

## Research Article

# Child Abuse Dental Report Form

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**Abstract:** Child abuse is a worldwide anthroposocial phenomenon that threatens children's physical, emotional and intellectual development, as well as their dignity, security, well-being and even their own lives. The approach to this problem is multidisciplinary, and all healthcare professionals must work together in preventing, detecting, and reporting suspected child abuse. Dentists are in a strategic position to recognize and report suspected cases. The aim of this work is to propose a form for Portuguese Dentists to fill in when collecting the medical history and performing the physical examination of a child suspected of abuse. For the development of this form, we used the Missing Person Dental Report and the Code Manual of the National Crime Information Center (NCIC) from the Federal Bureau of Investigation (FBI), the Fédération Dentaire Internationale (FDI) Numbering System (FDI Two-Digits Notation, ISO 3950) in the codification of the injuries and the International Classification of Diseases to Dentistry and Stomatology from the World Health Organization (WHO). The instrument we developed – the Child Abuse Dental Report Form – includes 7 sections: Section 1 – Mandated Reporter; Section 2 – Victim's Information; Section 3 – Involved Parties; Section 4 – Mouth; Section 5 – ICD-DA Codes; Section 6 – Dental Characteristics; and Section 7 – Other Dental Information.

**Keywords:** abuse; dentistry; child; form

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## Introduction

Violence against children is a public health, human rights and social problem, with potentially devastating and costly consequences, and is an important cause of morbidity and mortality in children [1].

It is a worldwide social anthropologic phenomenon, with a multidisciplinary scope, which affects the physical, emotional, and intellectual development of children, putting their safety, well-being, dignity and even life itself at risk.

The World Health Organization (WHO) estimates that one billion children, or one in two children in the world, suffer some type of violence every year [2]. This number, although high, is lower than the real one, mainly due to the difficulty in identifying certain types of mistreatment, such as sexual and emotional abuse and child neglect [3].

In order to raise awareness of this problem, the United Nations (UN) launched the *Transforming our World Agenda*, with the aim of eliminating all forms of violence against children. Target 16.2 of the 2030 *Agenda for Sustainable Development* is to end abuse, exploitation, trafficking and all forms of violence and torture against children [4].

In 2021, in Portugal, the Comissão Nacional de Promoção dos Direitos e Proteção das Crianças e Jovens (CPCJ) received 43,075 reports from children and young people identified as being in danger [5].

The CPCJ are official non-judicial institutions with functional autonomy, which aim to promote the rights of children and young people and prevent or put an end to situations that could affect their safety, health, training, education, or integral development (article 12.1 of Law no. 147/99 of 1 September) [6]. For the WHO, child maltreatment is the abuse and neglect that occurs in children under 18 years of age [5]. It includes all types of physical and/or emotional maltreatment, sexual abuse, abandonment, neglect and commercial or other exploitation that results in actual or potential harm to the health, survival, development or dignity of the child in the context of a relationship of responsibility, trust or power [7]. Most violence against children involves at least one of six main types of interpersonal violence (Table 1) that tend to occur at different stages of a child's development. When directed against girls or boys because of their biological sex or gender identity, any of these types of violence can also constitute gender-based violence [7].

**Table 1.** Types of Interpersonal Violence in Children [7].

Type of violence	Description
Mistreatment (including violent punishment)	Involves physical, sexual, and psychological/emotional violence; neglect of babies, children and adolescents by parents, caregivers, and other authority figures, most often at home, but also in settings such as schools and orphanages.
Bullying (including cyberbullying)	Unwanted aggressive behavior by another child or group of children who are not siblings or in a romantic relationship with the victim. Involves repeated physical, psychological, or social harm and often occurs in schools and other settings where children gather, as well as online.
Youth violence	Concentrated among children and young people aged 10 to 29, occurs most frequently in community settings between acquaintances and strangers. Includes bullying and physical aggression with or without weapons (such as guns and knives) and may involve gang violence.
Intimate partner violence (domestic violence)	Involves physical, sexual, and emotional violence by an intimate partner or ex-partner. Although men can also be victims, intimate partner violence disproportionately affects women. Usually occurs against girls in child marriages and early/forced marriages. Among romantically involved but unmarried teens, it is sometimes called “dating violence”.
Sexual violence	Includes completed or attempted non-consensual sexual contact and acts of a sexual nature that do not involve contact (such as voyeurism or sexual harassment); acts of sex trafficking committed against someone who cannot consent or refuse; and online exploration.
Emotional or psychological violence	Includes restriction of a child's movements, defamation, ridicule, threats and intimidation, discrimination, rejection, and other non-physical forms of hostile treatment.

The diagnosis of violence against children is essentially based on physical and psychological indicators (physical, psycho-emotional and behavioral signs and symptoms), always valued in the context of the history of the event.

This problem has a multidisciplinary approach, which requires the involvement of all health professionals in the prevention, detection, and reporting of suspected abuse of children and young people. Oral health professionals, Dentists in particular, are in a privileged position to detect, flag and report suspected cases to the competent authorities [CPCJ, *Polícia de Segurança Pública* (PSP), *Guarda Nacional Republicana* (GNR)], which play a fundamental role in protecting victims and investigating criminals. Therefore, they must have skills in this area [8].

Due to its susceptibility, erogenous connotation and its symbolism in nutrition and communication, the head and face region is home to more than 50% of injuries, and multiple injuries occur in the oral cavity, due to its easy accessibility (namely to try to silence the child) [9,10].

The objective of this work was to develop a form for Portuguese oral health professionals, dentists in particular, to record, in an objective, systematized and standardized way, data concerning anamnesis and clinical history, relevant in cases of suspected abuse of children and young people.

This form makes it possible to standardize and convey diagnostic elements between oral health professionals and the different entities involved in the victim's protection process and criminal investigation. The early detection and report of child abuse, using the form we propose, would benefit the prevention of new episodes of violence against the child victim of abuse, or other children in the future. It is mandatory to flag the first signs of abuse, and the dentist is often the first to have contact with the situation. Table 2 highlights a standardized set of criteria that represent indicators of child abuse.

**Table 2.** Indicators of Child Abuse [9].

Indicators of child abuse
1. Inadequacy or lack of explanation regarding the mechanism of trauma/injuries/sequelae
2. Inadequacy or lack of explanation regarding the date of occurrence of the trauma
3. Injuries in unusual locations for the child's age group (e.g., bruises or other injuries to the eyes, ears or mouth, bruises and contusions on the side of the face, ears and neck)
4. Figurative or modulated injuries (e.g., belt buckle, human hand) that are highly suggestive of abuse
5. Injuries with different locations
6. Injuries with a significant evolution time, without clinical intervention (delay in seeking healthcare)
7. Lesions with certain characteristics, especially when the history of their production is not known or plausible (e.g., burns or scars with clear edges and multiple locations, bitemarks, traumatic alopecia)

Regarding the type of orofacial injuries (Table 3), these occur mainly in the anterior region of the face, due to direct trauma (hand or wrist) or indirect trauma (instrument forcefully introduced into the oral cavity) [10].

**Table 3.** Most frequent orofacial injuries in Child Abuse [8,9].

Anatomical region	Type of injuries
Lips	Abrasions, bruises, lacerations, burns (punches, slaps, forced feeding)
Tongue	Burns, bites (by oneself or a third party) and scars
Labial or lingual brake	Bruises, lacerations – highly suggestive of abuse in children under 8 and over 18 months (sexual abuse, forced feeding) [11]
Gingival and buccal mucosa	Abrasions, lacerations (forced feeding)
Palate	Suffusions, lacerations, palatal petechiae (forced feeding, sexual abuse)
Tooth	Teeth avulsion, dislocation, fracture, necrosis (direct or indirect trauma)
Maxilla and mandible	Fractures (severe trauma)

## Materials and Methods

For the development of this form, we used the Missing Person Dental Report [1] and the Code Manual of the National Crime Information Center (NCIC) [12,13] from the Federal Bureau of Investigation (FBI), the Fédération Dentaire Internationale (FDI) Numbering System (FDI Two-Digits Notation [14], ISO 3950 [15]) in the codification of the injuries, as well as the International Classification of Diseases to Dentistry and Stomatology from the WHO [16].

## Results

The result was the construction of the Child Abuse Dental Report Form (Table 4), which includes 7 sections: Section 1 – Mandated Reporter; Section 2 – Victim's Information; Section 3 – Involved Parties; Section 4 – Mouth; Section 5 – ICD-DA Codes; Section 6 – Dental Characteristics; and Section 7 – Other Dental Information.

**Table 4.** Child Abuse Dental Report Form.**SECTION 1 – MANDATED REPORTER**

Professional Name	Portuguese Card Number	Did the mandated reporter witness the incident? Yes <input type="checkbox"/> No <input type="checkbox"/>
Dental Clinics/Office's Name and Address	Telephone #	Today's Date:
	Signature	

**SECTION 2 – VICTIM'S INFORMATION**

Name	Date of Birth	Age	Sex
Address	Telephone #	Class	Grade
Physically Disabled? Developmental Disability? Other Disability?	Nationality	Place of Birth	
Type of Abuse: Physical <input type="checkbox"/> Emotional <input type="checkbox"/> Sexual <input type="checkbox"/> Neglected <input type="checkbox"/> Other	Relationship to suspect		
In foster care? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Case Narrative Description			

**SECTION 3 – INVOLVED PARTIES**

SIBLINGS	Name 1 _____	Date of Birth	Age	Sex
	Name 2 _____			
	Name 3 _____			
	Name 4 _____			
VICTIM'S PARENTS	Name	Date of Birth	Age	Sex
	Address	Telephone #	Occupation	
	Name	Date of Birth	Age	Sex
	Address	Telephone #	Occupation	
SUSPECT	Suspect's Name	Date of Birth	Age	Sex
	Address	Telephone #	Class	Grade
	Other relevant information			

**SECTION 4 – MOUTH**

<b>1. Oral Cavity (including mucosa)</b> 1.1. <u>Vestibule</u> 1.1.1. Superior Labial Mucosa 1.1.2. Inferior Labial Mucosa 1.1.3. Superior Alveolar Mucosa 1.1.4. Inferior Alveolar Mucosa 1.1.5. Left Cheek Mucosa 1.1.6. Right Cheek Mucosa 1.1.7. Upper Lip (vermillion, border, philtrum, oral commissures) 1.1.8. Lower Lip (vermillion, border, oral commissures) 1.1.9. Upper Labial Frenulum 1.1.10. Lower Labial Frenulum  1.2. <u>Palate</u> 1.2.1. Hard Palate 1.2.2. Palatine Raphe 1.2.3. Incisive papilla  1.3. <u>Oral Cavity Proper - Gingiva</u> 1.3.1. Interdental papilla 1.3.2. Gingival sulcus 1.3.3. Gingival margin	
<b>2. Glands</b> 2.1. Parotid gland/Parotid duct 2.2. Submandibular gland/Submandibular duct 2.3. Sublingual gland/Major sublingual duct	
<b>3. Tongue</b> 3.1. Lingual tonsils 3.2. Lingual frenulum 3.3. Fimbriated fold 3.4. Sublingual caruncle 3.5. Glossoepiglottic folds 3.6. Lingual septum	
<b>4. Oropharynx</b> 4.1. Soft palate 4.1.1. Uvula 4.1.2. Palatoglossal arch 4.1.3. Palatopharyngeal arch 4.1.4. Plica semilunaris of the fauces 4.2. Tonsillar fossa 4.3. Palatine tonsil	

**SECTION 5 – ICD-DA CODES**

ICD-DA CODES	ICD-DA CODES
Upper Maxillary	Lower Maxillary
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12

**SECTION 6 – DENTAL CHARACTERISTICS**

Permanent Dentition ☐ Deciduous Dentition ☐ Mixed Dentition ☐

<b>Upper Right</b> <i>Permanent Dentition</i> 01 (18) _____ 02 (17) _____ <i>Deciduous Dentition</i> 03 (16) _____ 04 (15) _____ A (55) _____ 05 (14) _____ B (54) _____ 06 (13) _____ C (53) _____ 07 (12) _____ D (52) _____ 08 (11) _____ E (51) _____	<b>Lower Right</b> <i>Permanent Dentition</i> 17 (38) _____ 18 (37) _____ <i>Deciduous Dentition</i> 19 (36) _____ 20 (35) _____ K (75) _____ 21 (34) _____ L (74) _____ 22 (33) _____ M (73) _____ 23 (32) _____ N (72) _____ 24 (31) _____ O (71) _____
<b>Upper Left</b> <i>Permanent Dentition</i> 09 (21) _____ F (61) _____ 10 (22) _____ G (62) _____ 11 (23) _____ H (63) _____ 12 (24) _____ I (64) _____ 13 (25) _____ J (65) _____ 14 (26) _____ 15 (27) _____ 16 (28) _____	<b>Lower Left</b> <i>Permanent Dentition</i> 25 (41) _____ P (81) _____ 26 (42) _____ Q (82) _____ 27 (43) _____ R (83) _____ 28 (44) _____ S (84) _____ 29 (45) _____ T (85) _____ 30 (46) _____ 31 (47) _____ 32 (48) _____

Numbers and letters out of parentheses represent the Universal System.  
Numbers in parentheses represent the World Dental Federation (Fédération Dentaire Internationale – FDI) System.

## SECTION 7 – OTHER DENTAL INFORMATION

Dental X-Rays Yes ☐ No ☐

Dental Models Yes ☐ No ☐

Dental Photographs Yes ☐ No ☐

### Discussion

Globally, it is estimated that one in two children aged 2 to 17 experience some form of violence each year [17]. In addition to the immediate damage to families and communities, violence against children and young people has a pernicious nature, with lifelong effects that harm the potential of individuals, and, when aggregated in billions of people, can impede economic development [7].

The *Child Abuse Dental Report Form* aims to standardize procedures in cases of child and youth abuse for all Portuguese dentists and, at the same time, help to systematically and objectively communicate information to the competent authorities.

Most children in Portugal are monitored by a family doctor, pediatrician, and other health professionals, namely a dentist under the Oral Health Program known as *Cheque Dentista*. Each of these professionals has a legal obligation to report situations of mistreatment.

These issues have recently been discussed in Portugal, and physically abusive acts were reported by 12.1% of participants, while emotional abuse cases were reported by 23.7%, in a study in the north of the country [18].

In another study, in 30.8% of the cases, more than one type of abuse was practiced, with negligence being the most frequent, in 80% of cases, followed by physical abuse, in 20%. In 80% of the cases, there was intervention of the CPCJ, and 6 cases were solved by the social services of the hospital only [19].

In a study conducted in Porto, in the National Institute of Legal Medicine and Forensic Sciences – North Delegation (INMLCF-DN), held in the Medlegis data archives system, the eyes, mouth and nose are, in descending order, the regions most likely affected by physical aggression to the face. Together, these three regions are responsible for 81.2% of all facial injuries [20].

In Portugal, there are no forms of this type to be used by dentists; in this context, the legal obligation of professionals to notify cases of suspicion to the authorities should be reminded. The existence of the form constitutes an additional tool that standardizes the procedure, and also aims to standardize a *Child Abuse Dental Report Form* in dental clinical practice to report cases to the Portuguese authorities. Of particular note are the forensic services (delegations and medical-legal offices), entities with jurisdiction over children and young people – CPCJ and the Portuguese police authorities: *Polícia Judiciária* (PJ), PSP and GNR. Dentists can also report the abuse of children and young people to the *Linha Nacional de Emergência Social* (phone number: 144) and the *Linha Crianças em Perigo* (phone number +351 961231111).

Identification in Forensic Dentistry can be defined as the scientific and technical procedures dedicated to examine and analyze dental evidence in the interests of justice [21]. The Ukraine-Russia and Israel-Hamas conflicts have returned war to the highlights; forensic identification of human bodies has knocked back to our doors. Therefore, this form can also be used to help forensic identification (Section 6 – Dental Characteristics), representing an additional tool in identification procedures.

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### Author Contributions

LSA conceived and designed the work. MJPC read the manuscript critically. All authors read and approved the final manuscript.

### Conflicts of interest

The authors declare no competing interests.

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