAN was covered by the following questions: How often do you, in a professional context, encounter a suspicion of or a clear proof of child abuse (never, rarely, sometimes, often); If you, in your practice, had an experience with abused children try to approximate the number of the cases in which: a) you suspected of child abuse, b) you were sure of or the child abuse was already proven; When confronted with the suspicion of or with a clear proof of child abuse, how sure are you of your professional role (what to do and who to contact) (completely sure, partially sure, not sure at all); How clear do you find the role of other professionals in the protection of abused children? (completely clear, partially clear, not clear at all); Have you ever reported child abuse or neglect to the social service or the police? (yes, no); Have you ever been called as an expert witness to an ongoing trial? (yes, no).

Subjective and objective measures of CAN knowledge included the following questions:

Subjective Measures

How much do you know about the issue of child abuse? (I know nothing at all, I know a little bit, I am aware of the issue, I am well informed, I know a lot); Are you interested in additional education on the child abuse and neglect in your professional context? (yes, no); If yes which field interests you the most (possible multiple choices) (prevention, recognition, protection and treatment); Do you think interdisciplinary education of other professionals on the child abuse and neglect is necessary? (yes, no); If yes, which fields do you consider the most important (possible multiple choices: prevention, recognition, protection and treatment).

Objective Measures

Please read the statements listed below and indicate to what extent do you agree or disagree with each statement (I completely agree, I mostly agree, I mostly disagree, I completely disagree): 1. By physical abuse are considered only those actions that result in visible marks on the body (bruises, skin burns, fractures, etc.); 2. Preschool children are the most likely to become abuse victims; 3. Neglect is typical for lower socio-economic status families; 4. Physical force is present during every sexual assault; 5. Sometimes, it is

in child's best interest not to report the suspicion of abuse; 6. There are situations where physical punishment is justified; 7. Sexual assault can be provoked by the child's sexualized behavior; 8. Consequences of emotional abuse are lesser than those of physical or sexual abuse; 9. Sexual abuse perpetrators are usually strangers (to the child); 10. Self-inflicted injury (by the parents' description) could be a sign of abuse (reversely scored); 11. Reoccurring teeth injuries resulting in teeth avulsion or the discoloration could be a sign of continuous abuse trauma (reversely scored); 12. There is a strong connection between dental and physical neglect (reversely scored).

Statistical Methods

Basic, descriptive statistics (frequencies, percentages, means and standard deviations, minimal and maximal values) were computed using IBM SPSS Statistics, Version 11.0.

Results

Professional Experience Regarding CAN

When it comes to the experience with CAN in the professional context, dental practitioners express having relatively low encounter rates. Majority of the participants, 52 (63.41%), never, 25 (30.48%) rarely and 5 (6.09%) of them sometimes encounter the situation where a suspicion is raised or a clear proof of child abuse is present.

Among those who encountered such a situation, 25 (30.48%) of them report an average of M = 2.08 (SD = 1.97, min = 1, max = 8) cases where they suspected child abuse and 6 (7.31%) of them an average of M = 1.33 (SD = 0.42, min = 1, max = 10) cases where they were sure of it.

Vast majority of subjects noted partial or full awareness of the dentistry practitioners' 74 (90.24%) and the role of other professionals' 76 (92.67%) in a situation where there is a suspicion or a proof of child abuse (Table 1). In general, participants find themselves rather confident of their professional role and the role of the other professionals when it comes to what to do and what services to contact in case of suspicion of or a clear proof of CAN.

Although they find themselves rather confident of their role and even 1/3 of them reported being in a situation where suspicion of child abuse was raised or a clear proof was present, only 1 (1.21%) of them reported their suspicion of child abuse to social services or the police. It seems that the dental practitioners are rarely included in the abuse allegation investigation processes, with only 1

Table 1. Dental practitioners` perceived professional role sureness/clarity

	Dental practitioners	Other experts
	f (%)	*f* (%)
Not sure/clear at all	8 (9.75)	6 (7.31)
Partially sure/clear	37 (45.12)	48 (58.53)
Completely sure/clear	37 (45.12)	28 (34.14)

(1.21%) of them called as an expert witness to an ongoing trial.

Subjective and Objective Measures of CAN Knowledge

Participants were asked to assess the level of information they have on the issue of CAN. Leptokurtic distribution was obtained, with the majority of the participants, 47 (57.31%), reporting being aware of the problem and the rest perceiving themselves either under informed 17 (20.72%) or having a substantial body of knowledge regarding the issue 18 (21.94%) (Table 2).

Furthermore, when their knowledge was objectively measured, 59 (71.95%) of them gave mostly correct answers in the general part of the questionnaire and 50 (60.97%) of them in the profession-specific part. The item with the lowest number of correct answers was 'Sexual abuse perpetrators are usually strangers (to the child)', with only 6.09% correct response rate (Table 3). The rates of correct answers on the profession-specific questions was generally lower (Table 3) indicating the lack of profession-specific knowledge.

Having in mind that the participants had no education on CAN as a part of their formal education, they were given an opportunity to express if they are interested in additional education on the matter. Majority of the participants 55 (67.07) was interested in some kind of additional education (Table 4). Amongst the interested participants, 37 (67.27) of them were primarily interested in education in prevention and 34 (61.81) in CAN recognition. Almost all of them, 78 (95.12%), believe that interdisciplinary education of other experts is unequivocally necessary, with the special emphasis on child abuse prevention, 61 (78.20%), (Table 4.).

Table 2. Child abuse and neglect awareness

	f (%)
I know nothing at all	2 (2.43)
I know a little bit	15 (18.29)
I am aware of the issue	47 (57.31)
I am well informed	16 (19.51)
I know a lot	2 (2.43)

Discussion

Professional Experience Regarding CAN

Although CAN seems to be a common finding [2,6,14], Croatian dental practitioners report very low encounter rates. The majority of them report they have never encountered a situation where a suspicion of CAN was raised or a clear proof of it was present. This finding can be misleading due to the fact that no assessment of the professional cue-specific knowledge necessary for the identification of potential signs of CAN was made. Therefore, perception of low encounter rates may just be the artefact of practitioners never receiving any formal training in that subject, indicating two plausible explanations - either truly low rates of CAN or for it to pass unnoticed, more likely the latter.

Few other contradictions were present. Although the vast majority of the participants had reported being partially or fully aware of their role and the role of other professionals in a situation where there is a suspicion or a proof of child abuse, they had almost never reported it. This per se indicates either the lack of the professional role understanding or some other reasons preventing them in their

Table 3. Objective measures of CAN knowledge

General part	*f* (%) 1	2	3	4	F (1,2)	T (3,4)
1. By physical abuse are considered only those actions that result in visible marks on the body (bruises, skin burns, fractures, etc.)	8 (9.75)	26 (31.7)	14 (17.07)	34 (41.46)	34 (41.46)	48 (58.53)
2. Preschool children are the most likely to become abuse victims	4 (4.87)	3 (3.65)	23 (28.04)	52 (63.41)	7 (8.53)	75 (91.46)
3. Neglect is typical for lower socio-economic status families	5 (6.09)	14 (17.07)	24 (29.26)	39 (47.56)	19 (23.17)	63 (76.82)
4. Physical force is present during every sexual assault	14 (17.07)	16 (19.51)	25 (30.48)	27 (32.92)	30 (36.58)	52 (63.41)
5. Sometimes, it is in child's best interest not to report the suspicion of abuse	3 (3.65)	9 (10.97)	15 (18.29)	55 (67.07)	12 (14.63)	70 (85.36)
6. There are situations where physical punishment is justified	1 (1.21)	9 (10.97)	21 (25.6)	51 (62.19)	10 (12.19)	72 (87.8)
7. Sexual assault can be provoked by the child's sexualized behavior	1 (1.21)	10 (12.19)	16 (19.51)	55 (67.07)	11 (13.41)	71 (86.58)
8. Consequences of emotional abuse are lesser than those of physical or sexual abuse	1 (1.21)	1 (1.21)	15 (18.29)	65 (79.26)	2 (2.43)	80 (97.56)
9. Sexual abuse perpetrators are usually strangers (to the child)	47 (57.31)	30 (36.58)	2 (2.43)	3 (3.65)	77 (93.9)	5 (6.09)
Profession-specific part	**1**	**2**	**3**	**4**	**T (1,2)**	**F (3,4)**
10. Self-inflicted injury (by the parent's description) could be a sign of abuse (reversely scored)	23 (28.04)	24 (29.26)	25 (30.48)	10 (12.19)	47 (57.31)	35 (42.68)
11. Reoccurring teeth injuries resulting in teeth avulsion or the discoloration could be a sign of continuous abuse trauma (reversely scored)	14 (17.07)	45 (54.87)	18 (21.95)	5 (6.09)	59 (71.95)	23 (28.04)
12. There is a strong connection between dental and physical neglect (reversely scored)	13 (15.85)	32 (39.02)	27 (32.92)	10 (12.19)	45 (54.87)	37 (45.12)

F – false, wrong answer; T – true, correct answer

Table 4. Perception of necessity and the expressed interest towards additional education on the issue of CAN

	Dental practitioners	Interdisciplinary education of other professionals
	f (%)	*f* (%)
No (not interested)	28 (34.14)	28 (34.14)
Yes (interested)	55 (67.07)	55 (67.07)
Prevention	37 (67.27*)	61 (78.20*)
Recognition	34 (61.81*)	49 (62.82*)
Protection and treatment	22 (40.00*)	47 (60.25*)

* number of participants answered yes/number of picks

reports. It is not uncommon for CAN suspicions not to get reported [8,14,18-20], but overall report rates amongst Croatian dental practitioners seem alarmingly low compared to those in the other studies.

Given the raise in number of public campaigns and implementation of various legislative acts, all targeting the protective aspects of both the system and the community, it was expected that most of the dental practitioners would be aware of the problem. Their answers on the general part of the objective CAN knowledge measure were accordingly mostly correct. However, it is important to bear in mind that the given statements (questions) did not require high level of issue-specific knowledge to be answered correctly. Even the practitioners themselves recognized the need for and were willing to engage in additional education on the matter – primarily in the prevention and the recognition of CAN.

In general, all of the results seem comparable to those obtained in other studies [6,8,11-21], with the exception of the alarming CAN under-reporting amongst Croatian dental practitioners.

One of the major limitations of this study is the very low response rate. Overall response rates in similar studies seem diverse, even though seemingly increasing through time, ranging from 38% [21] to 64% [15], going even up to 97% [8]. Having in mind that Western Europe and USA have a longer history of recognizing the importance of systematic sensitization of healthcare providers on CAN, higher rates of cooperation in this kind of research is assumed. Nevertheless, considering context specific factors – average to low level of information on the issue of CAN among the Croatian healthcare providers is expected to yield low interest and even lower response rates, e.g. in the study by Buljan Flander, Čorić and Štimac higher response rates were recorded amongst pediatricians 30.8%, while general health practitioners had only 20.3% response rate [17]. It might be presumed that the less healthcare professionals perceive themselves profes-

sionally obliged or capable to act upon a certain issue the lesser the response rate.

It is recommended for further studies: 1) to use some more elaborate measures of professional-specific (cue-specific) knowledge regarding CAN recognition; 2) to explore what keeps dental and other healthcare practitioners from fulfilling their professional duty to report even the slightest suspicion of CAN; and 3) to further broaden the scope of target populations, including even students, healthcare staff and other personnel in direct day-to-day interaction with children. Such approach to the topic in question could enable a comprehensive comparison and strategic planning of education, prevention and support.

In conclusion, dental practitioners report having relatively low CAN encounter rates in their professional context. They also express an average level of information on the issue. Results of the present study clearly indicate that the Croatian dental practitioners are not yet sufficiently prepared to fully utilize their professional competences in CAN recognition. Accordingly, most of the participants perceive a need and are willing to engage in further education on the matter.

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Conflict of interest

None declared

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Zlostavljanje i zanemarivanje djece: Iskustva i znanja hrvatskih stomatologa

Sažetak – Cilj ovog istraživanja je bio procijeniti iskustvo i znanje hrvatskih stomatologa o zlostavljanju i zanemarivanju djece, u profesionalnom kontekstu. 500 stomatologa je poštom primilo strukturirani upitnik, od čega je konačni uzorak činilo 82 (16.4%) sudionika koji su ga vratili ispunjenog. Rezultati ukazuju na nisku stopu slučajeva zanemarivanja i zlostavljanja djece s kojom se stomatolozi susreću u radu: 52 (63.41%) nikad, 25 (30.48%) rijetko i 5 (6.09%) ponekad. Od onih koji su se sa takvim slučajevima susreli, prosječan broj slučajeva u kojima su bili suočeni sa sumnjom na zlostavljanje i zanemarivanje iznosi M = 2.08 (SD = 1.97, min = 1, max = 8) a slučajeva u kojima je postojao nepobitan dokaz M = 1.33 (SD = 0.42, min = 1, max = 10). Iako su sudionici sigurni u poznavanje svoje profesionalne uloge i uloge drugih stručnjaka u slučaju zlostavljanja i zanemarivanja djece, čini se da tu dužnost ispunjavaju u nedovoljnoj mjeri, tako je samo jedan sudionik prijavio svoju sumnju na zlostavljanje i zanemarivanje djeteta. Većina sudionika prepoznaje potrebu za dodatnom edukacijom na temu zlostavljanja i zanemarivanja djece u koju su se voljni uključiti, naročito u području prevencije i prepoznavanja takvih slučajeva.

Ključne riječi: zlostavljanje i zanemarivanje djece, stomatolozi, iskustvo, znanje