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RESEARCH

The Never-Ending Nightmare: Analysis of 435 Women Who Presented to the Emergency Department Due to Domestic Violence

Atakan Savrun[1], Seyda Tuba Savrun[2], Ismail Erkan Aydin[3], İskender Aksoy[4], Ibrahim Caltekin[5], Hacer Yasar Teke[6]

[1,2,3] Department of Emergency Medicine, Ordu University Faculty of Medicine, Ordu, Turkey
[4] Department of Emergency Medicine Prof.Dr.A. Ihan Ozdemir Training and Research Hospital, Giresun, Turkey
[5] Department of Emergency Medicine, Bozok University Faculty of Medicine, Yozgat, Turkey
[6] Department of Forensic Medicine, Ordu University Faculty of Medicine, Ordu, Turkey

ORCID; 0000-0001-7468-4159, 0000-0002-6512-2987, 0000-0003-3552-5459, 0000-0002-4426-3342, 0000-0002-3973-0655, 0000-0003-2311-5145

Abstract: Violence against women is the violation of fundamental rights and freedoms, and is a crucial problem occurring as a result of inequal power relationship between women and men. Violence against women is continuing at same rates worldwide despite all efforts made to take preventive measures. The objective of this study was to retrospectively investigate characteristics of 435 women who presented to the emergency department with the complaint of violence. Study data were collected through the "Domestic Violence Against Women Registry" forms that consisted of 26 questions investigating sociodemographic features of the women victims of violence and characteristics related to the violence. Risk assessment of violence was carried out with 5 items that were answered as 'Yes' or 'No'. The forms were filled by healthcare staff with face-to-face interview technique. Majority of women victims of violence (n: 270) were primary school and middle school graduates. Of all participants, 399 (91.72%) were married and 307 (70.57%) were employed. The violence more commonly has occurred at home (89.66%). The most common type of violence was physical violence in 368 (84.60%) women. Women aged 30-40 years, those with a low level of education, a higher number of children, smokers and employed women were at a higher risk of being exposed to domestic violence. The education level of women should be increased. Emergency departments provide a good opportunity for clinicians to screen violence against women. With new measurement tools with proven reliability, a database can be created to guide policies and regulations to be made in future for prevention of violence against women.

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Corresponding Author:
Ismail Erkan Aydin
E-mail; erkanaydinmd@gmail.com
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INTRODUCTION

There is no a universally recognized for domestic violence in the medical literature, and several terms are used to describe this phenomenon; abuse, intimate partner violence (IPV), wife battering, interpersonal violence and violence against women are various terms all of which are used for this purpose. Domestic violence refers to engagement in damaging activities that are likely to result in physical, sexual, economical, emotional, verbal or psychological abuse, within the context of a previous or existing relationship[1]. Violence against women is the violation of fundamental rights and freedoms, and is a crucial problem occurring as a result of inequal power relationship between women and men. This problem knows no geographical, socioeconomic, age, ability, cultural, or religious boundaries.

The prevalence of domestic violence against women is at an unacceptable rate and 10 to 69% of women are assaulted by men at a point in their lives worldwide[2]. Violence against women is a complex process involving actions that result in physical, sexual or psychological harm or suffering. In addition, domestic violence is a behavior, which causes economic deprivation or forced social isolation that causes the victim of violence to live in fear[3].

Domestic violence leads to depression, posttraumatic stress, substance abuse, acute and chronic injuries, pain syndromes, gynecological and maternal problems. Violence also negatively affects mental health and quality of life, increased usage of healthcare service and mental development of children they have cared for in long term. Violence against women is continuing at same rates despite all efforts made to take preventive measures, to implement sanctions and to put legal regulations into

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force all over the world, and especially in developed and developing countries[4].

According to a report published by the World Health Organization (WHO) in 2013, about one third of all women is subjected to physical or sexual violence[5]. According to the Research on Domestic Violence against Women in Turkey conducted by the TR Prime Ministry Directorate General on the Status of Women in 2008, for out of each 10 women are exposed to physical and/or sexual violence[6]. In the "Domestic Violence Against Women in Turkey" study by the TR Ministry of Family and Social Policies conducted throughout Turkey in 2015, the rates of women who were exposed to physical violence at any point of their lives and in the last year were found as 35.5% and 8.2%, respectively[7].

However, it is difficult to estimate the actual prevalence of violence against women because of inconsistencies in definitions, lack of the epidemiologic studies of this issue and underreporting[8]. In addition, reluctance of violence victims to disclose any information leads to underestimating the incidence and prevalence of domestic violence against women in questionnaires implemented.

Many women exposed to domestic violence present to the emergency department due to this abusive action. Emergency departments are the first and sometimes the only place where women victims of violence interact with the healthcare system about domestic violence[9]. On the other hand, many of these women are reluctant to interview with healthcare personnel about the violence until they are questioned. Therefore, in recent years identification and management of women who have been subjected to domestic violence by emergency room staff have attracted interest due to the potential of the emergency department for prevention of new violence events that can occur in future. Women exposed to violence are more likely to seek medical help than contact with security and criminal units or social service centers[10]. In a study conducted in the USA, the probability it has been reported that women who are exposed to violence are four times more likely to present to an emergency room within a period of 12 months than women who are not subjected to violence[11]. Again, in a cross-sectional study from the USA, the cause of presentation to an emergency department was reported to be related to domestic violence in 11.7% of the participant women[12].

To our knowledge, the number of etiologic studies on women presenting to emergency departments in Turkey is limited. Therefore, the objective of this study was to retrospectively investigate characteristics of 435 women who presented to the emergency department of our university hospital with the complaint of violence.

MATERIALS and METHODS

Ethics Consideration

Before the beginning, the study protocol was approved by the local ethics committee of Ordu University with the 15 November 2018 dated and 2018-237 numbered decision. Since this study was designed as retrospective, informed consent forms from the patients were waived. The study was conducted in line with the Declaration of Helsinki.

Patients and study design

This study included a total of 435 women aged over 18 years, who presented to the emergency department with the complaint of violence between 01 January 2013 and 31 December 2017. The population of the study consisted of 435 women who applied to the emergency department of a university hospital with an annual patient number of approximately 150,000 during the research period. No additional sample was selected, and the entire population was included as the sample.

Data Collection

Study data were collected through the "Domestic Violence Against Women Registry" form described in the "Domestic Violence Against Women Project" carried out by the TR Prime Ministry General Directorate on the Status of Women[6]. This form included demographic features of the participants as well as questions related to domestic violence. Time of victim's presentation to ED, cause of presentation, the way of arrival (alone or with someone) and time of leaving the hospital were evaluated with this form.

Regarding the history of domestic violence, the form included 26 questions with 12 determining sociodemographic and health characteristics of the victim, 7 including the violence status (symptoms of the victim, scene of the violence, time of the violence, severity, duration, type of the violence (physical, emotional, sexual, economical) and status of receiving aid from another center – with her own statements), 5 questions about the perpetrator (age, degree of relationship, status of repeating violence, illness) and 2 questions including the relationship of children with the violence (exposure and testimony).

The assessment was based on the answers given by the victim. Risk assessment of violence was carried out with 5 items that were answered by a Likert-2 scale as 'Yes' or 'No'. Accordingly, "Yes" answers given to any three of the five questions was considered as the victim woman is at a high risk for being subjected to violence again in near future.

The actions taken as a result of the presentation of women exposed to violence were evaluated under the title of legal notice, making a security plan, referral to further medical investigations, diagnosis and treatment, referral to children protective services, psychological support and counseling, arranging a follow-up plan, reporting to the police/security department and other. Before the filling of the forms, the women victims were informed in detail, assured that the completed questionnaire will remain confidential, and they gave written and verbal consent for participation. The forms were filled in a silent room by healthcare staff with face-to-face interview technique. Filling each form took approximately 10 minutes.

Statistical analysis

Data obtained in this study were analyzed using IBM v 23.0 (SPSS IBM Inc., Statistical Package for Social Sciences, Chicago, IL, USA) statistical software. Normal distribution of the quantitative data was evaluated with the Kolmogorov-Smirnov test. Comparison of non-normally distributed data was made using Mann-Whitney U test, while the qualitative variables were compared with Chi-square test. The variables were expressed as mean±standard deviation, median, minimum and maximum descriptive statistics. Categorical data are given as frequency and percentage. Sampling characteristics of the risk scores were analyzed with Chi-square and McNemar tests. $p<0.05$ values were considered statistically significant.

RESULTS

In this study, Domestic Violence Against Women Registry forms of 435 women who presented to the emergency department of our university hospital with the complaint of violence between 01 January 2013 and 31 December 2017 were retrospectively evaluated. The mean age of the women victims of violence included in our study was 33.59±10.25 (min-max: 15-74) years, while the mean age of the

perpetrators was 38.89±10.46 (min-max: 17-80) years. When educational status of the women subjected to violence was examined; 8 (1.84%) women were illiterate and 10 (2.30%) were literate, 145 (33.33%) were primary school, 125 (28.74%) middle school, 96 (22.07%) high school and 51 (11.72) college graduates. Accordingly, many women victims of violence were primary school and middle school graduates. Of the women included in the study, 18 (4.14%) were single, 18 (4.14) were widowed or divorced and 399 (91.72%) were married.

The average number of children of the participants was found as 1.87±1.23 (min-max: 0-6). Thirty (6.9%) of the women admitted to the emergency room due to domestic violence reported that they were pregnant. Of all participants, 307 (70.57%) were employed. Of the women included in this study, 199 (45.75%) were smokers and 13 (2.99%) were taking alcohol. The average number of people living with women was found to be 3.7 ± 1.42 (min-max: 0-11).

When presentations to the emergency department due to domestic violence were evaluated according to the months, the most common presentations were found to be in March, July and August, and the least presentations in May and October. The distribution of women who presented to the emergency service due to domestic violence by months is shown in Figure1.

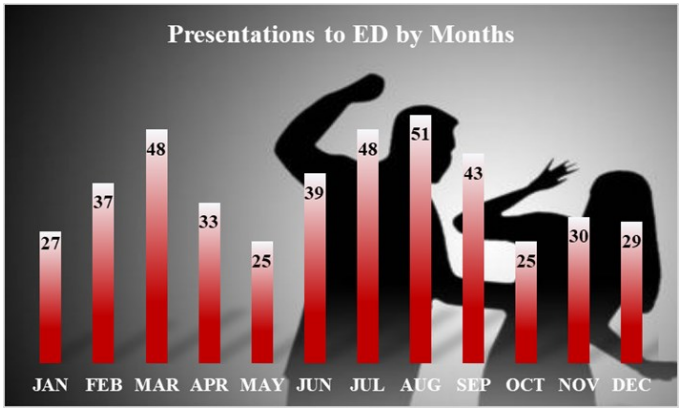

Figure 1. Distribution of the presentation of women exposed to violence to the emergency department by months.

When times of presentations to the emergency department due to domestic violence were analyzed, the most common presentations were found to occur between 16:00 and 24:00. The distribution of presentation times to the emergency department is given in Figure 2.

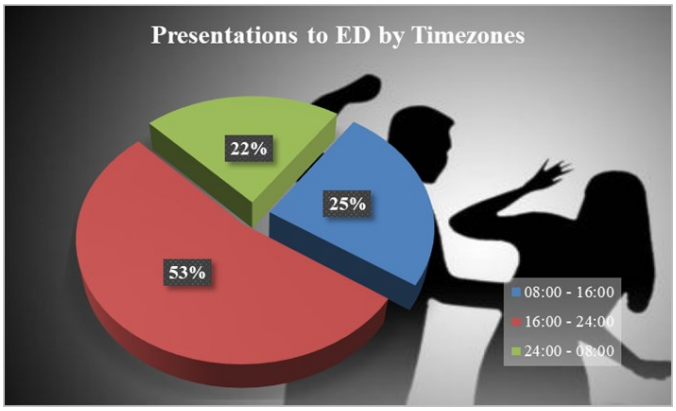

Figure 2. Distribution of presentations to the emergency department due to violence by time zones.

When data related to violence against women were evaluated, it was found that the violence has more commonly occurred at home (89.66%) followed by street (6.44%). The most common type of violence was physical violence in 368 (84.60%) women followed by emotional violence in 271 (62.30%) women, economical violence in 19 (4.37%) women and sexual violence in 13 (2.99%) women. Of the participants, 203 (46.67%) stated to be subjected to more than one type of domestic violence. The relationship degree of the perpetrators with the women is seen in Table 1.

Table 1. Relationship degree of the perpetrators.

Relationship of the perpetrators	n	%
Spouse	400	91.95
Ex-spouse	6	1.38
Father	8	1.84
Father in law	4	0.92
Other	17	3.91
Total	435	100.00

When "Domestic Violence Against Women Registry" forms were reviewed, it was found that 60.46% (n: 263) women did not receive help for violence, child/children of 59.77% (n: 260) of the women witnessed violence, child/children of 28.74% (n: 125) of the women were also exposed to domestic violence with their mothers, and the perpetrators committed violence also previously in 87.59 (n: 381) of the women. The answers given by the women victims of violence to the risk assessment questions are shown in Table 2.

Table 2. Distribution of the answers given by the women victims of violence to the risk assessment questions.

Risk Assessment Question	YES		NO	
	n	%	n	%
Has the frequency of physical violence increased over the past 6 months?	312	71.72	123	28.28
(perpetrator) Did he ever use a weapon or threatened you with a gun?	253	58.16	182	41.84
(perpetrator) Did he try to strangle you?	282	64.83	153	35.1
(perpetrator) Do you think he could kill you?	73	16.78	362	83.2
(perpetrator) Did he ever batter you during your pregnancy?	293	67.36	142	32.6

The statistical analysis of the relationships between the risk assessment questions and characteristics of the women exposed to domestic violence revealed that increased frequency of physical violence over the past 6 months was significantly higher in the middle school and high school graduates (p=0.029), women with a higher number of children (p=0.026) and those exposed to violence at home (p=0.028). Being threatened with guns was significantly higher among smokers compared to non-smokers (p=0.003). The rate of women who answered 'Yes' the question that 'Did the perpetrator try to strangle you?' were significantly higher in middle school and high school graduates (p=0.019), women who have a higher number of boys (p=0.003), women subjected to physical (p=0.009) and/or sexual violence (p=0.006) compared to the other women. The rate of women who answered 'Yes' the question that 'Do you think the perpetrator could kill you?" was higher in women with child/children (p=0.01), women who were subjected to sexual violence (p=0.034) and economical violence (p<0.001) compared to the other participants. Being battered during pregnancy was significantly higher in women exposed to sexual violence (p=0.007) and economical violence (p=0.036) compared to the other women.

All women victims of violence who participated in the study were informed about legal rights, women and child protection and support services. Return to home security plan was prepared in 136 (31.26%) women, while 406 (93.33%) women were referred to the relevant

clinics for further investigations, diagnosis and treatment, 352 (80.92%) were referred to the women and children protection services, 409 (94.02%) were referred for psychological support/counseling and 427 cases (98.16%) were reported to security forces.

DISCUSSION

Domestic violence against women remains an important public problem for women at all ages worldwide. Gender based discrimination and power inequality are the root causes of this problem[13]. This problem leads to undesired outcomes such as physical injury, mental health problems, decreased quality of life, depression and social isolation, causing the ending of the marriage and negatively affecting psychological and social development of the children. In addition, violence against women has been associated with suicidal ideation, low birth rates, abortion and the risk of developing infection[14]. The annual global cost of violence against women has been estimated to be more than 8 trillion USD[15]. It has been stated that one third of women are exposed to domestic violence worldwide[16]. Studies conducted in our country have reported the rate of women victims of violence between 13-78%[17,18]. Especially women subjected to physical violence often present to emergency services. In a population-based study by Farchi et al. in Italy, the rate of women exposed to violence was found to be higher compared to "healthy" women[19].

Emergency departments provide a unique opportunity to analyze violence against women and to identify the "hidden victims". In this respect, emergency services can play a key role in preventing violence against women. Although detailed studies have been conducted in Western countries and developed countries about the investigation of violence against women in emergency departments, studies on this issue are limited in the developing countries. The present study was conducted in order to respectively investigate sociodemographic features of the women who presented to the emergency department of our hospital due to domestic violence, and the relationships between risk status of these women and the sociodemographic and violence characteristics.

In the present study, the mean age of the participants was found as 33.59 years. In a study by Adjah et al. from Ghana, the median age of the women exposed to violence was reported as 33 years[20]. In a study by Basar and Demirci from Turkey, the mean age of the women subjected to violence was found as 39.42 years[21]. It has been proposed that advanced age of women is associated with domestic violence[22]. Conversely, Farchi from Italy argued that a young age in women is more associated with domestic violence[19].

Studies in the literature have proposed youth, pregnancy and absence of stable employment as the risk factors for women victims of violence[23,24]. In the current study, 30 women (6.9%) were pregnant, while 70.57% were employed. Adjah et al. reported the rate of employed women as 89%.[20] Violence against women presents all over the worlds, although sociocultural differences among countries cause differences between studies related to risk factors of violence against women. For example, young women are more commonly exposed to violence in a country, while advanced age is associated with violence in another. The same situation applies for other characteristics such as pregnancy, employment, age of the perpetrator, marital status, educational level, having child/children and number of children.

Adjah et al. investigated the determinants of domestic violence against married women and found that the most prevalent type of violence was emotional[20]. In a study from our country, the most common type was reported as verbal violence[21]. On the other hand, Johnston and Naved found the most common violence type as physical in Bangladesh[25]. Similarly, in the present study the most common form of violence was found as physical violence. However, a substantial portion (46.67%) of women have been exposed to more than one type of violence. Koziol et al. argued that emotional violence is part of a greater pattern of predominance and control[26]. According to WHO 2012 data, 13-61% of women are exposed to physical violence, 6-59% to sexual violence and 20-75% to economical violence[27]. The rates of violence types reported seem to differ among the studies. We think that these differences are resulted from sociocultural differences between countries, participant profile, methodology used and the setting of the study. In fact, since our study was conducted in an emergency department setting, the participants are expected to more commonly consist of women who are exposed to physical violence. In our study, 84.60% of the women victims of violence have been exposed to physical violence, 62.30% to emotional violence, 4.37% to economical violence and 2.99% to sexual violence.

Studies in the literature report that the perpetrator is mostly the spouse of the woman[22,28,29]. In our study also women victims have been exposed to violence mostly by their spouses (91.95%). The mean age of the perpetrators was found as 38.89 years.

Studies in the literature have associated a low level of education with domestic violence against women[30,31]. According to the results of our study; women aged 30-40 years, those with a low level of education, a higher number of children, smokers and employed women were at a higher risk of being exposed to domestic violence.

Study Limitations

This study has some limitations. First, the study was designed as a retrospective study and conducted in a single center. The data collected were limited with the "Domestic Violence Against Women Registry" forms and different scales, surveys or tools could be used to measure violence against women in the emergency department. In addition, a control group could be included in order to compare the examined characteristics between the women exposed to violence and those have not been exposed. Finally, the number of sociodemographic variables studied could be higher (age of marriage, income level etc.). On the other hand, our number of participants is relatively high. Given the importance of this problem and necessity of conducting research on this issue continuously to control the parameters included in the violence, further studies will be always needed and we believe that the results of our study will provide significant contribution to the existing literature.

Conclusion

The results of our study indicate that domestic violence against women is continuing with its all dimensions in Turkey as in all over the world. Women of all ages are at risk of being subjected to violence, regardless of their education level, marital status, childbearing status and number of children. Today, strategies of a multi-stakeholder approach and strict punishment of the perpetrator are implemented in many countries. However, there is no significant reduction in violence against women. Multicenter, even multi-national cross-sectional studies are urgently needed in order to investigate this issue in more detail. Again, one of the results of this study is the necessity to increase the education level of women. Emergency departments provide a good opportunity for clinicians to screen

violence against women. A database can be created for the measures to be taken, the policies and regulations to be made in the future by screening the women presenting to emergency departments due to domestic violence, through new and effective measuring instruments with proven validity and reliability.

Conflict of interest

The authors declare that they have no conflict of interest.

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