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Domestic violence in Kazakhstan: Forensic-medical and medical-social aspects

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ABSTRACT

Background: The consequences of domestic violence can be very serious for both individuals and society as a whole. Domestic violence, being one of the widespread instruments of dependence, requires study by forensic-investigative, forensic-medical and public organizations. The prospectivity of studying the forensic-medical aspects of this problem by analyzing the conditions, patterns of distribution of various forms of violence subsequently develops into a more objective approach to solving questions about the mechanisms and features of the formation of injuries, depending on the indicated situations.

Aim: to assess the national prevalence of domestic violence against women in Kazakhstan, to identify demographic, socio-economic and medical-social predictors that determine the prevalence of violence against women in modern conditions.

Methods: A qualitative-quantitative study was conducted in 14 regions of the Republic of Kazakhstan in the period from 2019 to 2022. The analysis was carried out based on the results of forensic medical reports and the results of a survey of 14,342 women who applied to the regional branches of the Center for Forensic Examinations of the Ministry of Justice of the Republic of Kazakhstan. The study used an adapted version of the questionnaire of the United Nations Economic Commission for Europe about violence against women based on the methodology of the WHO Cross-Country Study on women's health and domestic violence against women. Applied statistical analysis methods were used to analyze the obtained results.

Results: There has been an increase in cases of domestic violence over the past two years, especially in 2022. The main victims of domestic violence in the territory of the Republic of Kazakhstan are women (more than 77.9%), children - 17.52%, elderly people - 3.5% and men - less than 1.1%. The number of cases of domestic violence against women in different regions of the Republic of Kazakhstan differs significantly (p < 0.05) and is more apparent in large cities. The most vulnerable category are women aged 40 to 49 (41.46%) and 30 to 39 (37.80%). Women in the Republic of Kazakhstan

Introduction

Violence is one of the acute social problems and is evidence of deep-seated diseases of society. The problem of domestic violence is relevant for most countries of the world [1]. Domestic violence is particularly destructive and appears in all sectors of society, affecting people of all ages [2], [3]. The causes that give rise to domestic violence can be specific both in the context of a particular social group and in the context of a specific country [4], [5]. Many researchers identify common causes of domestic violence that are typical for most countries. In particular, among the causes of domestic violence, "low level of socio-economic development, high level of poverty, low level of education and lack of democratic culture…" are most often singled out [6], [7]. The development of negative processes in the country during a difficult critical period intensifies destabilization phenomena, which is reflected in crimes committed in everyday life and in the family [8]. The level of

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public tolerance for the problem of domestic violence varies depending on the characteristics of the national culture and the degree of corruption in state structures [1], [9]. The most vulnerable categories are children, the elderly people, and women [4], [10]. Violence against women is a global problem for which there are no cultural, geographical, religious, social and economic boundaries [3], [5], [11]. Women all over the world are exposed to violence, regardless of age, class, race, and nationality [2]. Physical, psychological, sexual, and economic violence against women is widespread [5]. According to recent estimates, about 30% of women aged 18 and over worldwide have experienced physical and sexual violence from an intimate partner during their lifetime [12]. Intimate partner violence is the leading cause of homicide in women worldwide and has many other negative health consequences [3], [6], [7]. It should be noted that domestic violence is observed in all socio-economic and cultural groups of the population.

Statistical data testify to the alarming scale of domestic violence both on a global scale and on the scale of a specific country. Kazakhstan is located in the center of the Eurasian continent and ranks 9th in the world in terms of area. According to the results of the 2022 census, the total number of Kazakhstanis amounted to 19,169,550 people (men - 48.71%, women - 51.29%). Today, representatives of more than 130 nationalities and 40 different religions live in this country. Kazakhstan is an upper-middle income country with a per capita income of $8260, an unemployment rate of 5.4%, and a GDP per capita of $12,000 [13]. Kazakhstan supports all major international obligations in the field of ensuring gender equality, including the elimination of violence against women. Despite this domestic violence persists in Kazakhstan seriously undermining the fundamental principle of the need to combat all violence against women. Prevention and combating the phenomenon of violence in Kazakhstani society is one of the most important priorities in state policy and refers to the obligations assumed by Kazakhstan and currently being implemented at the national level. Collecting information on the prevalence of various forms of violence against women is part of a global effort to develop policies, legislation, and services for women who underwent violence and to eradicate the phenomenon. Forensic-medical practice allows to study all aspects of gender-based violence and offer preventive measures in the fight against such negative phenomena in the life of society.

Aim of the research: to assess the prevalence of domestic violence against women in Kazakhstan, to identify demographic, socio-economic and medical-social predictors that determine the prevalence of violence against women in modern conditions.

Materials and methods

The data collection, which covered 14,342 respondents (18–75 years old), was conducted through interviews between 2019 and 2022, followed by an analysis of the forensic report of the examination. A qualitative-quantitative study was conducted in 14 regions of Kazakhstan to achieve broad geographical representativeness of households in the sample. All reported cases of domestic violence against women by the police were investigated. To improve the accuracy of national estimates and the statistical quality of comparisons, the urban/rural divide was taken into account in the stratification.

The survey questionnaire used an adapted version of the UNECE survey module on violence against women, which is based on the WHO Multi-Country Study on Women's Health and Domestic Violence against Women methodology. The "Questionnaire module for measuring violence against women" developed by Henrica A.F.M. Jansen was used as a tool. Adaptation of the questionnaire involved adding a limited number of questions (5 questions) to explore country-specific issues. The most common ways of administering the questionnaires in the surveys considered in this analysis were by face-to-face interviews women who contacted the police: either an oral survey (in which the interviewer fills out the questionnaire) (56,7%), or the respondent fills out the questionnaire independently (43,3%). Carefully selected and specially

trained women were used as interviewers. They used a language convenient for the respondent (Russian or Kazakh). Interviewing of women was carried out without the presence of men. The questionnaire consisted of an administrative form, a household selection form, a household questionnaire, a women's questionnaire and a reference list. The women's questionnaire included an individual consent form and 12 sections designed to obtain details about the respondent and her community, her general and reproductive health, her financial autonomy, her children, her partner, her experiences of partner and non-partner violence, and the impact of violence on her life. The women's questionnaire WHO Multi-country Study on Women's Health and Domestic Violence against Women included: section 1 - Characteristics of the respondent and her community, section 2 - General health, section 3 - Reproductive health, section 4 -Information regarding children, section 5 - Characteristics of current or most recent partner, section 6 - Attitudes towards gender roles, section 7 - Experiences of partner violence, section 8 - Injuries resulting from partner violence, section 9 - Impact of partner violence and coping mechanisms used by women who experience partner violence, section 10 - Non-partner violence, section 11 - Financial autonomy, section 12 - Anonymous reporting of childhood sexual abuse and respondent feedback.

The objects of the study were women who were subjected to domestic violence in four age categories: from 18 to 29 years old, from 30 to 39 years old, from 40 to 49 years old and over 50 years old.

The analysis of 14,342 forensic reports made it possible to assess the extent of injuries caused by domestic violence, their impact on women's health and consequences. In order to conduct research factual materials, in accordance with the regulatory and legislative framework of the Republic of Kazakhstan, in all cases, written permission from law enforcement agencies was obtained. The study was approved by the Committee on bioethics of scientific research of NJSC "Medical University of Karaganda" (protocol No. 4 dated December 06, 2021). The material was collected in accordance with the rules adopted by the ethical commission of the Karaganda Medical University (Kazakhstan) with strict adherence to the safety and ethics guidelines to ensure the safety of participants and researchers. In all cases, during the examination of women, their written informed consent was obtained.

The obtained data were processed using the statistical software packages Statistica 10.0 (StatSoft Inc., USA) and SPSS 20. Applied statistical analysis methods were used to analyze the results. The calculation of 95% CI was carried out according to the Wilson method. Differences in values were considered statistically significant at a probability level of more than 95% ($p < 0.05$). To analyze qualitative variables in independent samples, we used methods for comparing frequencies (or shares) in groups (Pearson's $\chi2$ test). Phi coefficient was used to measure the tightness of the connection in the analysis of binary features. The assessment of the probability of an outcome depending on the presence or absence of a risk factor was assessed using relative risk (RR) and odds ratio (OR) indicators.

Results

The conducted studies show that the number of cases of domestic violence, according to the analysis of initial police reporting, varies (minimum - 60327 cases in 2019, maximum - 80100 cases in 2022), continuing to remain at a fairly stable high level. However, according to the statistics of the Ministry of Justice of the Republic of Kazakhstan, the number of registered cases of domestic violence in the period from 2019 to 2021 decreased and only in 2022 it increased significantly (Fig. 1).

A comparative analysis of paired groups in two independent samples for 2019–2020 (46.75%) and 2021–2022 (53.25%) did not reveal a statistically significant difference (p>0.05).

It was found that the main victims of domestic violence in Kazakhstan in the period from 2019 to 2022 were women. According to the ratio within the study group, the following data were obtained: during the study period, women (violence directed against a spouse or
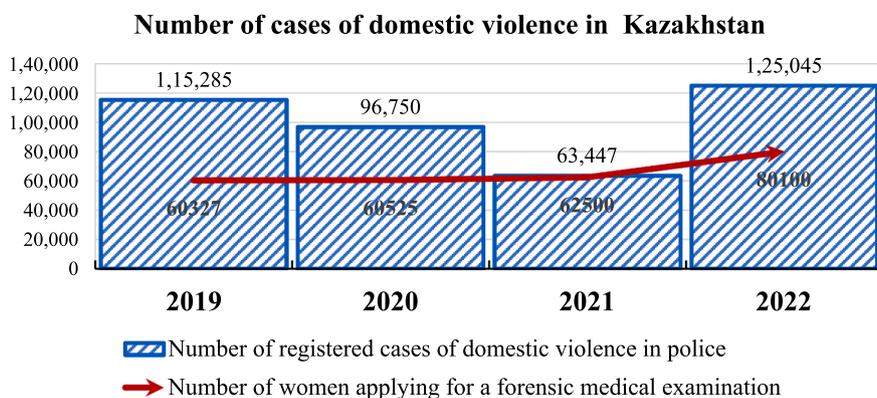
Number of cases of domestic violence in Kazakhstan

Fig. 1. Comparative dynamics of cases of domestic violence in Kazakhstan in 2019–2022.

partner) consistently accounted for more than 77.9% (from 77.9% of victims in 2020 to 91% in 2022). Other groups of victims of domestic violence have a much smaller proportion: child abuse - 17.52%, violence against the elderly - 3.5%, violence against men - less than 1.1%.

Studies have revealed the influence of the age of women who underwent domestic violence on the frequency of violence against them. It was revealed that the number of attacks on women of different ages is different (Fig. 2). Thus, women aged 40 to 49 (41.46%) and 30 to 39 years (37.80%) are the most unprotected, women over 50 (8.13%) and women aged 18 to 29 (12.60%) suffer the least from domestic violence in Kazakhstan. The criterion $\chi2 = 85.93$, df= 3, p = 0.000 show that the proportions of female victims of different ages differ statistically significantly.

However, the impact of the difference in the frequency of occurrence of domestic violence against women of different ages in 2019, 2020, 2021 and 2022 was not revealed (p>0.05) (Table 1).

The frequency of cases of domestic violence against women of a certain age in different years is quite stable with only minor deviations (Fig. 3). There was no statistical difference between the year of the crime and the age of the affected women (Pearson Chi-square (4.375, df=9, p = 0.885), M-L Chi-square (4.161, df=9, p = 0.900).

The group of victims is dominated by women of middle working age (30–49 years). It was established that the victims of domestic violence were mostly women with a low level of education, unemployed, having 2 or more children and economically dependent on their husbands, with low self-esteem, and lacking legal literacy. About two thirds of the victims were urban women (63%) and one third - were rural women (37%).

An analysis of information on perpetrators of violence against women in Kazakhstan showed that the majority of women, on average 87.80%, were subjected to some form of aggression by a man with whom

they had close relationships, and only 12.20% - by other persons. At the same time, the proportion of women who were assaulted by intimate partner in different regions of Kazakhstan, among all women victims of domestic violence, ranged from a minimum of 94.9% in 2022 to a maximum of 98.7% in 2021. It has been established that the frequency of domestic violence committed against women by their intimate partners is statistically significantly higher compared to domestic violence committed against women by other persons ($\chi2 = 140.634$, df=1, p = 0.000) (Table 2).

The results of the conducted studies show that in the overwhelming majority of cases, women are subjected to physical violence by their intimate partners (Fig. 4).

Approximately half of the women who underwent physical violence were assaulted by an intimate partner while pregnant or mothering young children. The majority - 78% of the women who applied for examination reported repeated facts of physical violence, 6% - about regular facts of sexual violence and 16% - about systematic combined violence from their male partner. Repeated use of violence was revealed: 57% of women who were subjected to violence by an intimate partner indicated that they had experienced it quite often (from 2 to 8 times) in the last 12 months. In addition, 21% of women aged 18–75 who have ever had a partner reported experiencing psychological violence from their partner, and 7% - about economic violence. It was found that women who reported that their mothers experienced physical or psychological abuse were significantly more likely to also indicate that they themselves experienced physical and/or sexual violence from an intimate partner (p < 0.05).

In addition to partner violence, the study also collected data on physical and sexual violence against women by non-intimate males. As abusers in these cases, 92% were men who are family members or friends, and 8% were unknown men. As perpetrators of sexual violence, 98% were male-friends, male-strangers, and male-colleagues.

The study showed that in cases of domestic violence against women by their intimate partners, severe forms of physical violence were used, such as hitting, kicking or throwing objects at them. Two-thirds of women (66%) in Kazakhstan who have underwent physical and sexual violence from their partner reported experiencing at least one injury as a result of their partner's violence. In almost all cases, the victim's injuries as a result of domestic violence extended to two or more topographical areas and consisted of bruises and abrasions.

The frequency of infliction of light, moderate and severe bodily injuries on women in different years does not statistically significantly differ from each other (p>0.05), i.e. their ratio among themselves for the studied period of time from 2019 to 2022 was approximately at the same level. There are no statistically significant differences between the severity of harm to women's health and the status of those who caused it. In a statistical analysis of the relationship between the severity of injuries inflicted on women and the age of women, it was found that the frequency of occurrence of bodily injuries of various degrees in different
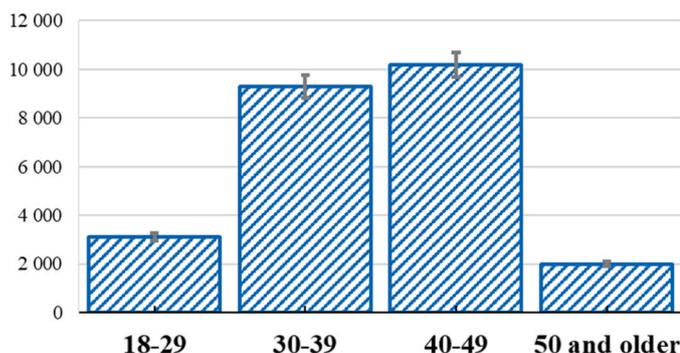

Fig. 2. Distribution of female-victims of domestic violence in Kazakhstan by age.

Table 1

Numbers (shares) of cases of domestic violence against women by age.

Year	Age group								
	18 to 29 years old			30 to 39 years old		40 to 49 years old		50 and older	
	p%	CI 95%	p%	CI 95%	p%	CI 95%	p%	CI 95%
2019	25.81	(13.7;43.25)		(17.08;34.38)	22.55	(15.52;31.57)	40	(21.88;61.34)
			24.73					
2020	19.35	(9.18;36.27)		(17.08;34.38)	19,61	(13.07;28.36)	20	(8.07;41.6)
			24.73					
2021	29.03	(16.09;46.59)		(22.67;41.18)	34,31	(25.82;43.94)	25	(11.19;46.87)
			31.18					
2022	25.81	(13.7;43.25)		(12.6;28.53)	23.53	(16.35;32.63)	15	(5.24;36.04)
			19.35					

Note. Share shown in percentage (p%), confidence interval 95% (CI 95%).

age group 18 to 29 years old

age group 30 to 39 years old

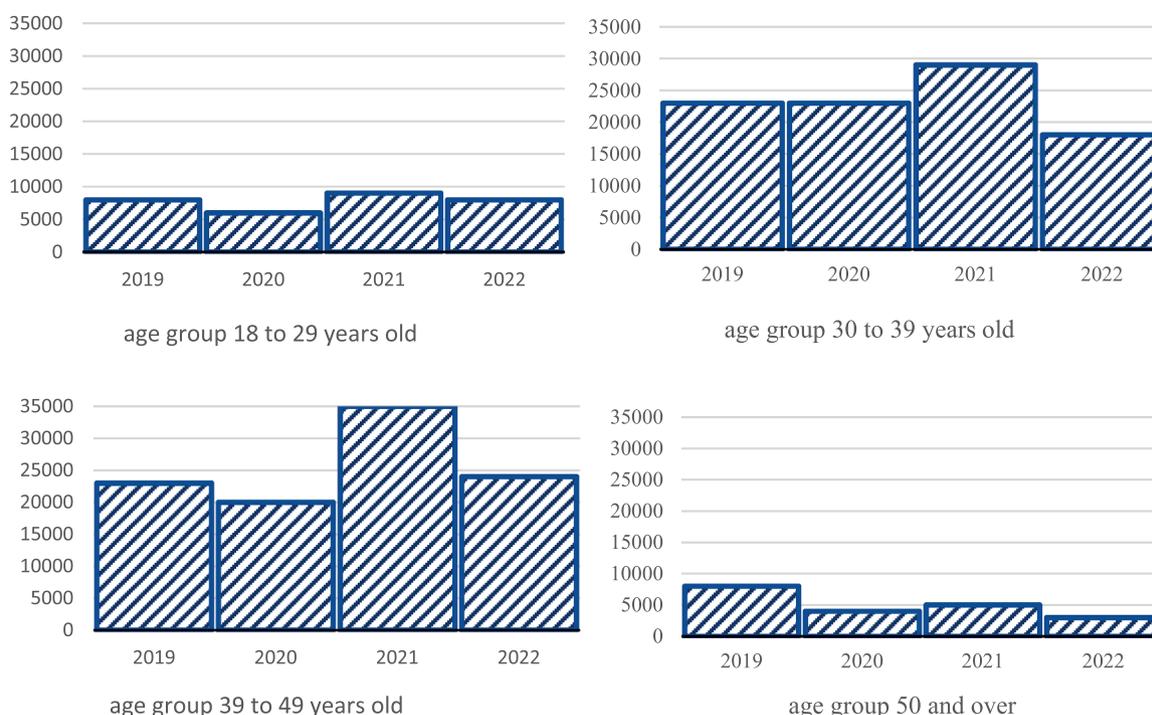age group 39 to 49 years old

age group 50 and over

Fig. 3. Age structure of women victims of domestic violence in Kazakhstan in 2019–2022.

Table 2

Statistical data on the analysis of the status of perpetrators of violence against women in Kazakhstan.

	Status of the perpetrator				Z	p level	95% CI difference in proportions
	Intimate partner		Other person				
	p%	CI 95%	p%	CI 95%			
Totals	87.80	(83.12;91.32)	12.20	(8.68;16.88)	16.77	0.000 *	(0.69;0806)

Note. Share shown in percentage (p%), 95% confidence interval (CI 95%).
Statistically significant change * ($p < 0.05$).

age groups of women is the same, no statistical significance was found between them. Statistical analysis showed that there is a difference in the frequency of occurrence of bodily harm to women of varying severity: light harm to health is caused to women statistically significantly more often at 51.22% ($\chi2 = 181.6$, df=3, p = 0.000). It should also be noted that the number of serious injuries and damages to women as a result of domestic violence in Kazakhstan increased from 2019 to 2022. Thus, the proportion of women who had bone fractures as a result of domestic violence increased from 22.22% (CI 9; 45.21) in 2019 to 27.78% (CI 12.5; 50.87) in 2022. The chances of getting fractures from an intimate partner and another stranger are the same (CI not statistically significant). However, no statistical significance was found in this case. However, more than half of the women victims of violence interviewed felt that the violence had a negative impact on their overall health. The study found that the main number of incidents occurred at home, approximately in equal numbers on weekdays and weekends. Most of the cases occurred in the evening and night (91%). In 97% of cases, the use of domestic violence is associated with the use of alcohol by the abusers.
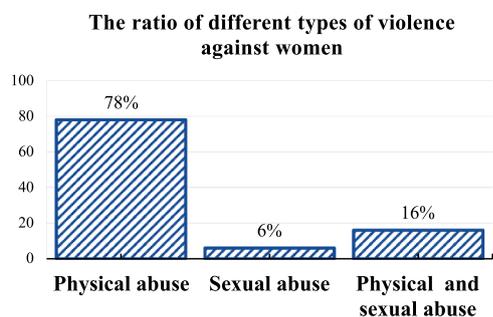
The ratio of different types of violence against women

Fig. 4. The ratio of various types of intimate partner violence against women in Kazakhstan in 2019–2022.

Discussion

The results of the study indicate a rapid increase in the total number of registered cases of domestic violence in 2022 in Kazakhstan against the backdrop of a gradual decrease in the period from 2019 to 2022. At the same time, the number of cases of domestic violence against women is increasing every year (from 77.9% to 91%). Previous studies show that data on domestic violence in many countries are underestimated and do not allow a complete picture of the true scale of the problem [1], [4], [12], [14]. It has been proven that violence against women is a latent phenomenon [6], [15]. According to one study, only 8% of women who underwent violence from intimate partner reported their partner's behavior to the police, 3% of women told a medical or social worker about it [2], [5], [16]. According to other studies: about 18% of women have ever told someone about any type of violence caused to them [3], [7], [9]. According to studies conducted by WHO, approximately one in three women in the world has experienced some form of intimate partner violence during their lifetime, and the lifetime prevalence of intimate partner violence among women who have ever been in a relationship is 30% [5]. This is fully consistent with the data obtained on the territory of the Republic of Kazakhstan: the number of registered cases of domestic violence in 2022 compared to 2019 increased by 8.5%, compared to 2020 by 30%, and compared to 2021 increased by 2 times. Meanwhile, when considering the data obtained, it is also necessary to take into account the fact that not all injured women in Kazakhstan turn to the police, forensic medical examination authorities or hospitals for help. Studies conducted in a number of countries confirm that violent actions by family members, child abuse, and sexualized violence are widespread after emergencies [17]. According to V. Kolbe *et al.* [16] the long-term negative impact of various negative factors on a person, in particular, increased stress and loss of money for living, lead to additional risks, including various forms of violence. According to P.A. Matushin *et al.* [18], such dynamics (decrease with subsequent intensive growth) is explained by the growth and accumulation of negative consequences of the situation and, as a result, the accumulation of negative emotions, which leads to an increase in aggression and an increase in cases of domestic violence, which is fully consistent with the results obtained when analyzing the situation in Kazakhstan.

According to some studies, domestic violence against women is not only a human rights issue, but also a public health issue [10], [14]. According to K.M.Keto *et al.* [19], domestic violence is often the cause of death, disability, and deterioration in the health of women of reproductive age. The results of a study in Kazakhstan confirm that domestic violence is a significant health problem, not only because it causes direct injuries, but also because it indirectly affects a number of health indicators. So, according to L. Li *et al.* [20], continued abusive treatment, which can technically be classified as "non-harmful" injuries, has a serious negative impact, leading to long-term physical and emotional suffering of the victim. Some studies have established a link between physical abuse and a higher level of need for psychiatric treatment, suicide attempts and alcohol dependence [6], [11], [21], [22]. Although

our study did not directly address this issue, a number of previous studies indicate that repeated violence may pose a risk for women with psychological problems, for example, fear, anxiety, fatigue, problems with sleep and nutrition, depression and post-traumatic stress disorder [9], [23]. Although a cross-sector study cannot establish whether violence causes health problems (with the exception of injuries), the results of this study are consistent with data from other studies, which establish very a prominent relationship between partner violence and signs of poor physical and mental health.

Domestic violence often refers to violence against a sexual partner. According to Ahmadi Gohari M. *et al.* [24] women are about 8 times more likely to be harmed by a sexual partner than men. According to most studies, intimate partner violence, physical violence and rape are the three most commonly measured categories of violence [1], [12], [16], [24]. In Kazakhstan, there are also a number of factors contributing to the occurrence of intimate partner violence, a feature of which is recurring incidents ("pattern") of different types of violence (physical, psychological, sexual and economic) [25]. Studies on intimate partner violence against women show that intimate partner violence against women ranges from 3% to 40% for sexual violence, from 6% to more than 59% for physical violence and from 5% to 91% in the case of emotional and psychological violence [26]. According to other data, every third woman (33%) aged 18–75 who has ever had a partner has experienced at least one form of controlling behavior from her intimate partner [7]. Controlling behavior is also common in a large proportion of close relationships in Kazakhstan. However, the situation noted in Kazakhstan is not similar to the situation in Europe. Thus, in Europe the prevalence of intimate partner violence is 25%, and in Kazakhstan it averages 87.80%, but varies depending on the region of Kazakhstan. According to T.Elghossain *et al.* [27], this is due to the difference in cultures (historically determined traditions of each particular society) of countries, regions and social factors that influence the behavior of an individual in society. In addition, it also depends on the accepted norms of behavior for men and women. The prevalence of intimate partner violence in Kazakhstan is comparable to the results obtained in other countries of Central Asia [24], [27]. However, according to K.V. Zubareva *et al.* [17], we should be careful when comparing the results of different studies, because even when using a similar methodology, there are differences, for example, in how partnership status is determined, which affects the prevalence rate. Gender relations, according to A.M. Moore *et al.* [2] are still defined by traditional negative stereotypes of inequality and controlling behavior towards women. Along with the general stereotypes of women's secrecy in relation to partner violence, due to living conditions, individual characteristics, temperament and characters of people, there are differences depending on the region of residence [8], [11], [18]. Thus, culture, traditions and beliefs have largely contributed to the building of gender identity and social norms in different regions of Kazakhstan. Gender roles and cultural norms are clearly expressed in some regions of Kazakhstan: in the south of Kazakhstan, educated women often do not look for work outside the home due to the priority of domestic duties, there are quite common attempts to limit a woman in her choice of activities. Preservation of this phenomenon is facilitated by the presence of established stereotypes, as well as traditional cultural and religious customs and ideas that downplay the role of women [11]. According to K.V. Zubareva *et al.* [17], in addition to the main reason in the form of gender inequality in Kazakhstan, there are several other contributing factors, including: control of men over women in close relationships, the current legislation does not directly provide criminal liability for domestic violence, which causes impunity and signals tolerance for domestic violence, children become witnesses of manifestations of violence, which contributes to the rooting in their minds of the normalness of this phenomenon, as well as the lack of services for helping women in this situation. As a result, cultural beliefs in Kazakhstan encourage an attitude that internal issues such as domestic violence should be handled within the family structure, leading women to prefer not to report physical or other forms of

domestic violence.

A study of young and middle-aged women (18–49 years) found an increased risk of intimate partner violence. Similar data were obtained in studies conducted in different countries [11], [15], [28]. According to some studies, domestic violence against young women (18 to 29 years old) at the beginning of partnership immediately leads to their rupture, while older women (over 50 years old) who have experienced domestic violence over the years, develop a certain protective form of behavior in relationships, which reduces the amount of violence against them, or they are less likely to report violence [8]. The most vulnerable age categories are women aged 30 to 49, which, according to the C. Coll *et al.* [6] is due to the birth of children and the associated limitation of the financial independence of women, which is fully confirmed by the data obtained during the study of the situation in Kazakhstan.

However, according to M. Hameed *et al.* [29], the scale of domestic violence in rural areas is often disproportionately greater, since violence is seen here as an integral part of family and marital relations. However, a different situation was recorded on the territory of the Republic of Kazakhstan: for example, the proportion of women victims of domestic violence in rural areas is lower than in the city. This may be due to the difficulties of women applying to law enforcement, social, medical or forensic-medical institutions due to the remoteness of their place of residence. An analysis of the data obtained in Kazakhstan indicates that alcohol abuse (98.2% of violence was committed while intoxicated), economic problems and lack of work among men results in psychological stress and displacement of disorder on a woman, which is fully confirmed by studies conducted in other countries [2], [4], [11], [15].

The literature focuses on the growing problem of domestic violence during the COVID-19 pandemic in many countries around the world [30], [31]. Long-term social isolation, uncertainty, loss of financial stability created conditions for intensification and aggravation of psychological tension in the family and triggered an increase in cases of domestic violence [32]. As in other countries, the number of domestic crimes increased by 21% during this period. However, the data we have received indicate a decrease in the number of women admitted to the Forensic Medical Service in 2020. According to earlier studies, lockdown generally reduces the flow of criminal complaints to the police, but increases the proportion of domestic violence cases [33]. Home detention led to constant contact between offenders and victims, which led to an increase in violence but a decrease in the number of communications [34]. The closure of educational institutions, the re-profiling of a number of medical institutions for COVID-19 patients, the lack of medical personnel, the restriction of admission of patients with other diagnoses did not allow adequate and timely identification of cases of domestic violence in Kazakhstan during this period, making the problem a purely private family matter.

The available indicators do not allow an assessment of the true extent of the problem in Kazakhstan due to the lack of uniformity in the use of terminology in the reports. Furthermore, the extremely complex provability of crimes related to domestic violence, due to the closed Kazakh family, the inviolability of private property, the absence of witnesses at the time of the commission of the crime and the persistence of traditional attitudes towards marital relationships within the family, as well as the absence of pre-trial protective measures.

It should be specially noted that the conducted forensic medical research assumed only accounting for physical and sexual violence against women. An analysis of medical documents showed that, as a rule, neither records and medical records contain a complete anamnesis of injuries sustained by a victim of domestic violence, nor the registered information is not complete enough to establish all the circumstances of receiving injury. Overall, the study in Kazakhstan confirms that violence against women is a serious public health problem.

The urgency and urgency of the problem require the early detection of cases of domestic violence due to their frequency and high risk of negative consequences. Innovative technologies to identify and assist victims of domestic violence: providing access to digital services and platforms to get timely assistance were developed and partially introduced into social practice in response to the prevailing conditions intensification of promotional activities.

Research has revealed several ways of reducing domestic violence in Kazakhstan, among which measures such as developing the concept of mandatory psychotherapy for aggressors to prevent relapse are particularly important; Training in working with victims in accordance with international human rights standards; human rights activities in schools to teach children the fundamental rights of integrity and dignity; increasing information and awareness-raising activities with parents on the upbringing of children (their roles in society without limiting them to gender-assigned roles); training for journalists on the ethics of media reporting on violence, including the identification of the language of victimization (shifting responsibility to the victim). In addition, it is important to broadcast cases on the punishment of offenders, create new and broadcast existing films, social spots, podcasts in television, social networks on the prevention of gender-based violence.

Study Limitations

While the study methodology was sound and consistent with international standards, like every study, this study has limitations. First, the cross-sector design of the study does not allow for a causal relationship between intimate partner violence and health problems or other outcomes. Second, as in any study where data is presented from memory, recall errors are possible in some issues. At the same time, the standardization of research instruments, careful preliminary development and testing of the survey helped to reduce systematic errors to a minimum in order to obtain the maximum amount of information. Nevertheless, we assume that some of the biases associated with the desire to hide personal information are still present and could lead to underestimations of the prevalence of domestic violence. In this connection, the prevalence rates obtained in the study should be considered as minimum estimates of the true prevalence of domestic violence in Kazakhstan. Third, to estimate the national prevalence of domestic violence against women in Kazakhstan, the survey was adapted compared to the original WHO survey due to the impossibility of obtaining answers to certain types of questions. As a result, there was less data available on the health effects of violence or risk factors associated with violence than in some other countries where the WHO Cross-Country Study on women's health and domestic violence against women was conducted. In addition, the inconsistency of the data obtained in Kazakhstan should be emphasized: They are fragmented and difficult to access and the results are not measurable. This makes it impossible to trace the dynamics of domestic violence during this period according to the main socio-demographic indicators, since the data collected by different methods are scattered on different scales.

Conclusion

Despite its prevalence, the problem of violence against women in the Republic of Kazakhstan still remains in the background. Forensic-medical practice fully allows studying all aspects of gender-based violence and offering preventive prophylactic measures in the fight against such negative phenomena in the life of society. The development of a comprehensive model for fight domestic violence against women requires targeted allocation of resources, including human and financial resources, as well as many years of work, which includes testing, monitoring, analysis, including forensic-medical, and adaptation of new approaches.

Credits

information databases and conclusions of a forensic medical examination.

CRediT authorship contribution statement

Mussabekova Saule A.: Writing – review & editing, Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Conceptualization. **Abdikadirova Khamida R.:** Supervision, Data curation. **Mkhitaryan Xeniya E.:** Visualization, Resources.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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