Policy brief

Domestic violence and reproductive health during the pandemic: Challenges and policy implications

Golshan Maleki [1], **Mouloud Agajani Delavar** [2], **Mohammad Ali Jahani** [1], **Angela Hamidia** [3], **Zahra Geraili** [1], **Mina Galeshi** [4], **Zeynab Farhadi** [1] [*]

[1] Social Determinants of Health Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, Iran
[2] Infertility and Reproductive Health Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, Iran
[3] Clinical Research Development Unit of Shahid Yahyanezhad Hospital, Babol University of Medical Sciences, Babol, Iran
[4] Clinical Research Development Unite of Rouhani Hospital, Babol University of Medical Sciences, Babol, Iran

Abstract

The COVID-19 pandemic and associated lockdown measures led to a global surge in domestic violence against women, a phenomenon widely described as the "Shadow Pandemic". This study was derived from a systematic review and meta-analysis examining the prevalence and patterns of domestic violence during COVID-19 lockdowns. Data on physical, sexual, psychological, and verbal violence were extracted, with specific emphasis on vulnerable populations, including pregnant women and postpartum mothers. The pooled prevalence of domestic violence during lockdowns was 36%. Psychological (32%) and verbal (29%) violence was reported more frequently than physical and sexual violence (16% each). Pregnant women and new mothers experienced the highest rates of psychological and physical violence. Substantial geographical variation was observed, reflecting cultural, economic, and structural differences across regions. Significant gaps persist in the existing literature, particularly regarding comprehensive assessments of violence dimensions and the role of sociocultural determinants. policymakers should prioritize strengthening support services, implementing preventive interventions grounded in a socio-ecological framework, and revising protective legislation with specific attention to vulnerable groups. These evidence-based findings offer practical guidance for health authorities, policymakers, and support organizations in mitigating domestic violence during current and future public health emergencies.

Keywords: COVID-19, Domestic Violence, Lockdown, Pregnant Women, Policy Intervention

Context

The global outbreak of the COVID-19 pandemic in December 2019, followed by widespread quarantine and lockdown measures, produced far-reaching consequences extending well beyond physical health. While public health efforts primarily focused on infection control and mortality reduction, a less visible but equally severe crisis emerged described by the United Nations as a "shadow pandemic" (1, 2). This term refers to the marked escalation of domestic violence against women worldwide, driven by factors such as prolonged social isolation, economic strain, confinement within households, and reduced access to protective and support services (3).

Global evidence indicates a substantial rise in domestic violence during lockdown periods, with reported increases ranging from 25% to 33% compared with pre-pandemic levels (4, 5). Similar trends were observed in Iran, where preliminary studies reported that approximately 35% of women experienced at least one form of domestic violence during the pandemic. Psychological and emotional violence were the most frequently reported forms (33%), followed by verbal violence (12%), with a considerable proportion of women also reporting physical and sexual abuse (6).

Despite growing recognition of this issue, research on domestic violence during the COVID-19 pandemic in Iran remains fragmented and limited. Three critical gaps are evident. First, few studies have simultaneously examined all major forms of domestic violence; psychological, verbal, physical, and sexual

*Correspondence author: Dr. Zeynab Farhadi, Social Determinants of Health Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, Iran, Tel: +981132199015, Email: farhadi_zeynab@yahoo.com

across different subgroups of women, resulting in an incomplete understanding of violence patterns. Second, insufficient attention has been paid to the influence of sociocultural variables, including education level, economic status, place of residence, and family structure, all of which may significantly shape the occurrence and severity of violence. Third, the lack of comparable and generalizable data constrains the development of effective policy interventions, particularly in preparation for future public health emergencies.

Accordingly, this systematic review and meta-analysis aimed to address these gaps by comprehensively synthesizing evidence on domestic violence against women during the COVID-19 pandemic, with a focus on Iran within a broader international context. By examining patterns of violence and identifying influencing factors, this study seeks to inform policy development and support the design of targeted interventions for mitigating domestic violence during future crises. The findings are intended to support policymakers, health professionals, women's rights advocates, and service providers in strengthening protective and preventive responses.

The Problem Statement

This study was derived from a systematic review and meta-analysis examining the prevalence and patterns of domestic violence during COVID-19 lockdowns (7). The study protocol was registered in the PROSPERO database (CRD42024544357) to ensure transparency and methodological rigor. The review was conducted and reported in accordance with established guidelines.

A comprehensive search of PubMed, Scopus, and Web of Science was conducted for studies published between January 2019 and December 2024. Search terms included combinations of "COVID-19 quarantine," "lockdown," "domestic violence," and "prevalence." Reference lists of eligible studies and relevant reviews were manually screened to identify additional sources.

Eligible studies were cross-sectional or cohort in design and reported quantitative data on the prevalence of domestic violence during lockdowns. Forms of violence included physical, psychological, sexual, verbal, and economic violence. Qualitative studies, studies with insufficient data, and those exclusively focused on child abuse were excluded.

Study selection followed a two-stage screening process (title/abstract and full-text), conducted independently by two reviewers. Discrepancies were resolved through discussion or consultation with a third reviewer. The selection process adhered to PRISMA guidelines.

Data extraction was performed independently by two researchers using standardized Joanna Briggs Institute (JBI) forms. Extracted data included study characteristics, design, and sample size, type of violence, lockdown context, and prevalence estimates. Methodological quality was assessed using JBI critical appraisal tools (8). Statistical analyses were conducted using STATA version 17. A random-effects model was applied to estimate pooled prevalence rates with 95% confidence intervals. Heterogeneity was assessed using the I² statistic. Subgroup and sensitivity analyses were performed, and publication bias was evaluated using funnel plots and Egger's test. Findings from the meta-analysis informed subsequent policy analysis and recommendations.

Key Findings

A total of 24 studies involving approximately 15,000 participants from 10 countries across three continents were included. Two studies were conducted in the Americas, eight in Asia, and fourteen in Africa. Ethiopia (12 studies) and Iran (4 studies) were the most frequently represented countries. Other countries including Canada, the United States, India, Saudi Arabia, China, Bangladesh, Congo, and Uganda were each represented by one study (Figure 1).

Figure 1. Geographical distribution of included studies by continent and country

The pooled prevalence of domestic violence against women during COVID-19 lockdowns was estimated at 36%, indicating that more than one in three women experienced violence during this period. Psychological violence was the most prevalent form (32%), followed by verbal violence (29%), while physical and sexual violence were each reported by 16% of women.

Psychological violence included behaviors such as humiliation, social isolation, and threats, whereas verbal violence primarily involved repeated insults and verbal degradation. Physical violence encompassed acts such as beating and throwing objects, while sexual violence referred to forced or unwanted sexual acts (Figure 2, Table 1).
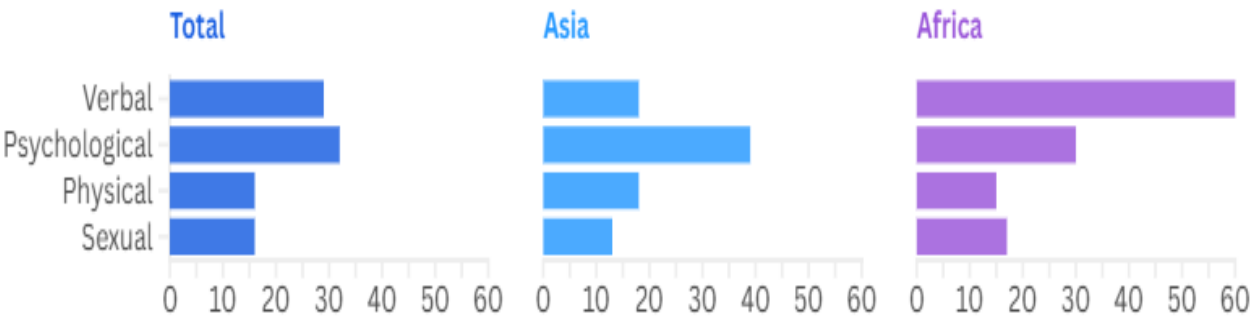
Figure 2. Comparative prevalence of domestic violence types during covid-19 lockdowns by region (Overall, Asia, and Africa)

34

Table 1. Prevalence and characteristics of domestic violence types during the COVID-19 lockdowns

Type of Violence	Prevalence (%)	Description
Psychological	32	Humiliating behaviors, control of social relationships, isolation, threats of harm
Verbal	29	Insults, verbal threats, profanity, and public humiliation in front of family
Physical	16	Physical assault, including hitting, pushing, throwing objects, or use of weapons
Sexual	16	Coerced or unwanted sexual relations, imposition of degrading sexual acts

Regionally, the highest overall prevalence of domestic violence was reported in the Americas, while verbal violence was most prevalent in African countries. The United States (74%), Uganda (68%), and India (62%) reported particularly high prevalence rates. Aggravating factors included increased firearm access, economic hardship, overcrowded housing, alcohol consumption, limited law enforcement presence, and weak social support systems (Table 2).

Table 2. Country-level prevalence and aggravating factors of domestic violence during covid-19 lockdowns

Country	Prevalence (%)	Aggravating factors
United States	74	Increased firearm purchases, disruption of police services, severe economic strain
Uganda	68	Strict lockdowns without financial support, overcrowding in small households
India	62	Closure of support centers, increased alcohol consumption, deeply rooted patriarchal norms

Pregnant and postpartum women emerged as the most vulnerable subgroup during lockdowns (9). Pregnant and postpartum women emerged as the most vulnerable subgroup during lockdowns (9). Compared with other women, they experienced significantly higher rates of psychological and physical violence. Contributing factors included economic

dependence on Partners, limited access to healthcare services, increased financial burdens related to childbirth and infant care, and psychological and hormonal changes that were sometimes exploited by perpetrators.

These findings underscore the urgent need for targeted interventions for pregnant and postpartum women, including strengthened support networks, remote counseling services, and uninterrupted access to healthcare and social protection during crises.

Policy Options / Analysis

This systematic review and meta-analysis provide robust evidence of a substantial increase in domestic violence during COVID-19 lockdowns, consistent with psychosocial theories linking collective stress to heightened interpersonal violence. Notably, psychological and verbal violence were more prevalentthan physical violence, emphasizing that domestic violence extends beyond physical harm to include less visible but equally damaging forms of abuse.

The heightened vulnerability of pregnant and postpartum women represents a critical concern for reproductive health and maternal care systems. Economic dependence, restricted healthcare access, and compounded stress during crises collectively increased the risk of violence in this group (10). Furthermore, observed geographical variations ranging from approximately 33% in Africa to 39% in Asia—highlight the influence of sociocultural, economic, and structural factors, reinforcing the need for context-specific interventions.

Addressing domestic violence during crises requires multisector, evidence-based strategies with explicit prioritization of vulnerable populations.

Future research should focus on long-term consequences, intervention effectiveness, and sustainable prevention should focus on long-term consequences, intervention effectiveness, and sustainable prevention strategies. Policymakers must also integrate domestic violence preparedness into national emergency response frameworks to prevent future "shadow pandemics."

Policy Analysis

Three policy options were evaluated based on effectiveness, cost-effectiveness, and feasibility:

Strengthening emergency support and response systems offers immediate protection and life-saving potential. Although initial costs may be high, long-term healthcare and social savings are substantial.

Preventive programs using a socio-ecological approach provide cost-effective, long-term benefits, particularly in addressing psychological and verbal violence through education, community engagement, and empowerment.

Developing legal and policy frameworks focused on specialized care, while requiring longer implementation timelines, offers durable structural impact, particularly for protecting vulnerable populations such as pregnant women.

Monitoring indicators—including reporting rates, service utilization, public awareness, and changes in violence patterns—are essential for evaluating policy effectiveness (Table 3).

Recommendations

Recommended Measures for Addressing Domestic Violence during Crises and Pandemics

A) Legal and Policy Interventions

Strengthen domestic violence legislation to explicitly include psychological and verbal abuse.

Develop national crisis preparedness protocols addressing domestic violence surges.

B) Support for Vulnerable Groups

Implement targeted support strategies for pregnant and postpartum women.

Integrate routine domestic violence screening into prenatal and postnatal care.

Expand crisis-specific support infrastructure to ensure service continuity.

C) Knowledge Development and Evidence-Based Action.

Allocate resources for applied research focusing on domestic violence prevention and response in emergency contexts.

Executive Recommendations

A phased policy approach is recommended:

Short-term (3–6 months): Emergency response and victim support.

Medium-term (6–12 months): Prevention and public awareness.

Long-term (1–3 years): Legal reform and institutionalization of support systems.

Clear indicators should guide monitoring and evaluation (Table 4).

Conclusion

The COVID-19 pandemic intensified the "shadow pandemic" of domestic violence, particularly psychological and verbal abuse. Addressing this challenge requires coordinated, multi-level interventions combining immediate support, preventive strategies, and structural reforms. Targeted attention to vulnerable groups and sociocultural context is essential for building resilient systems capable of preventing domestic violence during future crises.

Ethical Considerations

This study was conducted in full compliance with ethical research principles and in accordance with the guidelines of the Ethics Committee of the Babol University of Medical Sciences. This study was approved by the Ethics Committee [IR.MUBABOL.HRI.REC.1402.100].

Acknowledgements

Table 3. Comparative Analysis of Policy Options for Addressing Domestic Violence in Crisis Situations

Policy Option	Key Actions	Effectiveness	Cost-Effectiveness	Implementation Timeline	Implementation Challenges
1. Strengthening Support and Emergency Response Systems	Establish 24/7 emergency hotlines - Expand temporary shelters - Train healthcare personnel - Allocate emergency funds - Develop rapid judicial response mechanisms	High Enables rapid access and immediate response to violence cases	Moderate: Requires significant initial funding, but provides high short-term impact	Short-Term (3–6 months)	- Limited financial resources - Accessibility issues in rural areas - Mobility restrictions during crises
2. Implementing Preventive Programs with a Socio-Ecological Approach	- Awareness campaigns - Online life skills education - Community-based initiatives - Online family counseling - Economic empowerment for women	Moderate to High Long-term impact, especially on psychological and verbal violence	High: Low-cost and scalable, particularly for online strategies	Medium-Term (6–12 months)	- Digital divide - Cultural resistance - Need for stakeholder collaboration
3. Developing Legal and Policy Frameworks Focused on Specialized Care	- Reform domestic violence laws - Develop special protocols for pregnant women - Integrate violence screening into routine care - Establish national crisis-response guidelines - Build targeted research and data systems	High Structural reforms with lasting impact	Moderate: Initial infrastructure costs with long-term sustainability	Long-Term (1–3 years)	- Lengthy legislative processes - Intersectoral coordination requirements - Potential institutional resistance

37

Table 4. Policy timeline for addressing domestic violence during crises

Time Frame	Primary objective	Key recommended action	Measurable indicator
Short-Term (3–6 months)	Immediate response to victims' urgent needs	-Implement emergency reporting systems -Strengthen support centers and hotlines	- Rate of contact with support services - Response time to incidents
Medium-Term (6–12 months)	Prevention and public awareness	-Launch participatory educational programs - Run media awareness campaigns	-Public awareness levels -Participation in prevention programs - Reduction in reported psychological violence
Long-Term (1–3 years)	Institutionalization of support systems and legal reform	- Revise domestic violence laws - Integrate crisis-response protocols into national policies	- Enactment of legal reforms - Allocation of sustainable funding - Integration into health and social welfare systems

Conflicts of Interest

The authors declare that there are no conflicts of interest related to this study.

References

1. Guan D, Wang D, Hallegatte S, Davis SJ, Huo J, Li S, et al. Global supply-chain effects of COVID-19 control measures. Nat Hum Behav. 2020;4(6):577–87.

2. Supady A. Consequences of the coronavirus pandemic for global health research and practice. J Glob Health. 2020;10(1):010366.

3. Women U. The Shadow Pandemic: Violence against women during COVID-19 2025 [Available from: www.unwomen.org/en/news/in-focus/in-focus-gender-equality-in-covid-19-response/violence-against-women-during-covid-19.

4. Berniell I, Facchini G. COVID-19 lockdown and domestic violence: Evidence from internet-search behavior in 11 countries. Eur Econ Rev. 2021; 136:103775.

5. Haddadou M, Dellazizzo L, Simoes-Gomes T, Giguère C-É, Dumais A. The Effects of the COVID-19 Pandemic on Family Violence: A Meta-Analytical Investigation. COVID. 2025;5(2):13.

6. Babu SA. Fifth World Congress on Disaster Management: Volume IV: Proceedings of the International Conference on Disaster Management, November 24-27, 2021, New Delhi, India: Taylor & Francis; 2023.

7. Maleki G. Investigating types of domestic violence during the COVID-19 pandemic quarantine: A systematic review [MD thesis]. Babol: Babol University of Medical Sciences, International Branch; 2025 Jul. Registration No.: 724135082.

8. Jun H, Yoon S-H, Roh M, Kim S-h, Lee J, Lee J, et al. Quality assessment and implications for further study of acupotomy: case reports using the case report guidelines and the Joanna Briggs Institute critical appraisal checklist. 2021.

9. Lyons M, Brewer G. Experiences of intimate partner violence during lockdown and the COVID-19 pandemic. Journal of family violence. 2022;37(6):969–77.

10. Usta J, Murr H, El-Jarrah R. COVID-19 lockdown and the increased violence against women: Understanding domestic violence during a pandemic. Violence and gender. 2021;8(3):133–9.