# Interpersonal violence in a city of Paraná: a study about the epidemiological profile of victims and characterization of dental trauma

Violência interpessoal em cidade paranaense: um estudo do perfil epidemiológico das vítimas e caracterização dos traumas dentais

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#### **RESUMO**

O contexto socioeconômico e a vulnerabilidade da população estão diretamente associados à violência no país. No Brasil, o Código Penal (CP) prevê o ato ilícito e pune o agressor que atentar contra a integridade física de outrem. A violência interpessoal constitui um ato ilícito e está associada à vulnerabilidade das vítimas. Sendo assim, o estudo do perfil epidemiológico de vítimas de violência interpessoal se faz necessário para alertar a população quanto à suscetibilidade dessas. O presente estudo objetivou tracar o perfil epidemiológico de vítimas de lesão corporal por violência interpessoal na região de Maringá, no estado do Paraná, e estudar a caracterização das lesões dentais quanto à debilidade e deformidade permanente. Foram analisados 4.962 laudos pertencentes aos anos de 2018 a 2020 por estatística descritiva. Dados coletados incluíram: sexo, idade, estado civil, região afetada pela lesão corporal, tipo de trauma dental e respostas para "debilidade" ou/e "deformidade permanente". Durante o período estudado, houve prevalência de vítimas do sexo feminino (57,8%), cor de pele branca (80,2%), com idade entre 21 e 30 anos (24,9%), solteiros (54,9%), e a região mais afetada foi a dos membros superiores (32,1%). Em relação às lesões corporais com envolvimento dental, 67 casos foram relatados. Vítimas do sexo masculino foram prevalentes (60,3%) e a fratura do elemento obteve destaque com 54,4% das lesões periciadas. A implementação do Núcleo de Odontologia Legal ocorreu em agosto de 2019 e, ainda com a interrupção das atividades periciais no ano de 2020 - devido à pandemia da COVID-19 - resultados quanto à debilidade permanente foram evidentes. O perfil epidemiológico das vítimas é caracterizado pelo sexo feminino, cor de pele branca, faixa etária de 21 a 30 anos e solteiros. Quanto aos traumas dentais, vítimas do sexo masculino e fraturas dentais foram prevalentes. Além disso, houve um aumento na classificação de "debilidade permanente", bem como um leve aumento nos casos de "necessidade de avaliação complementar" para deformidade permanente.

Palavras-chave: Odontologia legal, Direito penal, Traumatismos faciais, Ferimentos e lesões.

#### **ABSTRACT**

The socioeconomic context and population vulnerability are directly associated with violence in the country. In Brazil, the Criminal Code provides the illicit act and punishes the aggressor who offends the physical aggression from a person. Interpersonal violence is an illegal act and is associated with the vulnerability of victims. Therefore, the study of the epidemiological profile of victims of interpersonal violence is needed to alert the population about their susceptibility. The present study aimed to design the epidemiological profile of victims of bodily injury from interpersonal violence in the region of Maringá, in the state of Paraná, and to study the characterization of dental injuries in terms of permanent weakness and deformity. Four thousand nine hundred sixty-two reports performed between 2018 and 2020 were analyzed using descriptive statistics. Data collected included: sex, age, marital status, the region affected by the bodily injury, type of dental trauma, and responses to "weakness" or/and "permanent deformity". During the period studied, there was a prevalence of female victims (57.8%), white skin color (80.2%), aged between 21 and 30 years (24.9%), single (54.9%), and the most affected region was the upper limbs (32.1%). Regarding bodily injuries with dental involvement, 67 cases were reported, male victims were prevalent (60.3%), and dental fracture was highlighted with 54.4% of examined injuries. The implementation of the Forensic Dentistry Centre took place in August 2019 at the Medico-Legal Institute of Maringá. Also, with the interruption of expert activities in 2020 - due to the COVID-19 pandemic - relevant outcomes regarding permanent weakness were observed. The epidemiological profile of victims is characterized by the female sex, white skin color, the age group from 21 to 30 years old, and singles. Regarding dental trauma, male victims, and dental fractures were prevalent. Furthermore, there was an increase in the classification of "permanent weakness", as well as a slight increase in cases of "further assessment required" for permanent deformity.

**Keywords:** Forensic dentistry, Criminal law, Facial injuries, Wounds and injuries.

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## INTRODUCTION

In Brazil, Forensic Dentistry had its historical landmark in 1924, when Professor Luiz Lustosa da Silva defined it as a science and the field that provides all dental knowledge at the service of law and justice<sup>1</sup>. The performance of the expertise in civil, criminal, labor, and administrative courts in Brazil is provided in Law No. 5.081<sup>2</sup> from 1966 and in Resolution No. 63/2005 of the Federal Council of Dentistry<sup>3</sup>.

Later, through Law No. 12.030/2009<sup>4</sup>, the role of odontologists was regulated in the list of official experts<sup>5</sup>. Among the activities developed by these professionals, the forensic odontologist is responsible for examining bodily injury. This procedure aims to materialize and measure the damage according to the level of impairment, and location of the injury, according to article 159 of the Brazilian Code of Criminal Procedure (CCP)<sup>4-7</sup>.

Violence is an item of common interest and is considered a study subject of public health  $^{8,9}$ . Interpersonal violence is defined as an illicit act, according to the Criminal Code (CC) $^{10}$ . Article 129 of CC $^{10}$  provides for offending the physical integrity of another, classifies it as mild, severe, or very serious, and distinguishes between voluntary and involuntary crime practiced by action or omission.

The role of Dentistry is to characterize facial injuries according to the weakness or deformity they will cause to the victim. The forensic odontologist answers the issues, as provided by article 160 of the CCP<sup>6</sup>, through the technical-scientific basis and diagnosis of the injuries to the judge. The Judiciary Branch, on the other hand, is responsible for framing the bodily injuries and quantifying the punishment for the aggressor<sup>9-12</sup>.

In forensic examinations involving the head and neck region, it is essential to carry out by the expertise of the forensic odontologist since injuries related to the oral and maxillofacial area may cause a significant number of consequences as they cover a functional masticatory, phonetic and aesthetic complex, which has social repercussions<sup>13-15</sup>.

In this way, the lack of an odontologist on the official list may result in the inadequacy of the sentence attributed to the aggressor by the judge. These decisions depend on the legal framework of the injuries, which is based on the answers to the official issues given by the experts, as well as social damages due to the feeling of injustice for the victims and their families<sup>16</sup>.

More specifically, regarding the state of Paraná, Law No. 18.008/2014<sup>17</sup> about the official staff (presently has four official dental experts), which currently are located in Curitiba, Maringá, Foz do Iguaçu, and Londrina. The implementation of the Forensic Dentistry Center at the Medico-Legal Institute (MLI) of Maringá took place only in August 2019. Thus, the present work aimed to design the epidemiological profile of victims of interpersonal violence examined at the MLI in the city of Maringá. In addition, we aimed to characterize dental trauma from the experts' answers to official issues.

# **MATERIAL AND METHODS**

To carry out this research, the present project was submitted to the Ethical Committee of the School of Dentistry of Ribeirão Preto and approved under opinion number 4.899.883 and CAAE 47541021.7.0000.5419 in order to fulfill all the requirements of Research Ethics nº 466/12. This is a cross-sectional, quantitative, and descriptive study in which reports were analyzed to design the profile of bodily injury victims, obtained from the access of reports from MLI in the city of Maringá, produced between 2018 and 2020 that recorded physical and interpersonal violence in their records.

Reports that did not characterize physical aggression, but a personal injury caused by motor vehicles and *ad cautelam*, were excluded. Data collected included: sex, age, skin color, marital status, and affected region (head and neck, trunk, upper limbs, and/or lower limbs). Data were evaluated and tabulated in Excel® software (Microsoft Corp., Redmond, WA, USA) spreadsheets and submitted to descriptive statistics.

For those reports that included dental trauma, a new spreadsheet was created in which the following data were collected: description of the dental trauma, element(s) involved, weakness, or permanent deformity, according to the requirements of article 160 of CCP<sup>6</sup>.

## **RESULTS**

The present research comprised 4,962 reports of bodily injury, of which 109 were excluded because they did not report interpersonal violence in their

records but domestic accidents, professional error, animal bites, and others. Therefore, 4,853 reports of victims examined at the MLI of Maringá, in Paraná state, were analyzed, of which 2,804 (57.8%) were females and 2,049 (42.2%) were males (Figure 1).

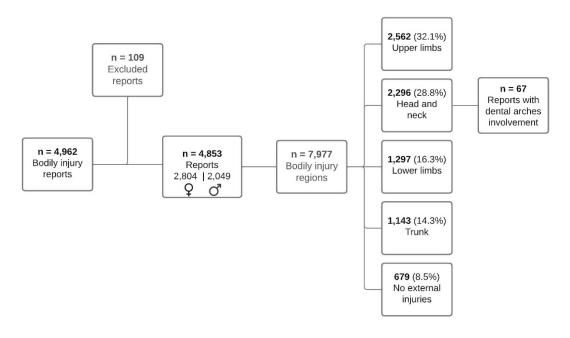


Figure 1: Distribution of bodily injury reports due to interpersonal violence from victims examined at the MLI of Maringá, between 2018 and 2020, according to the amount, sex, and area of involvement of the injuries.

Concerning skin color, 3,892 (80.2%) of the victims were white, 765 (15.7%) were mixed, 153 (3.2%) were black, 30 (0.7%) were yellow, and 13 (0.2%) were without information. Regarding marital status, 2,663 (54.9%) of the victims were single, 1,183 (24.4%) were married, 509 (10.5%) were divorced, 303 (6.2%) were in a stable relationship, 96 (2%) widows, 95 (2%) without information, and 4 (0.1%) answered for "others". The prevalence of the age group was between 21 and 30 years (Figure 2).

Regarding the regions affected, it is important to note that they differ from the total number of reports since a report may have described the presence of lesions in more than one body region. The upper limbs were highlighted, followed by the head and neck, lower limbs, and trunk (Figure 1).

Sixty-seven reports mentioned the involvement of dental arches. Among them, four were excluded from the study due to trauma involving prostheses or restorations, characterized as property damage, as defined in Brazilian law. Therefore, 63 reports of dental trauma comprised the following data: 38 (60.3%) were males, and 25 (39.7%) were females (Figure 3).

When analyzing the description of teeth involved, 90 teeth were calculated, of which 72 were identified, and 18 had incomplete data – the higher number than the number of reports is justified by the involvement of more than one dental element in some reports. The most affected teeth were the maxillary central incisors, as seen in Figure 4.

Regarding the type of trauma, it was observed that the fracture of the dental element was the most prevalent, reported 49 times (Figure 5).

Regarding the official issues proposed by Brazilian law<sup>6</sup>, when observing permanent weakness, they were analyzed by years, while the objective was to analyze the characterization of lesions over

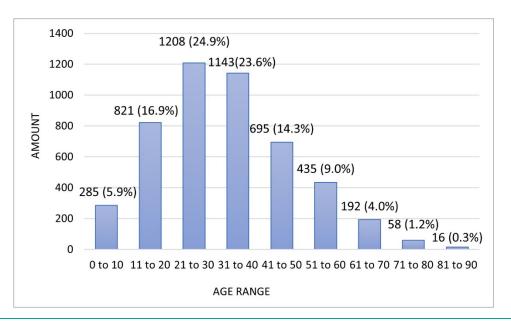


Figure 2: Distribution of reports from victims of personal injury by interpersonal violence according to age group.

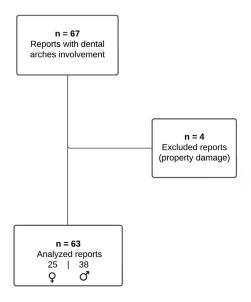


Figure 3: Distribution of reports with dental arch involvement, between 2018 and 2020, according to amount and sex.

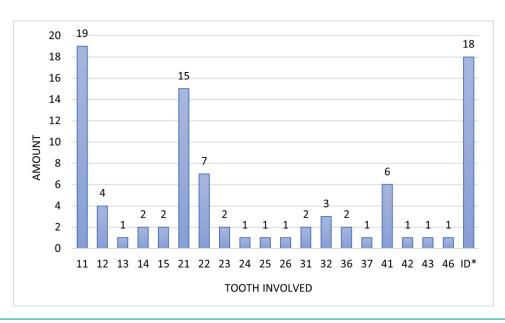


Figure 4: Distribution of teeth affected according to reports of dental trauma. Teeth are coded according to the notation proposed by the International Dental Federation. \*ID – Incomplete data.

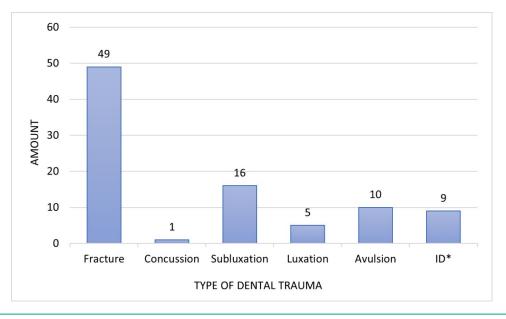


Figure 5: Number of reports regarding the type of dental trauma. \*ID – Incomplete data.

time. In this sense, negative answers for permanent weakness were reported fifteen times both in 2018 and 2019, and in 2020, they were reported nine times. On the other hand, positive answers increased from one (in 2018) to three (in 2019) and rose to six in 2020. Answers for "further assessment required" (FAR) remained similar between the years (Figure 6).

When analyzing the variable permanent deformity by years, 15 answers were observed for "no" in 2018, 17 in 2019, and 14 in 2020. Answers for "yes" were reported only in 2018 and 2019. Further assessments required were reported five times in 2018, four in 2019, and six in 2020 (Figure 7).

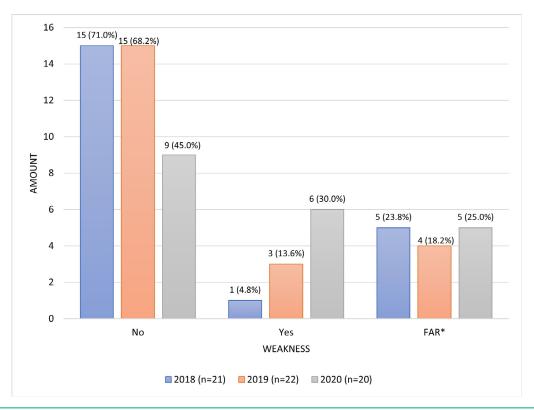
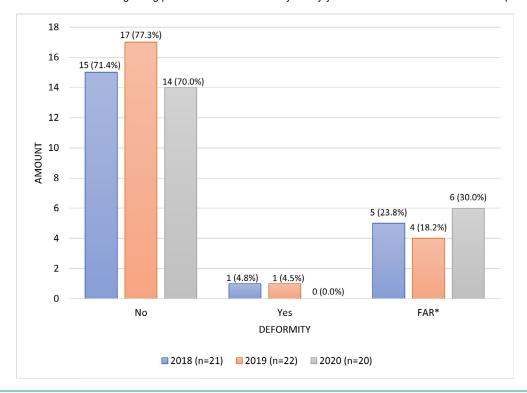


Figure 6: Answers to official issues regarding permanent weakness analyzed by years. \*FAR - Further assessment required.



**Figure 7:** Answers to official issues proposed by Brazilian law regarding permanent deformity. Data were analyzed over the years. \*FAR – Further assessment required.

# **DISCUSSION**

Violence has been discussed as a public health issue and a psychosocial risk factor for its victims. It is a life-threatening condition; thus, it must be an object of study in the public health area aiming to identify the prevalence of the characteristics of the victims in an attempt to alert them about their sucebility<sup>9</sup>. In the period analyzed, there was a prevalence of female victims, white and single individuals. Hence, based on these results, we may notice that the propensity of women as victims establishes the association between vulnerability and interpersonal violence<sup>18</sup>.

Concerning skin color, a study in the capital of Pernambuco in Brazil in 2012, disclosed the prevalence of mixed skin color in cases of violence from the state<sup>19</sup>. These results are consistent with the study by Mascarenhas et al. (2009)<sup>20</sup> conducted in the Federal District and related municipalities. Nonetheless, in this research, we observed the prevalence of white individuals.

These disagreements may be explained by the Brazilian Institute of Geography and Statistics (2020) data<sup>21</sup>. In the Northeast and Midwest of Brazil, study region by Silva et al. (2012)<sup>19</sup> and Mascarenhas et al. (2009)<sup>20</sup>, respectively, the prevalence of skin color in the resident population was mixed. Besides, in the southern region of Brazil, where this study was carried out, the prevalence was the white color.

As well as the age group variable, ages between 21 and 30 years were prevalent, considering that individuals entered the labor market experiencing the uncertainties of the economic scenario<sup>22</sup>. The prevalence of ages between 21 and 30 years in this study corroborates the data from the research carried out by Oliveira et al. (2008)<sup>13</sup> in the state of Sergipe and by Campos et al. (2016)<sup>23</sup> in the state of Maranhão.

On the other hand, Tauffer et al. (2020)<sup>24</sup> analyzed cases of interpersonal and/or self-inflicted violence that occurred between 2014 and 2018, in the western region of Paraná. The authors found that the most prevalent age group was between 15 and 19. This data disagrees with results obtained in the present research, carried out in the northwest region of Paraná.

Concerning the affected region, in this research, we may notice that the upper limbs correspond to the most affected body region. This

result contrasts with the research by Garbin et al. (2012)<sup>25</sup>, carried out in the countryside of the state of São Paulo, in which the head and neck were the most affected areas.

However, the number of injuries (n = 2,296) described as belonging to the head and neck region in this research deserves to be highlighted because it was after the amount of injury to the upper limbs. In this sense, facial injury can cause dental trauma, leading to a significant number of sequelae, such as changes in chewing, phonetics, and aesthetics of the individual. In the present study, the anterosuperior elements were the most affected, in agreement with the results of Valente et al. in  $2018^{26}$ .

Saliba et al. (2021)<sup>27</sup> carried out an epidemiological survey of oral and maxillofacial traumas at the MLI in Salvador, Bahia, in which the result obtained was dental involvement in 61% of victims and prevalence of male victims. Regarding the sex of the victims, the present research showed that men were more affected by bodily injuries with dental involvement.

When analyzing dental trauma, it is essential to point out that, in this research, the year 2020 was characterized by a state of public calamity resulting from the COVID-19 pandemic, with the interruption of activities for three months. However, the number of dental traumas found remained stable in the three years analyzed: 21 reports in 2018, 22 in 2019, and 20 in 2020 (Figures 6 and 7).

When observing the characteristic of the trauma, the fracture of the dental element (54.4%) was highlighted, being reported in more than half of the exams, as well as the maxillary central incisors, which were the most affected. Such data corroborate the study by Silva et al. (2011)<sup>28</sup> in Curitiba, Paraná. These results made it possible to conclude that coronary fracture is the most common type of trauma and state that the anterosuperior elements were the most affected because they are in a more exposed region.

According to article 129 of CC<sup>10</sup>, injury of a serious nature is characterized by permanent weakness when there is a reduction or weakening of the sense or function. On the other hand, injury of a very serious nature is qualified by permanent deformity, loss, or disablement of sense or function, which may be total or partial. The characterization of mild injury is performed in the face of the exclusion of other types.

In relation to the reports containing dental trauma, answers regarding the permanent weakness of the dental element should be emphasized. Even though the maintenance of the number of recorded traumas, it is evident that between 2018 and 2020, the official issue had a six times increase (Figure 6), indicating that there was a valuation of dental trauma.

Regarding the permanent deformity, we may observe that the data between the years studied remained similar. However, it is worth mentioning that 2020 has a bias due to the interruption of activities for three months due the COVID-19 pandemic. Despite this, there was a slight increase in the number of cases regarding the need for further assessment for a later decision (Figure 7).

That said, according to Sgarbi et al. (2016)<sup>11</sup>, the judge may question the severity of the damage due to the difficulty of legally framing these injuries, and there may be differences in opinions among professionals, as observed in the present study (analysis of the years before and after the implementation of the Forensic Dentistry Centre). As can be seen in the results, mainly in "permanent weakness", in which there was a substantial increase between the years studied (Figure 6).

The fact that the head and neck area is frequently affected by aggressors in interpersonal violence and due to the dynamics of injuries, the presence of the forensic odontologist in the MLIs becomes fundamental in examinations involving oral and maxillofacial areas. However, as reported by Pinto et al. (2020)<sup>5</sup>, there are still few vacancies for forensic odontologists in Brazil compared to other positions of official expertise, and the need to allocate more offices in this area is unanimous in the Brazilian literature<sup>5,29</sup>.

# CONCLUSION

By analyzing the reports from MLI of Maringá, we may conclude that the epidemiological profile of personal injury victims of interpersonal violence is characterized by the female sex, white skin color, the age group from 21 to 30 years old, and singles. In contrast, male victims were prevalent in dentally compromised traumas (60.3%), and dental fracture was the most reported type of trauma. There was an increase in the classification of "permanent

weakness" over the years, as well as a slight increase in cases of "further assessment required" for permanent deformity.

# **REFERENCES**

- Silva RF, Franco A, Oliveira RN, Daruge-Júnior E, Silva RHA. A história da odontologia legal no brasil. Parte 1: origem enquanto técnica e ciência. Rev Bras Odontol Leg 2017; 4 (2): 87-103. https://doi.org/10.21117/ rbol.v4i2.139
- Brasil. Lei nº 5.081, de 24 de agosto de 1966. Regula o exercício da Odontologia. Available from: http://www. planalto.gov.br/ccivil\_03/leis/l5081.htm
- Conselho Federal de Odontologia. Resolução nº 63, de 8 de abril de 2005. Aprova a Consolidação das Normas para Procedimentos nos Conselhos de Odontologia. Availabe from: https://www.diariodasleis.com.br/busca/ exibelink.php?numlink=1-27-34-2005-04-08-63
- Brasil. Lei nº 12.030, de 17 de setembro de 2009. Dispõe sobre as perícias oficiais e dá outras providências. Brasília, DF. Available from: http://www.planalto.gov.br/ccivil\_03/\_ato2007-2010/2009/lei/l12030.htm
- Pinto PHV, Costa PB, Franco A, Silva RHA. Perícia oficial de natureza criminal: panorama nacional após dez anos de promulgação da lei nº 12.030/2009. Rev Bras Odontol Leg 2020; 7 (1): 17–29. https://doi.org/10.21117/ rbol-v7n12020-267
- 6. Brasil. Lei nº 8.862, de 28 de março de 1994. Dá nova redação aos artigos 6º, incisos I e II; 159, caput e § 1º; 160, caput e parágrafo único; 164, caput; 169; e 181 caput, do Decreto-Lei nº 3.689, de 3 de outubro de 1941. Código de Processo Penal. Brasília, DF. Available from: http://www.planalto.gov.br/ccivil\_03/leis/1989\_1994/l8862.htm
- Dahlberg LL, Krug EG. Violência: um problema global de saúde pública. Cien Saude Colet 2006; 11 (1): 1163-78. https://doi.org/10.1590/S1413-81232006000500007
- Rezende EJC, Araújo TM, Moraes MAS, Santana JSS, Radicchi R. Lesões buco-dentais em mulheres em situação de violência: um estudo piloto de casos periciados no IML de Belo Horizonte, MG. Rev Bras Epidemiol 2007; 10 (2): 202-14. https://doi. org/10.1590/S1415-790X2007000200008
- Porto LVMG, Sousa JR, Souza EHA, Silva-Neto JC. Quantificação do dano: o estudo da debilidade de função e deformidade permanente nas lesões dentárias. Brazilian J Forensic Sci Med Law Bioeth 2014; 4 (1): 134-46. https://doi.org/10.17063/bjfs4(1)y2014134
- 10. Brasil. Decreto-Lei n° 2.848, de 07 de dezembro de 1940. Código Penal. Brasília, DF. Available from: http://www.planalto.gov.br/ccivil\_03/decreto-lei/del2848compilado.htm

- 11. Sgarbi ACG, Abreu C, Almeida P, Daruge E, Daruge-Júnior E. Critérios de avaliação penal por juízes, peritos e especialistas em odontologia legal – parte I: lesões dentais decorrentes de agressão. Rev Bras Odontol Leg 2017; 4 (1): 11– 24. https://doi.org/10.21117/ rbol.v4i1.80
- 12. Miguel LCM, Perícolo S, Oliveira S, Gaedke A, Molina CG, Michels B. Atuação do cirurgião-dentista no Instituto Geral de Perícias de Joinville, SC. Rev ABENO 2017; 17 (2): 51–9. https://doi.org/10.30979/rev.abeno. v17i2.357
- Oliveira CMCS, Santos JS, Brasileiro BF, Santos TS. Epidemiologia dos traumatismos buco-maxilo-faciais por agressões em Aracaju / SE. Rev cir traum buco-maxilofacial 2008; 8 (3): 57–68.
- 14. Galea H. An investigation of dental injuries treated in an acute care general hospital. J Am Dent Assoc 1983; 109 (3): 434–8. https://doi.org/10.14219/jada.archive.1984.0419
- Reddy LV, Bhattacharjee R, Misch E, Sokoya M, Ducic Y. Dental injuries and management. Fac Plast Surg 2019; 35 (6): 607-13. https://doi.org/10.1055/s-0039-1700877
- 16. Ribas-e-Silva V, Terada ASSD, Silva RHA. A importância do conhecimento especializado do cirurgião-dentista nas equipes de perícia oficial do Brasil. Rev Bras Odontol Leg 2015; 2 (1): 48-62. https://doi.org/10.21117/ rbol.v2i1.22
- 17. Paraná. Lei nº 18.008/14, de 7 de abril de 2014. Dispõe sobre o quadro próprio dos peritos oficiais do estado do Paraná. Curitiba, PR. Available from: https://www. legislacao.pr.gov.br/legislacao/exibirAto.do?action=in iciarProcesso&codAto=116506&codItemAto=735433
- Piosiadlo LCM, Fonseca RMGS, Gessner R. Subordination of gender: reflecting on the vulnerability to domestic violence against women. Esc. Anna Nery 2014; 18 (4): 728–33. https://doi.org/10.5935/1414-8145.20140104
- 19. Silva MCM, Brito AM, Araújo AL, Abath MB. Caracterização dos casos de violência física, psicológica, sexual e negligências notificados em Recife, Pernambuco, 2012. Epidemiol Serv Saude 2013; 22 (3): 403–12. https:// doi.org/10.5123/S1679-49742013000300005
- 20. Mascarenhas MDM, Silva MMA, Malta DC, Moura L, Macário EM, Gawryszewski VP. Perfil epidemiológico dos atendimentos de emergência por violência no Sistema de Serviços Sentinelas de Vigilância de Violências e Acidentes (Viva): Brasil, 2006. Epidemiol Serv Saude

- 2009; 18 (1): 17-28. https://doi.org/%2010.5123/ S1679-49742009000100003
- 21. Instituto Brasileiro de Geografia e Estatística [IBGE]. Pesquisa Nacional por Amostra de Domicílios Contínua 2012-2019. 2020. Available from: https://biblioteca. ibge.gov.br/visualizacao/livros/liv101707\_informativo. pdf
- 22. Sales MF, Satel CIR. Perfil dos ocupados no mercado de trabalho paranaense para 2003, 2006, 2009 e 2012. Econ Região 2014; 2 (2): 81. https://doi. org/10.5433/2317-627X.2014v2n2p81
- 23. Campos MLR, Costa JF, Almeida SM de, Delwing F, Furtado FMS, Lima LNC. Análise de lesões orofaciais registradas no instituo médico-legal de São Luís (MA), no período de 2011-2013. Rev Bras Odontol Leg RBOL 2016; 3 (2): 21–31. https://doi.org/10.21117/rbol. v3i2.3
- 24. Tauffer J, Zack BT, Berticelli MC, Kássim MJN, Carmello SKM, Maraschin MS. Perfil dos casos de violência interpessoal e/ou autoprovocada atendidos em um hospital público do Paraná, 2014 a 2018. Rev Epidemiol Control Infect 2020; 10 (1): 1–7. https://doi. org/10.17058/jeic.v1i1.14476
- 25. Garbin CAS, Garbin APDGQ, Rovida TAS, Garbin AJI. Occurrence of traumatic dental injury in cases of domestic violence. Braz Dent J 2012; 23 (1): 72–6. https://doi.org/10.1590/S0103-64402012000100013
- 26. Valente RPA, Franco A, Silva RF, França BHS. Análise das sentenças judiciais envolvendo deformidades permanentes em cabeça e pescoço na jurisprudência dos tribunais da região sul do Brasil. Rev Bras Odontol Leg 2018; 5 (2): 39-48. https://doi.org/10.21117/rbol.v5i2.178
- 27. Saliba TA, Dias IA, Chiba FY, Garbin AJÍ, Garbin CAS. Epidemiologia dos traumas bucomaxilofaciais: análise de laudos periciais do Instituto Médico Legal de Salvador, Bahia, 2007 a 2013. Rev Bras Cres Desenv Hum 2021; 9 (2): 1-9. http://dx.doi.org/10.18316/sdh.v9i2.7213
- 28. Silva HR, Melchioretto EF, Batista PS, Colombo MCSS. Perfil epidemiológico do trauma dentário e facial em Curitiba. Arch Oral Res 2011; 7 (3): 267-273. https://doi.org/10.7213/aor.v7i3.23096
- 29. Silveira EMSZSF. A importância do odontolegista dentro do Instituto Médico Legal. Rev Bras Med do Trab. 2013; 11 (1):34–9.

## Individual contributions from each author:

- 1. Sato CM: Research project development, data collection, data analysis, and writing of the preliminary version.
- 2. Pinto PHV: Research project development, data analysis, and writing of the preliminary version.
- 3. Costa LB: Data collection, data analysis, review, and approval of the final version.
- 4. Silva RHA: Research project development, review, and approval of the final version.

## **CONFLICT OF INTEREST**

None.

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