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ORIGINAL ARTICLE / ОРИГИНАЛНИ РАД

Medicolegal characteristics of domestic violence

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SUMMARY

Introduction/Objective Domestic violence is a phenomenon as old as the history of human civilization, present in all cultures, epochs and social systems. Despite the fact that domestic violence represents a dangerous and unacceptable social phenomenon, as well as a significant medical problem, there are still no precise data on the prevalence of this phenomenon in our country.
This study aims to determine the elementary forensic characteristics of domestic violence that would represented the basis for future medical research in this field.

Methods A total of 4,593 records of forensic autopsy (n = 3,120) and clinical forensic medical examinations (n = 1,473) were analyzed in the 1996–2005 period in order to determine the cases of domestic violence.

Results The analysis encompassed 300 cases (6.5%) of clinically examined (n = 211; 70.3%) and autopsied (n = 89; 29.7%) victims of domestic violence. A statistically significant increase in domestic violence cases ($\chi^2 = 12.74$; p = 0.00036) was determined in the observed period. The victims were mostly females (78%), with the mean age of 45.8 years (min = 0.3; max = 85; SD = 17.7), married (45%), with personal income (74.4%), and urban residence (66.3%). The majority of abusers were males (89.3%). Intimate partner violence was present in 58.3% of the cases. Physical abuse was the most common form of violence (97.7%), while sexual violence (2.3%) and child abuse (4.3%) were rarely recorded.

Conclusion The results of this research indicate that forensic medicine can be of great help in designing appropriate standards for conducting clinical medical examination, preventive programs, and strategies in fighting domestic violence.

Keyword: domestic violence; forensic medicine; abuse; injury

INTRODUCTION

Domestic violence (DV) is a phenomenon as old as the history of human civilization, present in all cultures, epochs and social systems [1]. For this reason, the ubiquity and universality are essential characteristics of this phenomenon [2]. Until the late 1960s, DV had not drawn any particular attention of the society. The dominant opinion was that "a home is a man's fortress" and that violence within the family is a private matter. During the 1980s and 1990s, DV became more widely recognized and considered as one of the most under-reported crimes [2, 3]. In the coming years, DV has been seen not only as a dangerous and unacceptable social behavior produced and maintained by the cultural and social norms, but also a great burden on the health system at the global level [3, 4]. Numerous problems that affected Serbia over the past decades, including the long-lasting social and economic crisis, the general impoverishment of the population, an increase in unemployment, the inability to satisfy basic subsistence needs, the arrival of a vast number of refugees, and many other challenges, caused the dramatic rise in all forms of violence in our country, including DV [4, 5]. Despite this, there is a deficiency of exact data of DV incidence in Serbia both in the context of social and natural sciences [5].

The current study attempted to determine medicolegal characteristics related to the distribution, structure, nature, and consequences of DV, with the aim to achieve a better understanding of this phenomenon from a forensic perspective, which would represent the basis for future medical research of this phenomenon.

METHODS

This retrospective study conducted at the Institute of Forensic Medicine of the Faculty of Medicine, University of Niš, Serbia, by analysis of autopsy protocols and reports of DV victims who underwent clinical forensic examination in the 1996–2005 period. A total of 4,593 cases (3,120 autopsy reports and 1,473 clinical exams) were analyzed. The cases of DV victims (n = 300; 6.5%) were analyzed in the investigated sample.

The survey covered the territory of District of Niš (the second largest district in Serbia by size, with the area of 2,729 km² and 373,404 inhabitants) and surrounding areas of Southeastern Serbia (the area of 14,010 km² and a total of 1,551,268 inhabitants) [6].

Each clinical examination was preceded by obtaining the informed consent of the examined person about using their information for scientific research purposes, with absolute protection of their identity and privacy. The Ethics Committee of the Faculty of Medicine of the University of Niš approved research on human cadavers.

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Several items were analyzed in every case: the aspect of the victim, the aspect of the abuser(s), the characteristics of violence (form of violence, reason, time and place of violence act), as well as the forensic aspect of the victim's injuries (the type, topography, severity and outcome, weapon type and mechanism of harm). The results were statistically analyzed using SPSS Statistics for Windows, Version 17.0 (SPSS Inc., Chicago, IL, USA).

RESULTS

The retrospective analysis of the records of the Niš Institute of Forensic Medicine between the years 1996 and 2005 revealed a total of 300 DV cases, which constituted 6.5% of all examined subjects (n = 4,593). Among the DV cases, clinically examined subjects and autopsied victims were represented in 70.3% (n = 211) and 29.7% (n = 89), respectively. In relation to the total sample, there was a statistically significant increase in DV cases ($\chi^2 = 12.74$; p = 0.00036), as shown in Figure 1. Clinical forensic examination was carried out at personal request of DV victims in 65.7% of the cases, while in 34.3% the examination was conducted at official order by investigating authorities (in all autopsied and in 4.6% of clinically examined victims).

Regarding the demographic characteristics of DV victims, it was found that 78% of the cases were females, and 22% were males. The mean age of victims was 45.8 years (min = 0.3; max = 85; SD = 17.7). The victims under the age of 18 years were represented in 4.3% of the cases (n = 13), as shown in Figure 2. More than one half of all victims were either formally married (45%) or lived in cohabitation, e.g. in an extramarital community (6.7%). Most victims (74.4%) had personal income (employed, retired, farmer), while victims without income (housewives, unemployed, and dependent persons) accounted for about one quarter of all cases (25.6%). Majority of the victims resided in the city (66.3%). The results showed an increase in the number of victims in urban areas, but not statistically significant ($\chi^2 = 0.335$; p = 0.56). In addition, there is a statistically insignificant negative trend of victims from the rural areas ($\chi^2 = 0.625$; p = 0.43).

The majority of abusers were males (89.3%), while women committed violence against family members in 10.7% of the cases. The most common reason for DV was quarrel and disagreement (56.7%). In only 11% of the cases abusers were under the influence of alcohol at the time of the act of violence, and the majority of them were found to be mentally competent (94.7%). Violence act mostly occurred in the residence of the victim (82%), in the afternoon and evening (a total of 59.3%), during the summer and autumn. The peak incidence was in September (11.7%). Regarding the relations between abuser and victim, the majority of abusers expressed violence within intimate partner relationships (58.3%), towards their current or former intimate partners (formally married, cohabitating, or after separation/divorce). Intimate partner violence (IPV) was committed by male abusers in 54.3% and by female abusers in 4% of the cases (Figure 3). After killing

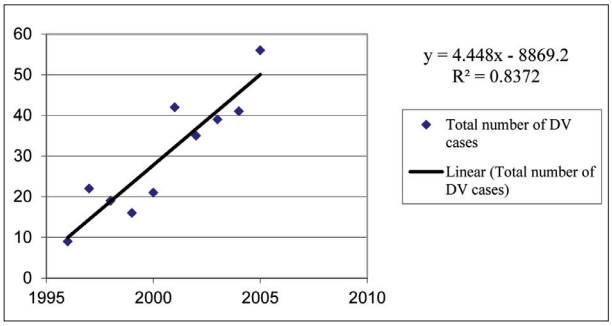

Figure 1. Trend of total number of domestic violence (DV) cases

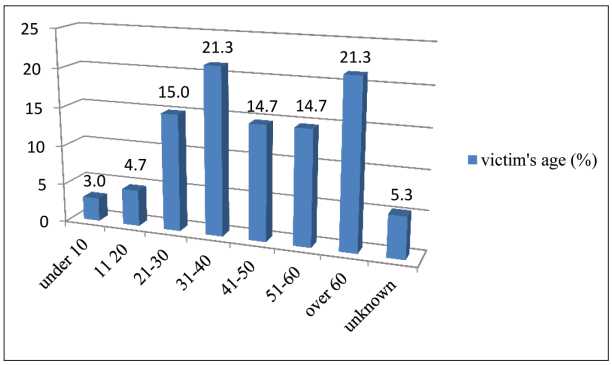

Figure 2. Distribution of domestic violence victims according to age

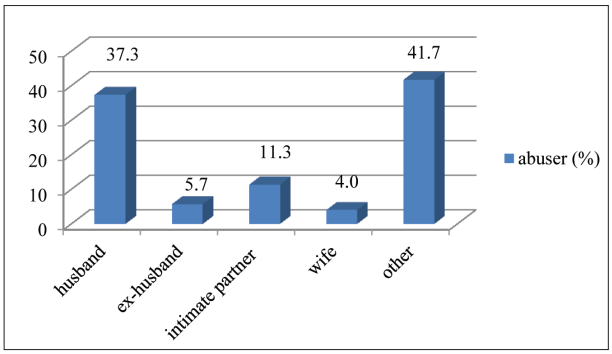

Figure 3. Incidence of abusers according to the relation with the victim

of a family member, male abusers committed suicide in 12 cases. Suicide followed intimate partner homicide in nine cases, and attempted suicide in one case. There was no suicide among female abusers.

Continuous and long-lasting DV was present in 46% of the cases. The most common form of DV was physical violence (97.7%), while sexual violence was recorded only in 2.3% of the cases (all the victims were females, aged from 16 to 65 years). The psychological violence, which usually accompanied physical and sexual abuse, was not possible to investigate due to the lack of information in the study sample.

Physical abuse almost exclusively manifested by mechanical injuries (93.3%), while other types of injuries (e.g. asphyxia, thermal, chemical, etc.) were present to a much lesser extent (6.7%) (Figure 4). Blunt mechanical trauma caused 75.5% of all injuries, usually induced by blows with fists, feet, or various objects (wooden sticks, metal rods, hammers, agricultural tools, chairs, ashtrays, phones,

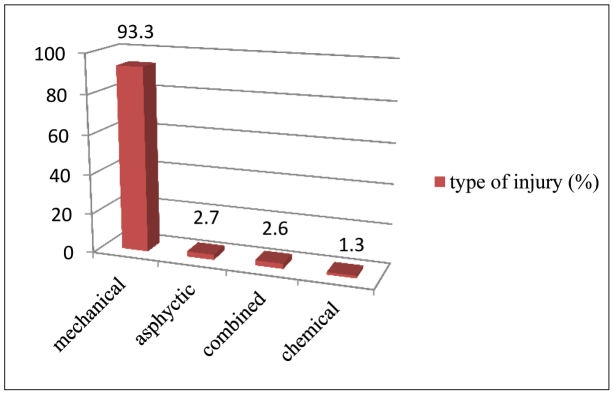

Figure 4. Incidence of injuries by type

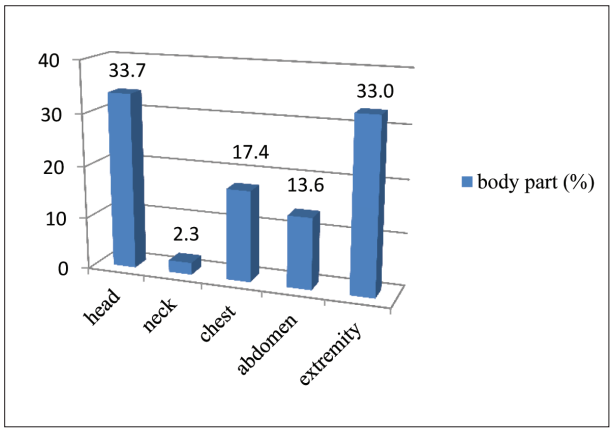

Figure 5. Topographic distribution of injuries

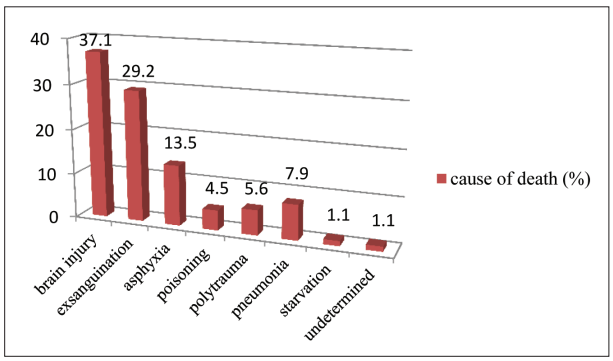

Figure 6. Incidence of causes of death in domestic violence victims

bricks, stones, straps, cables, ropes, etc.). Injuries inflicted by firearms and edged/pointed weapons were present in 10.7% and 10.4%, respectively. Most commonly encountered injury sites were the head (33.7%) and the extremities (33%) (Figure 5).

In the group of clinically examined victims (n = 211), the commonest were skin and underlying soft tissue injuries (hematoma, abrasion, contusion, laceration), and to a lesser extent bone fractures and dislocations, all inflicted by blunt objects. In this group, there were no injuries inflicted by firearms. In contrast to previous results, in the group of autopsied casualties (n = 89), the most frequent cause of death was a severe brain injury, chest and abdominal trauma, or multiple bodily injuries (polytrauma), inflicted by blunt or sharp objects and firearms (Figure 6). Regarding the severity of all mechanical injuries, minor bodily injuries were present in 65.9%, severe in 9.7%, serious life-threatening in 12.5%, and unconditionally fatal injuries in 11.8% of the cases.

DISCUSSION

DV represents any use of force, threats, or other forms of coercion sufficient to injure or endanger the physical and/or psychological integrity of the victim, which is committed by one family member against other person(s) with whom he/she lives or has lived with, or with whom is/was in an intimate relationship [7, 8]. Some feminist theorists advocate the view that apart from army during the war, family represents the most violent social institution with high chances of being killed, physically abused, punched, beaten, and slapped [1]. The results of our study are not so far from this standpoint.

Despite the fact that there is no systematic monitoring of DV in Serbia, the authorities have recognized this phenomenon as a separate entity, and have accordingly made significant steps in its disclosure and studying in different scientific fields [5]. The present study reveals some important points about DV in our community.

First, there is an obvious increase of DV cases within the studied group. According to the scientific data, it seems that the growing trend is not only a consequence of general rise in crime but also a result of active national strategy in the legislation of this offense [5, 8]. Patriarchal ideas about gender relations and parenting are still prevalent in our country. Those are the main reasons why DV had not been considered a serious form of violence for a long time, but a common and socially acceptable behavior [5, 7]. Our society has marginalized and ignored this phenomenon for decades. Until 2002, there were no adequate legal mechanisms to prevent and fight DV in Serbia [9]. Influence of positive legislation and greater individual sensitivity to this kind of violence has contributed to more frequent reporting, which is the condition that should be taken into consideration in the analysis of results [5].

The second important result of our study revealed overwhelming majority of female victims and male abusers, which corresponds to results of almost all previous studies conducted around the world [10–13]. A survey on male violence against women, carried out during 2011 by the Ministry of Labour and Social Development of the Republic of Serbia and funded by the United Nations, revealed that 54.2% of women suffer from some form of DV induced by men [10, 14]. This survey was based on a representative sample of 2,500 Serbian women between 18 and 75 years old.

Our findings about IPV, which includes violence towards current or former intimate partners showed the similar results as the research of Dixon and Graham-Kevan [13]: male abusers were violent towards their marital or extra-marital partners or ex-wives in 54.3% of cases. On the other side, female intimate partner abusers expressed violence exclusively towards their marital partners (4%), and never to the extramarital partners or ex-husbands.

The current study also confirmed the fact that the most severe forms of DV were related to IPV, especially to the marital violence [14, 15]. According to our results, IPV had a fatal outcome in 14% of the cases, out of which men conducted the violent act in 11.7%, and women in 2.3% of the cases. This research showed an interesting result that after the killing of a husband, there were no suicidal tendencies among female abusers. Unlike women, after taking the life of the wife, ex-wife, or intimate partner (n = 35), male abusers committed suicide in nine cases and attempted suicide in one case. Other authors obtained similar results in intimate partner homicide-suicide studies [16, 17]. In the light of the abovementioned results, it is necessary to undertake specific preventive measures directed at the most vulnerable population group – women in abusive intimate partner communities.

The third distinctive feature of DV relates to the small representation of children in the survey sample. Namely, minor victims (under the age of 18 years) were represented in 4.3% of the cases (n = 13). Among them, in four fatalities and nine non-fatal cases, the abusers were their biological parents. These results correspond with the findings of other researchers that also suggested the high number of under-reported cases of DV against children [18]. The explanation for this phenomenon lies in a child's total dependence on their abusive parents, who, logically, avoid self-reporting to the authorities [19, 20]. In our study, a non-violent parent (usually also a victim of the same abusive family member) has always reported DV against children. In accordance with these results, appropriate national strategies are required for the disclosure of DV and child protection [18, 19, 20].

The fourth characteristic result of this research refers to the small number of identified sexual violence cases (2.3%). Such finding almost certainly points to an "iceberg phenomenon," which indicates a high proportion of under-reported ("missed") cases [10, 11, 13]. The reason for such an outcome can be primarily explained by the fact that the marital rape was established in the Criminal Code of the Republic of Serbia as late as 2002 [9]. It means that the legislator did not recognize this form of violence as a criminal offense before this period. In addition to this, there is a deficiency of standardized protocols for medical examination not only for the DV victims but also for the rape victims. These circumstances greatly complicate professionals' dealing with victims. To be specific, rape in general, and particularly DV rape, is associated with a high degree of secondary victimization that occurs during the medical procedures, pre-investigation, and court proceedings, and additionally discourages victims in reporting the offense. For this reason, creating standardized medicolegal protocols for rape and DV victims can be of great help for society [21]. Determining the characteristics of injury on the victim's body and sampling of biological material as physical evidence that gave rise to the litigation is imperative in forensic detection of any crime, including DV offenses [21, 22]. Thus, comprehensive medical approach to work with victims imposes the necessity for forensic clinical examination in such cases.

The fifth important finding reveals physical violence as the dominant form of DV (97.7%). From medicolegal point of view, the severity of injuries directly correlated with the manner of medical treatment [23, 24]. In most cases of minor bodily injuries (65.9%), medication was required, but not necessary. Severe bodily injuries (9.7%) demanded particular medical assistance, while serious, life-threatening injuries (12.5%) always needed urgent and specialized medical care, as well as the obligatory hospitalization. Prompt and suitable medical help could not save victim's life in 11.8% cases of unconditionally fatal injuries. Similar results about physical injuries related to DV were reported in the scientific literature [24, 25], according to which DV represents one of the leading causes of injury in general population [5, 17].

CONCLUSION

The existence of numerous prejudices, conciliatory public attitude, and viewing DV as an acceptable behavior, significantly contribute to the high frequency and extent of this form of violence in our society. The results of this research on DV indicate that forensic medicine can be of great help not only for court proceedings, but also in the designing appropriate standards for conducting clinical medicolegal examination, prevention programs and strategies in fighting this phenomenon. Therefore, education and training of physicians of all specialties in recognizing the specific elements of DV abuse, as well as application of medical protocols to the treatment of DV victims, are necessary for a better understanding of the health hazards related to this field.

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Судско-медицинске карактеристике породичног насиља

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САЖЕТАК

Увод/Циљ Породично насиље је феномен стар колико и историја људске цивилизације, присутан у свим културама, епохама и социјалним системима. Упркос чињеници да насиље у породици представља опасно и неприхватљиво друштвено понашање, као и значајан медицински проблем, у нашој земљи и даље не постоје прецизни подаци о учесталости ове појаве.

Циљ овог истраживања је детерминација основних судско-медицинских карактеристика породичног насиља, које би представљале базу за будућа медицинска истраживања на овом пољу.

Методе У периоду 1996–2005. године анализирано је 4.593 протокола судско-медицинских обдукција (n = 3.120) и клиничких судско-медицинских прегледа (n = 1.473), у циљу евидентирања случајева породичног насиља.

Резултати У анализу је укључено 300 случајева (6,5%) клинички прегледних (n = 211; 70,3%) и обдукованих (n = 89; 29,7%) случајева породичног насиља. У посматраном периоду је утврђен статистички значајан пораст броја случајева породичног насиља (χ^2 = 12,74; p = 0,00036). Жртве су најчешће биле женског пола (78%), просечне старости 45,8 година (мин. = 0,3; макс. = 85, СД = 17,7), у браку (45%), са личним примањима (74,4%) и настањене у граду (66,3%). Највећи број насилника је био мушког пола (89,3%). Насиље између интимних партнера је било присутно у 58,3% случајева. Физичко злостављање је био најчешћи облик насиља (97,7%), док су сексуално насиље (2,3%) и злостављање деце (4,3%) били ретко заступљени.

Закључак Резултати овог истраживања упућују на то да судска медицина може бити од велике помоћи у пројектовању одговарајућих стандарда за обављање клиничких лекарских прегледа, као и превентивних програма и стратегија у борби против насиља у породици.

Кључне речи: породично насиље; форензичка медицина; злостављање; повреда