

# Domestic violence against Iranian women during the Covid-19 lockdown: A cross-sectional study

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## Abstract

**Background and Aims:** Despite the fact that public health measures such as social isolation can help control the coronavirus disease 2019 (Covid-19) pandemic, these procedures may contribute to elevated levels of stress and escalate various forms of violence against women. The current study aimed to estimate the prevalence of domestic violence and identify factors associated with domestic violence during the Covid-19 lockdown among married women attending healthcare centers in Iran.

**Methods:** This cross-sectional study, conducted between 2020 and 2021, focused on a sample of 5317 married women who sought healthcare services within urban centers across five major cities in Iran. Sampling was done through a multistage cluster method. The Revised Conflict Tactics Scales (CTS2) were used to assess levels of violence. The collected data was analyzed using descriptive and inferential statistics, including independent sample *t*-test, Chi-square, and multiple logistic regression) with the SPSS software version 22.

**Results:** During the Covid-19 lockdown, psychological violence was reported by 66.7% of women (95% confidence interval [CI], 65.44%–67.98%), physical violence by 44.8% (95% CI, 43.43%–46.10%), sexual violence by 28.8% (95% CI, 27.60%–30.03%), and injury by 24.5% (95% CI, 23.39%–25.70%). The multiple logistic regression showed several significant factors associated with domestic violence. These included low levels of social support ( $p < 0.001$ ), shorter duration of marriage ( $p < 0.001$ ), unemployment of both women ( $p < 0.007$ ) and their spouses ( $p < 0.001$ ), poor economic status ( $p < 0.001$ ), as well as substance abuse by the husband, including alcohol ( $p < 0.001$ ) and drug abuse ( $p < 0.01$ ), and smoking ( $p < 0.01$ ).

**Conclusion:** The findings highlighted the magnitude of domestic violence against women during the Covid-19 lockdown. It is crucial to implement comprehensive strategies that encompass preventive and responsive measures to address domestic violence not only during lockdowns but also in the post-lockdown period.

## KEYWORDS

Covid-19, domestic violence, lockdown, women

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## 1 | BACKGROUND

The coronavirus disease 2019 (Covid-19) pandemic, as acknowledged by the World Health Organization<sup>1</sup> has emerged as a significant worldwide public health crisis with far-reaching effects on various facets of society, particularly mental and physical health.<sup>2</sup> While public health measures such as social isolation and lockdowns have proven effective in curbing the spread of the virus,<sup>3-5</sup> they have also presented negative repercussions for mental health, both in the short-term and long-term.<sup>6</sup> It is important to note that the resulting seclusion and restricted contact with the outside world have created an unfavorable environment for many individuals, particularly women who may find themselves trapped at home with an abusive partner.<sup>3</sup> The global nature of the pandemic coupled with the pervasive fear and uncertainty can provide a stressful situation, escalating various forms of violence against women.<sup>7</sup>

Domestic violence is a grave violation of basic human rights occurring within the confines of the domestic sphere. It encompasses a form of abuse perpetrated by a partner.<sup>8</sup> Several pathways have been identified, establishing a connection between pandemics and violence against women. These pathways include the adverse effects of economic insecurity and poverty-related stress; the impact of quarantines and social isolation; reduced availability of health service; the inability of women to temporarily escape abusive partners; and virus-specific sources of violence.<sup>7</sup> Fear of violence may prevent women from seeking essential health services during the epidemic.<sup>9</sup> The restrictions on movement and closure of clinics can pose significant challenges for women in accessing healthcare. In summary, epidemics have the potential to divert healthcare resources from sexual and reproductive health services.<sup>10</sup> Reports indicate that Covid-19 is being used as a coercive control mechanism, where abusers exert greater control over women in violent relationships through containment, fear, and the threat of contagion as a means of abuse.<sup>11</sup>

Worldwide, a significant proportion of women, approximately 30%, experience intimate partner abuse at some point in their lives.<sup>12</sup> It has been observed that such violence can increase during crises and pandemics.<sup>13</sup> Lessons learned from past epidemics indicate that women face an increased risk of domestic violence in these situations.<sup>10</sup> Currently, reports from different countries suggest a rise in domestic violence rates. For instance, in China, cases of domestic violence tripled during the pandemic, with approximately 90% of reported incidents being related to the Covid-19 pandemic.<sup>10</sup> Brazil reported a rise of 40%–50% in domestic violence.<sup>8</sup> Additionally, Tunisia saw a significant increase in violence from 4.4% to 14.8% during the lockdown period.<sup>14</sup> Bangladesh also witnessed a distressing surge in sexual violence against women during the Covid-19 pandemic,<sup>15</sup> with over half of the affected women reporting a higher rate of violence following the implementation of lockdown measures.<sup>16</sup> Although there are huge differences in the prevalence of domestic violence across different countries due to variations in measurement tools used, these studies collectively reveal an increase in the rates of violence during the pandemic. However, due to the

complex nature of domestic violence and the unique circumstances posed by the pandemic, there is limited systematic evidence available regarding its impact.<sup>17</sup>

Similarly, domestic violence is a significant social problem and health concern in Iran. Before the Covid-19 pandemic, there were varying statistics regarding the prevalence of domestic violence against women. A meta-analysis showed that 66% of Iranian women had experienced at least one form of abusive behavior from their husbands during their married life.<sup>18</sup> Based on a recent systematic review, the prevalence of physical violence in Iran ranged from 5.4% in Zahedan to 94.7% in Tehran, with an overall rate of 22.9%.<sup>19</sup> Domestic violence is associated with substantial public health consequences, including general health issues and reproductive health problems such as chronic pain, disability, unintended pregnancy, sexually transmitted infections, and psychological disturbances.<sup>20</sup> The risk of domestic violence is influenced by factors such as lower levels of education, lower income, poor socioeconomic status, and lack of social support.<sup>21,22</sup> Risk factors for violence, such as unemployment are more likely to be compounded with measures implemented in response to Covid-19.<sup>3</sup> However, the immediate impact of lockdown measures on families in low- and middle-income countries, including Iran, is not yet well understood.

To gain a better understanding of domestic violence occurrence and develop targeted preventive strategies for various population groups, it is required to establish a global perspective on its occurrence. Therefore, a comprehensive understanding of the magnitude of the extent and risk factors of domestic violence should be a key focus in implementing preventive interventions,<sup>22</sup> especially during pandemics. On the other hand, to effectively respond to the management of Covid-19, it is crucial to recognize the socioeconomic ramifications of pandemic control measures, which inevitably have adverse effects on mental health due to increased unemployment and poverty.<sup>2</sup> To fill the gap in the literature, this study was conducted to determine the prevalence of domestic violence and to identify its correlates among married women attending healthcare centers during the Covid-19 lockdown in Iran.

## 2 | METHODS

This cross-sectional study was conducted from November 2020 to September 2021, involving 5317 married women who visited urban healthcare centers in five major cities of Iran (Tehran, Mashhad, Tabriz, Shiraz, and Ahvaz). The sample was selected using a multistage cluster sampling method. Selected cities were categorized into three districts (northern, southern, and central) based on socioeconomic status, and two healthcare centers were randomly chosen from each district. Subsequently, participants were consecutively recruited from each healthcare center. The study included Iranian women who had been married for a minimum of 1 year before the study, and were residing with their husbands in the same household.

Following informed consent, the selected women underwent interviews in private rooms at the healthcare center. A trained female

healthcare provider conducted interviews focusing on investigating instances of spousal violence during the Covid-19 lockdown period. To ensure confidentiality, no names were recorded on the questionnaire. Additionally, interviews were conducted without the presence of the husband to guarantee the safety of the participants. It is important to emphasize that participation in the study was completely voluntary, and women were reminded of their right to terminate the interview or withdraw from the study at any given point.

The data collection tools included a socio-demographic and fertility-related characteristics form, Multidimensional Scale of Perceived Social Support (MSPSS),<sup>23</sup> and the Revised Conflict Tactics scales (CTS2).<sup>24</sup>

The MSPSS<sup>23</sup> is a 12-item scale designed to assess the perceived adequacy of social support from three sources: family (4 items), friends (4 items), and significant other (4 items). Participants rate each item on a 7-point Likert scale ranging from 0 (*very strongly disagree*) to 7 (*very strongly agree*). The total score of the scale is derived by summing the scores of all items and dividing the sum by 12. Additionally, the mean score for each subscale is computed by summing the scores of the respective subscale items and dividing the sum by 4.<sup>23</sup> The Persian version of the MSPSS has demonstrated good internal consistency, with a Cronbach's alpha coefficient of 0.86.<sup>25</sup>

In this study, domestic violence was assessed using the CTS2, which is a self-report questionnaire consisting of 39 items—each item includes two questions—one referring to the woman and the other to her partner—resulting in a total of 78 questions. The CTS2 evaluates the nature and frequency of conflict management tactics employed by partners in intimate relationships.<sup>24</sup> This instrument has been translated into Farsi and adapted to the cultural context. Three questions (numbered 58, 64, and 76) were removed in the process.<sup>26</sup> This revised version of instrument comprises 36 questions and includes scales related to negotiation (items 1–6), physical assault (items 7–18), psychological aggression (items 19–26), sexual coercion (items 27–30), and injury (items 31–36). Participants utilized a Likert scale to indicate the frequency at which they experienced each act perpetrated by their husbands during the Covid-19 lockdown. The response options were as follows: 1 = once; 2 = twice; 3 = 3–5 times; 4 = 6–10 times; 5 = 11–20 times; 6 = > 20 times; 7 = not in the referent period but happened before; 0 = never.<sup>24</sup> To obtain a prevalence score, a value of one was assigned if one or more of the acts occurred previously (score 0 = none of the items answered 1–6).<sup>27</sup> The Cronbach's coefficient ( $\alpha = 0.89$ ) was used to evaluate the reliability of the instruments. In this study, a total of 5892 women were included; 5455 women answered (92.58%) the questions, and 138 (2.52%) answers were excluded. Finally, 5317 questionnaires were analyzed. The SPSS software version 22 was used to analyze the data. The categorical variables were reported as frequency (percentage), while quantitative variables were presented as means (standard deviation) or medians. The comparison of categorical variables was conducted using a Chi-square test, and for normally distributed quantitative variables, an independent sample t-test was

used to determine the mean difference between the two groups. Additionally, multiple regression models were performed to identify the related factors. Adjusted odds ratios (AORs) and 95% confidence interval (CI) were calculated for the multiple logistic regression model. All analyses were performed as two-sided tests, and a significance level of 0.05 was set.

Ethical approval was obtained from the Ethics Committee of Iran University of Medical Sciences (IR.IUMS.REC.1399.362). Additionally, before their involvement in the study, all participants provided written informed consent.

### 3 | RESULTS

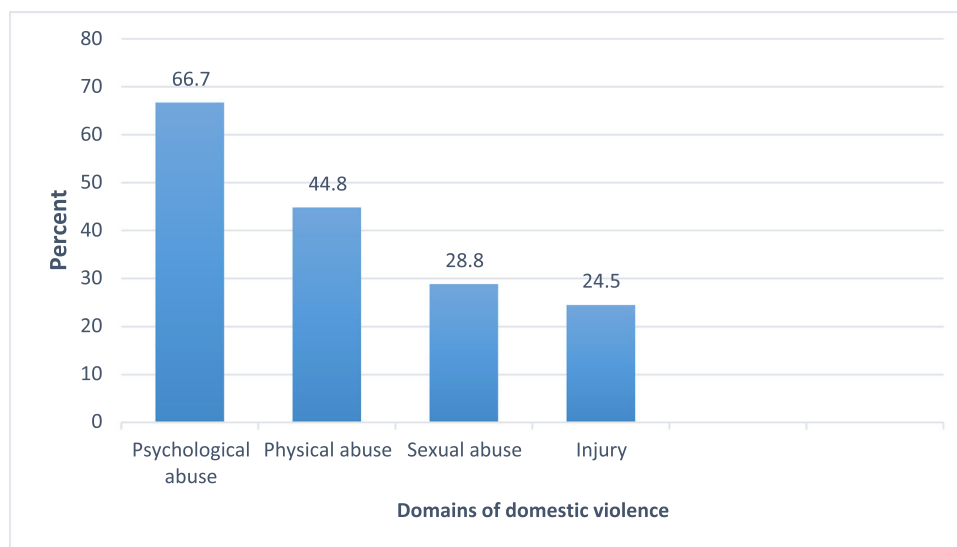
The data analysis showed that of 5317 women, 74.7% (95% CI, 73.75%–75.91%) experienced at least one type of domestic violence, 66.7% (95% CI, 65.44%–67.98%) reported psychological violence, 44.8% (95% CI, 43.43%–46.10%) physical violence, 28.8% (95% CI, 27.60%–30.03%) sexual violence, and 24.5% (95% CI, 23.39%–25.70%) injury (Diagram 1). All women subjected to physical violence had experienced psychological violence as well.

The mean age of the participants and their husbands was  $34.37 \pm 9.66$  and  $38.84 \pm 11.00$  years, respectively. The mean duration of marriage was  $12.32 \pm 10.50$  years, and the median number of children was 1.00 (0–12). Table 1 shows the highest rate of domestic violence occurred among women in the age group younger than 20 years. Domestic violence was higher in women whose marriages were less than 5 years. Other socio-demographic characteristics are presented in Table 1.

The results of multiple logistic regression showed several significant factors associated with domestic violence. Low levels of social support ( $p < 0.001$ ), shorter duration of marriage ( $p < 0.001$ ), unemployment of both women ( $p < 0.007$ ) and their spouses ( $p < 0.001$ ) and poor economic status ( $p < 0.001$ ), husband's smoking status ( $p < 0.01$ ), as well as husband's alcohol ( $p < 0.001$ ) and drugs ( $p < 0.01$ ) abuse, displayed significant associations with domestic violence. Specifically, women with poor economic status were found to experience domestic violence 3.1 times more frequently compared to women with good economic status. Furthermore, the odds of domestic violence were 1.94 times higher for women whose husbands consumed alcohol and 1.56 times higher for women whose husbands were addicted to drugs. In addition, women with poor social support faced a domestic violence risk that was 1.84 times higher, while women with moderate social support demonstrated a 1.49 times higher risk compared to those with high social support (Table 2).

### 4 | DISCUSSION

The current research involves a large-scale study focusing on understanding the prevalence and risk factors associated with domestic violence during the Covid-19 lockdown in Iran. Our findings



**DIAGRAM 1** The percentage of different domains of domestic violence in women during the Covid-19 lockdown.

indicated that almost three-fourths of Iranian women referred to urban health centers experienced at least one form of domestic violence during the Covid-19 lockdown. Notably, psychological violence emerged as the most prevalent type of violence experienced by women during this challenging period.

Domestic violence against women remains a major social and public health problem in Iran. According to a meta-analysis, the prevalence of domestic violence was estimated to be 66%.<sup>18</sup> The global outbreak of the coronavirus has further exacerbated reports of domestic violence worldwide.<sup>10,12</sup> Bangladesh witnessed a 23% increase in domestic violence cases during the lockdown period.<sup>28</sup> Similarly, a recent cohort study conducted in Iran reported a 20% increase in the prevalence of domestic violence during the pandemic compared to pre-pandemic period, and about 25% of women without prior exposure to domestic violence experienced violence for the first time within the initial 6 months of the pandemic (Fereidooni et al., 2021). The implementation of Covid-19 lockdown measures in Iran resulted in severe psychological challenges for the population, potentially leading to an escalation in domestic violence incidents. Iran being a society known for its social cohesion and strong familial bonds, faced the disruption of interpersonal connections due to the necessity of reduced social interactions. Moreover, the deprivation of participation in family, national and religious gatherings coupled with distressing news about the illness and loss of loved ones across the country exacerbated psychological pressure, which might have contributed to an increase in domestic violence. The confluence of Covid-19-induced lockdowns, mandatory stay at home orders, and social distancing policies, caused adverse consequences, including heightened domestic violence rates. Several studies<sup>16,28,29</sup> have confirmed that enforced cohabitation and economic downturns act as additional stressors within households, leading to intimate partner violence. The lockdown measures increased the amount of the time partners spent together, often accompanied by additional

responsibilities such as childcare, limited physical environment, and isolation from external support networks.<sup>29</sup> Therefore, according to existing evidence, economic downturns, women's confinement with their partners at home, and fear, anxiety, depression, and stress induced by the pandemic significantly contribute to the aggravation of violent behavior in domestic settings.<sup>30</sup>

In our study, it was found that a significant proportion of women experienced various forms of domestic violence during the lockdown period. Psychological violence was reported by two-thirds of women, while almost half of them endured physical violence. Additionally, one-third of women experienced sexual violence. It is noteworthy that in certain patriarchal societies, domestic violence, particularly sexual violence used as a means to assert sexual dominance. It serves as a tool for men to assert sexual dominance and exert social control over women.<sup>31</sup> A cross-sectional online study conducted on 203 Iranian women revealed that significant percentages experienced high levels of physical violence (26.6%), emotional violence (26.1%), and sexual violence (21.2%) during the Covid-19 pandemic. An cross-sectional online study conducted on 203 Iranian women revealed that significant percentages experienced high levels of physical violence (26.6%), emotional violence (26.1%), and sexual violence (21.2%) during the Covid-19 pandemic.<sup>32</sup> Similarly, among married Bangladeshi women, approximately half of them experienced emotional abuse, 15.29% reported physical abuse, 10.59% indicated sexual abuse, and 19.22% experienced either physical or sexual abuse.<sup>30</sup> Discrepancies in results can be attributed to variations in measurement tools and the populations studied. For instance, Yari et al., used a self-structured 17-item questionnaire that measured three dimensions of domestic violence, including physical violence, emotional violence, and sexual violence. On the other hand, Rayhan et al., utilized the WHO multi-country study tool to assess intimate partner violence among Bangladeshi women. In our study, the CTS2 was employed to identify instances of domestic violence among

**TABLE 1** Demographic characteristics of women.

Variable		Nonabused women N = 1343 N (%)	Abused women N = 3974 N (%)	p-Value
Woman's age	≤20	58 (21.7)	208 (78.2)	0.001
	21–50	1136 (24.5)	3500 (75.5)	
	>50	149 (35.9)	266 (64.1)	
Husband's age	≤20	5 (17.4)	18 (78.3)	0.001
	21–49	1037 (23.4)	3397 (76.6)	
	50–60	227 (33.4)	453 (66.6)	
	>61	74 (41.1)	106 (58.9)	
Marital duration	>5	358 (21.0)	1343 (79.0)	0.001
	5–10	266 (22.3)	926 (77.7)	
	11–20	372 (26.4)	1039 (73.6)	
	>20	347 (34.3)	666 (65.7)	
Woman's level of education	Illiterate	20 (24.7)	61 (75.3)	0.022
	Secondary school	294 (30.2)	679 (69.8)	
	Diploma	465 (23.9)	1479 (76.1)	
	Academic	564 (24.3)	1755 (75.7)	
Husband's level of education	Illiterate	19 (22.4)	66 (77.6)	0.122
	Secondary school	281 (28.2)	716 (71.8)	
	Diploma	439 (24.7)	1338 (75.3)	
	Academic	604 (24.6)	1854 (75.4)	
Women's employment status	Unemployed	903 (24.8)	2742 (75.2)	0.022
	Employed	429 (26.9)	1166 (73.1)	
	Retired	11 (14.3)	66 (85.7)	
Husband's employment status	Unemployed	70 (17.2)	337 (82.8)	0.001
	Employed	1195 (25.8)	3428 (74.2)	
	Retired	78 (27.2)	209 (72.8)	
Economic status	Poor	221 (15.7)	1185 (84.3)	0.001
	Moderate	950 (28.4)	2390 (71.6)	
	Good	172 (30.1)	399 (69.9)	
Women smoking	No	1217 (26.1)	3437 (73.9)	0.001
	Yes	126 (19.0)	537 (81.0)	
Husband smoking	No	998 (28.3)	2533 (71.7)	0.001
	Yes	345 (19.3)	1440 (80.7)	
Woman alcohol use	No	1318 (25.9)	3769 (74.1)	0.001
	Yes	25 (10.9)	205 (89.1)	
Husband alcohol use	No	1221 (28.0)	3147 (72.0)	0.001
	Yes	122 (12.9)	827 (87.1)	
Woman drug abuse	No	1339 (25.4)	3943 (74.6)	0.038
	Yes	4 (11.4)	31 (88.6)	

(Continues)

TABLE 1 (Continued)

Variable		Nonabused women N = 1343 N (%)	Abused women N = 3974 N (%)	p-Value
Husband drug abuse	No	1295 (26.1)	3663 (73.9)	0.001
	Yes	48 (13.4)	311 (86.6)	
Social support	Low	53 (16.9)	261 (83.1)	0.001
	Moderate	374 (20.9)	1417 (79.1)	
	High	916 (28.5)	2296 (71.5)	

TABLE 2 Multiple logistic regression analysis of factors associated with domestic violence.

Variable		OR	95% CI for OR		p
			Lower	Upper	
Woman's age	21–50	1.113	0.797	1.556	0.530
	>50	1.046	0.656	1.669	0.850
	≤20	1			
Husband's age	21–49	0.794	0.277	2.272	0.667
	50–60	0.588	0.201	1.723	0.333
	>61	0.337	0.108	1.055	0.062
	≤20	1			
Marital duration	5–10	0.919	0.759	1.112	0.383
	10–20	0.768	0.640	0.920	0.004
	>20	0.590	0.458	0.762	0.001
	<5	1			
Woman's level of education	Secondary school	0.585	0.337	1.014	0.056
	Diploma	0.811	0.468	1.406	0.456
	Academic	0.871	0.499	1.519	0.626
	Illiterate	1			
Women's employment status	Employed	0.809	0.693	0.944	0.007
	Retired	2.755	1.388	5.470	0.004
	Unemployed	1			
Husband's employment status	Employed	0.528	0.398	.702	0.001
	Retired	0.936	0.621	1.411	0.753
	Unemployed	1			
Economic status	Poor	3.134	2.459	3.994	0.001
	Moderate	1.381	1.123	1.699	0.002
	Good	1			
Woman smoking	Yes	0.955	0.753	1.212	0.708
	No	1			
Husband smoking	Yes	1.233	1.043	1.458	0.0114
	No	1			

TABLE 2 (Continued)

Variable		OR	95% CI for OR		p
			Lower	Upper	
Woman alcohol use	Yes	1.339	0.833	2.153	0.228
	No	1			
Husband alcohol use	Yes	1.942	1.533	2.460	0.001
	No	1			
Woman drug abuse	Yes	1.408	0.456	4.343	0.552
	No	1			
Husband drug abuse	Yes	1.560	1.113	2.186	0.010
	No	1			
Social support	Low	1.847	1.339	2.548	0.001
	Moderate	1.498	1.296	1.731	0.001
	High	1			

Abbreviations: CI, confidence interval; OR, odds ratio.

Iranian women. It is important to recognize that domestic violence is influenced by cultural factors.<sup>33</sup> Consequently, depending on the cultural context, some Iranian women may not perceive aggressive behaviors as violence and may consider such actions from their husbands to be normal.

In our study, we identified several significant factors associated with domestic violence during the lockdown. These factors include insufficient social support, a short marital duration, unemployment of both woman and her husband, and poor economic status, as well as husband's smoking, alcohol and drug abuse. In Iran, during the period of February 20 to April 20, 2020, the government implemented a nationwide lockdown to curb the spread of the disease. This unprecedented crisis resulted in various profound consequences, such as sudden disruptions in daily routines, escalating levels of stress, widespread joblessness, scarcity of essential commodities, and limited access to social support systems.<sup>34</sup> It is important to note that all of these factors have been widely recognized as risk factors for domestic violence globally.<sup>35,36</sup> According to a recent survey conducted in Iran, several demographic factors were identified as significant risk factors for domestic violence during the pandemic. These factors include younger age, lower levels of education, previous marriage(s), and unwanted marriage.<sup>32</sup> Our findings revealed that women with poor economic status were three times more likely to experience violence compared to women with good economic status. The association between domestic violence and poor economic status has been consistently supported by previous studies.<sup>28,32,37</sup> The risk factors for domestic violence, such as unemployment, limited resources, and restricted social support are further exacerbated by the measures implemented to address the Covid-19 pandemic.<sup>3</sup> Evidence has shown that women face a higher risk of violence when confined with little access to law enforcement agencies due to lockdown measures.<sup>38</sup> Boserup et al.,<sup>39</sup> indicate that the social isolation resulting from lockdown measures can worsen the

economic and health vulnerabilities of women experiencing violence, as they lack established social support systems. Additionally, alcohol abuse, a common risk factor for domestic violence, has been linked to the occurrence of stressful events and a lack of social support, both which can be consequences of the Covid-19 pandemic.<sup>3</sup>

Our study had several limitations that should be acknowledged. Firstly, our data on domestic violence was restricted to urban healthcare centers located in large cities, which restricts the generalizability of our findings to rural areas or small towns. However, to mitigate this limitation, we made efforts to randomly select healthcare centers during the study. Secondly, the cross-sectional nature of the study precluded precisely estimating the magnitude to which domestic violence has risen as a direct result of the pandemic-related measures. Additionally, the absence of comparative data on the prevalence of domestic violence before the implementation of the lockdown measures further constrained our analysis. Finally, it is important to take into account the potential impact of underreporting of violence due to societal factors such as shame, stigma, and other socio-cultural influences. To address this concern, we employed local female healthcare professionals to conduct private interviews with the women, creating a supportive environment that aimed to encourage disclosure. While these limitations affect the robustness of our findings, they also underscore the need for further research to capture the broader impact of domestic violence in various settings and to explore effective interventions within different sociocultural contexts.

## 5 | CONCLUSION

Our study revealed a notable prevalence of domestic violence in Iran during the Covid-19 lockdown. Factors contributing to domestic violence against women during this time included limited social

support, shorter marriage duration, unemployment of women and their spouses, precarious economic status, as well as smoking, alcohol, and drugs abuse by husbands.

To effectively address and prevent domestic violence, comprehensive strategies should be implemented during and after lockdowns. As insufficient social support and poor economic status were identified as major factors associated with domestic violence during the lockdown, it is crucial for government and welfare organizations to provide affected families with diverse forms of social support and financial assistance. Ensuring continued accessibility of social and healthcare services for women throughout the lockdown period is crucial, with a focus on enhancing safety measures and providing assistance to those experiencing abuse. Additionally, considering the movement restrictions and limited access to support services during quarantine, offering phone-based and online psychological counseling can be a valuable means of supporting women during this challenging period. Furthermore, introducing vocational training programs, entrepreneurship initiatives, and job placement services can empower abused women to attain financial independence. Promoting equal access to employment opportunities and fair wages is paramount in ensuring their economic stability and reducing dependency on abusers.

#### AUTHOR CONTRIBUTIONS

**Maryam Gharacheh:** Conceptualization; formal analysis; funding acquisition; investigation; methodology; project administration; software; supervision; writing—original draft. **Tahereh Sadeghi:** Methodology; writing—review & editing. **Mojgan Mirghafourvand:** Conceptualization; project administration; writing—review & editing. **Simin Montazeri:** Conceptualization; methodology; project administration; writing—review & editing. **Shayesteh Jahanfar:** Conceptualization; formal analysis; methodology; writing—review & editing. **Fahimeh Ranjbar:** Conceptualization; project administration; writing—review & editing.

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#### CONFLICTS OF INTEREST STATEMENT

The authors declare no conflict of interest.

#### DATA AVAILABILITY STATEMENT

Data available on request from the corresponding author.

#### ETHICS STATEMENT

In the current study, all methods were performed in accordance with the relevant guidelines and regulations (Declaration of Helsinki). Ethic approval was achieved from the Ethics Committee of Iran University

of Medical Sciences (IR.IUMS.REC.1399.362). Informed consent was obtained from all participants. Participants were informed that they are free to participate and can withdraw from the study at any time. Questionnaires were completed anonymously observing the essentials of secrecy and confidentiality of participants and only identifiers were used for each questionnaire. In the current study, no individual patient data was used and hence no consent was needed for publication. Informed consent was obtained from all individual participants included in the study.

#### TRANSPARENCY STATEMENT

All authors affirm that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained. MGh had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis.

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