

Corona Virus Pandemic and Social Isolation Process Influences on Increased Violence Against Women: an integrative review

Debora Batista de Souza Rocha (Corresponding author)

Graduate student, Graduate Nursing Course - Medical school, University of Uberlandia. Uberlandia, Brazil.

ORCID: <https://orcid.org/0000-0003-1339-3846>

Email: deborabsrocha@gmail.com

Andrea Mara Bernardes da Silva

College professor, Graduate Nursing Course - Medical school, University of Uberlandia. Uberlandia, Brazil.

ORCID: <https://orcid.org/0000-0001-5126-1110>

Email: andrea-bernardes@hotmail.com

Ana Carolina Silva Gonçalves

Graduate student, Graduate Nursing Course - Medical school, University of Uberlandia. Uberlandia, Brazil.

ORCID: <https://orcid.org/0000-0002-1216-0592>

Email: anacarolinasgenf@gmail.com

Vivian de Moraes Coelho

Graduate student. Sports and Physical Education School, University of Sao Paulo. Ribeirao Preto, Brazil.

ORCID: <https://orcid.org/0000-0001-7603-2568>

Email: viviancoelho97@hotmail.com

Luana Araujo Macedo Scalia

College professor, Graduate Nursing Course - Medical school, University of Uberlandia. Uberlandia, Brazil.

<https://orcid.org/0000-0003-1000-8738>

Email: luabellamacedo@gmail.com

Abstract

Introduction: violence against women is a complex worldwide health problem due to its multicausality. Global background alterations resulting from Corona Virus (Sars-Cov 2) pandemic implicated on the exacerbation of many vulnerabilities, including those that predispose domestic violence. Nowadays this kind of violence is even more intense and reaches significant national and worldwide morbimortality proportions among women. Objectives: to synthetize data described in the literature regarding how the

Covid-19 pandemic and social isolation process have affected women lives concerning domestic violence. Methodology: integrative literature review, using a high sensitivity search in the databases Pubmed, Cochrane, Embase and the Virtual Library of Health (VLH) on Dec 07 2020. Ten studies were included in this review. Results: 90% of the studies analyzed presented an increase in intensity and frequency of violence against women after the beginning of social distancing policies. Women that had already suffered any kind of violence before the beginning of the isolation policies are more propense to physical violence during reclusion. Pandemic reduced contact of these women with their informal support network and with health services, culminating in the enhancement of the gravity of cases that are assisted by the system. Conclusion: women are a highly vulnerable population to violence during the pandemic period. Public policies that qualify professionals and facilitate prevention, tracking and intervention of cases are even more necessary.

Keywords: Women; Violence against women; Domestic violence; Gender violence; Corona virus infection;

1. Introduction

Violence against women is considered a global epidemy and a violation of human rights (OPAS, 2017). It is defined by the American States Organization as any action that, based on gender, causes suffering, death, physical, sexual or psychological damage (TJES, 2020).

It is subdivided into five categories: physical violence, when there is harm to a woman's body by use of physical force or objects by the aggressor; psychological violence, when involves emotion harm, by intimidation or women self-esteem diminishment; sexual violence, when women are forced to witness, maintain or participate in any kind of sexual action against her will; patrimonial violence, involves retention, total or partial destruction or subtraction of any woman's item or object, including work tools, documents, money and others; moral violence, when any allegation is pejorative or falsely held, exposing the victim to calumnies, defamation or injury (TJES, 2020).

Physical and sexual violence are the most notified. In the whole world, one third of women have reported some physical or sexual violence from their partners and 38% of feminicides occur in this context. The variables that most influence the occurrence of domestic violence are stressful environments and conflict situations, low educational level, violence background, disagreement and marital dissatisfaction (OPAS, 2017).

On March 11th, 2020 Sars-Cov 2 contamination, responsible for the popularly known Covid-19, was elevated to a Pandemic category by the Word Health Organization (WHO). All governments were called to take emergency measures to control dissemination and contamination by this virus. The best way to control Covid-19 spread was social isolation, according to the WHO recommendation. This measure changed social organizations and all kinds of spheres in human relationship: interactivity, business, education, health actions. Workers' organization was reconfigured to adequate itself to the historical moment. However, inside the houses, women began to deal with many issues, such as factors that contribute to and enhance domestic violence (WHO, 2020).

In accordance to the WHO (2020), health reports of many countries, including the United States of

America, United Kingdom, China and others, demonstrated a significant increase of violence against women during the pandemic. Furthermore, femicide cases increased and the number of survivors to the most aggressive episodes, the ones that look for health services, decreased. There also was a decrease in the number of complaints and police report filings.

Preexistent gender inequalities, especially related to discriminatory culture structures, have made the situation even worse to women. Many countries where inequalities between genders and violence against women is already high had increased femicide and violence cases records during Coronavirus pandemic (Rana, 2020).

In addition, health services access decreased, which impairs early diagnosis and treatment of violence against women. Health systems have been intensely directed to COVID-19 infection prevention, combat and treatment, leading to an almost complete reconfiguration of service strategies to the population (WHO, 2020).

The significant signals for the rise in violence against women cases, the current pandemic scenario, progressive recession and slow world economy recovery, health professional's difficulty to maintain effective assistance to violence against women victims and the small number of papers approaching this theme highlight the importance of works in this area.

This study synthesized literature data concerning how the Coronavirus pandemic (COVID-19) and social isolation process is affecting women, regarding domestic violence.

2. Methodology

This is an Integrative Literature Review. This methodology was chosen to guarantee study synthesis. It has the following stages: theme definition and leading question elaboration; literature search; data extraction; analysis of selected studies; discussion of results; synthesis and presentation of information (Souza et al., 2017).

Integrative review is an important tool to compare and synthesize current evidence, phenomena, and concepts in many fields of knowledge. In Health Sciences it stimulates evidence-based practice (EBP) and propitiates an optimized assistance, since it can identify common points in a research problem, providing tools for a reflective practice (Souza et al., 2017).

After identifying the theme, the following leading question was made: "How does the Coronavirus pandemic and social isolation process have influenced the increased amount of violence against women cases?". This question was elaborated following PICO (Patient/Population, Intervention, Comparison/Control, Outcome) strategy, rearranged for integrative reviews (Richardson et al., 1995).

A search was done in Pubmed, Excerpta Medica dataBASE (Embase), Cochrane Library, and Virtual Library of Health (VLH), which covers the databases Literatura Latino-americana e do Caribe em Ciências da Saúde (LILACS), Pan American Health Organization (PAHO-ÍRIS), Índice Bibliográfico Español en Ciencias de la Salud (IBECS), World Health Organization (WHO-IRIS), Scientific Electronic Library Online (SCIELO) Preprints, Base Regional de Informes de Avaliação de Tecnologias em Saúde das Américas (BRISA/RedTESA) and Ministerio de Salud del Perú (MINSAPERÚ), and returned results for the search terms.

Health Sciences Controlled Keywords (DeCS) used in all searches were: “mulheres”, “violência doméstica”, “violência de gênero”, “violência contra a mulher” e “infecções por coronavírus”. A highly sensitive strategy was used, adding all terms related (or synonymous) to the main term. In Pubmed and Cochrane Library the terms were translated to the corresponding Medical Subjects Headings (Mesh): “women”, “domestic violence”, “gender-based violence”, “violence against women” and “coronavirus infection”. In Embase the keywords followed Embase subject headings (Emtree). In VLH the keywords were used in Portuguese, English, French and Spanish along with their category codes.

In order to prevent underestimation of results, search terms were arranged in sets: #1 “women”, #2 “domestic violence”, #3 “gender-based violence”, #4 “violence against women”, #5 “coronavirus infection”. The search strategy followed the same steps in all bases, respecting the search language. After sensitive search of each search term, they were grouped with Boolean operators OR and AND: #6 #2 OR #3 OR #4 OR #5; and #7 #1 AND #6 AND #5. The filter “paper fully available”, provided by the database, was applied in the VLH search. Papers from Medline were excluded since they were duplicates from Pubmed. The whole search process was conducted on December 7th, 2020.

Inclusion criteria were: papers related to the search theme, with no restriction on language or publication date. Database search order was: Pubmed, Embase, Cochrane and VLH. Exclusion criteria were: duplicates, not fully available, not related to the theme, literature review, case reports, opinion articles, editorials and comments.

Two hundred fifty articles were identified: 84 in Pubmed, 158 in Embase, 1 in Cochrane and 13 in VHL. Search results were exported to online references organizer EndNote Web and were filtered to eliminate duplicates. 45 articles were excluded in this process. The remaining papers (211) were exported to Rayyan, online facilitator app for reviews. All papers were filtered to identify duplicates once more, and 12 articles were excluded in this process, remaining 199 studies for analysis.

Inclusion process was done by two reviewers, double-blinded, in three stages. Phase 1: reading title and abstract; Phase 2: resolution of questionable and conflicting cases; Phase 3: reading the full text of all remaining articles.

Studies were selected according to PRISMA strategy (identification, selection, eligibility and inclusion) (Brazil, 2015), as shown in Figure 1.

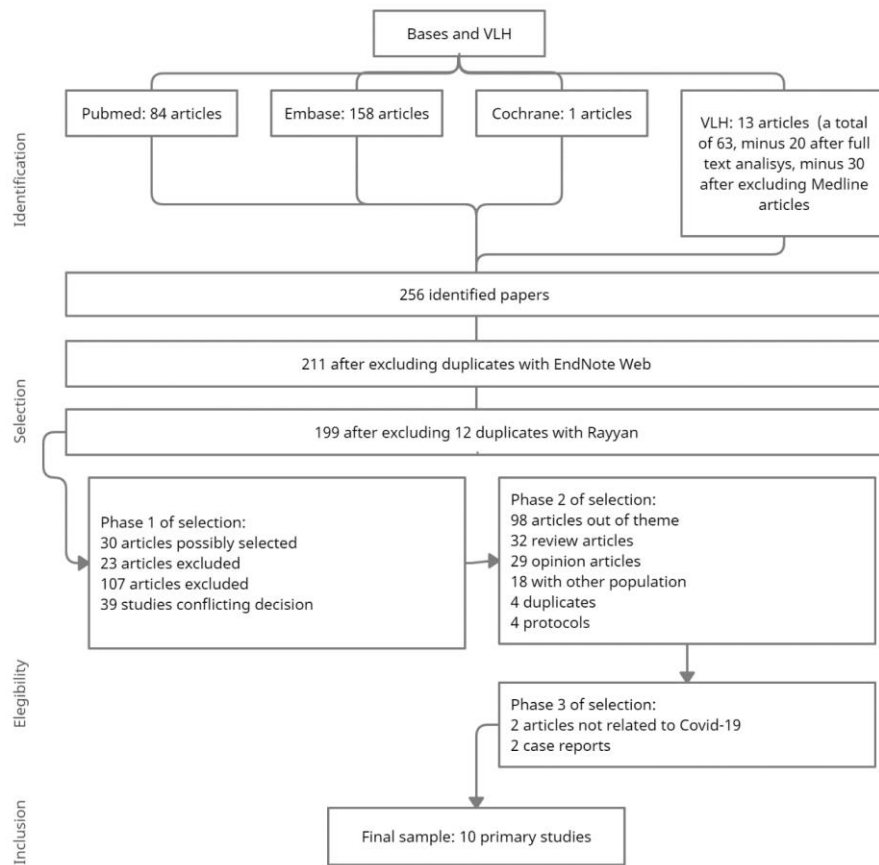


Figure 1. Articles selection flowchart according to PRISMA strategy.

Source: Elaborated by the author, 2021.

Ten primary studies were included in this review. Data collection occurred with a validated categorization instrument (Ursi, 2005). Evidence level was not considered as exclusion criterium, due to the small scientific body of this matter. Analysis was performed in a descriptive manner, by reading and synthesizing each study included in this review.

3. Results and discussion

All ten included articles were published in English. 50% of publications investigated the correlation between “domestic violence” and “Coronavirus pandemic” and the other 50% included the variable “mental health impact”. All studies were classified transversal, eight of them had quantitative approach, one qualitative approach and one mixed approach.

The countries included in the studies were: Jordan, United States of America (USA), Ethiopia, Pakistan, Italy, Tunisia, Peru and Netherlands. In five studies (50%), women belonged to the community and in three (30%) they were in vulnerably situation. One study investigated violence in vulnerable families, and one approached communities’ men and women. Six studies were conducted remotely (e-mail, electronic forms, phone calls and forms available in social media, such as Facebook, Whatsapp, and local ones), two (20%) checking public data, and two (20%) in presential interviews or in-person self-applied questionnaire. All included studies are synthesized in Table 2.

Table 1. Publication information synthesis of selected articles

IN	Title	Authors	Local the study was conducted and publication year
1	<i>Violence against Jordanian Women during COVID-19 Outbreak</i>	S. Abuhammad	Jordan / November 2020
2	<i>Intimate partner violence against reproductive age women during COVID-19 pandemic in northern Ethiopia 2020: a community-based cross-sectional study</i>	T. G. Gebremeskel, G. G. Gebremeskel, D. B. Tadesse	Ethiopia / October 2020
3	<i>The pandemic paradox: domestic violence and happiness of women</i>	W. Haq, S. H. Rasa, T. Mahmood	Pakistan/ November 2020
4	<i>Women's mental health: acute impact of COVID-19 pandemic on domestic violence</i>	S. Sediri, Y. Zgueb, S. Ouanes et. al.	Tunisia/ October 2020
5	<i>Exacerbation of Physical Intimate Partner Violence during COVID-19 Lockdown</i>	B. Gonsagi, H. Park, R. Thomas et. al.	USA / August 2020
6	<i>Time from COVID-19 shutdown, gender-based violence exposure, and mental health outcomes among a state representative sample of California residents</i>	A. Raj, N. E. Johns, K. M. Barker et. al.	USA / August 2020
7	<i>Effect of COVID-19 pandemic on women's health and safety: A study</i>	B. Sabri, M. Hartley, J. Saha et. al.	USA / October 2020

	<i>of immigrant survivors of intimate partner violence</i>		
8	<i>COVID-19 and the rise of intimate partner violence</i>	J. M. Aguero	Peru / September 2020
9	<i>Gender-based violence during the COVID-19 pandemic response in Italy</i>	R. Ludin, B. Armocida, P. Sdao et. al.	Italy / December 2020
10	<i>Domestic violence in families in the Netherlands during the coronavirus crisis: A mixed method study</i>	B. Tierolf, E. Geurts, M. Steketee	Netherlands / October 2020

Source: Elaborated by the author, 2021. IN: Study identification number.

The first study held an online survey with 687 Jordan community women. Its objective was to determine domestic violence prevalence among Jordanian women and to identify possible correlations between domestic violence and Coronavirus pandemic. Most participants were 18 to 25 years old, 35% were married and 40% reported suffering violence during isolation process. Two hundred eighty-seven women were victims of violence, and 70% of them had children with the aggressor, about 40% called the police at the aggression moment; however, in only 10% of the cases the aggressor was arrested (Abuhammad, 2020).

Only 9.8% of the women had suffered physical violence previously to social isolation, indicating an increase in the number of new cases or intensification of cases in which women had not suffered physical injury yet. The most prevalent kind of violence was the physical one, where 68.3% of women reported suffocation aggression and 3.5% by weapons. 45.6% had their mobile phone taken, 20.2% got indirect threats, usually by text messages, 14.6% had their pets assaulted, 16.7% were induced to take medicine and 70.7% were blamed for being assaulted (Abuhammad, 2020).

Prevalence of physical violence in this study contrasts with other studies, where verbal, psychological and property violence were most frequent during the pandemic. One plausible explanation may be that physical violence against women is considered as a legitim discipline method in some cultures, commonly associated to patriarchal communities and restrictive religions (Haq, Raza, Mahmood, 2020).

This reasoning line can be supported by the fact that among women that were assaulted, some were not assaulted only by their partners, but in 19.5% of cases by their brothers, 27.2% by their fathers and 48.9% by their mothers. This last data can also be related to other findings in the same study, that highlight replicated violence, that is, aggression suffered by women was positively correlated to the violence they exerted over their children and family members, especially females (Abuhammad, 2020).

The second study was conducted with Ethiopian childbearing age women, also via online questionnaire, assessing intimate partner violence (IPV) prevalence during the pandemic. It was responded by 682 women, and 24.6% reported as violence victims. The most prevalent violence was psychological (13.3%), followed by physical (8.3%) and sexual (5.3%). Most propense women to be assaulted were housewives, unemployed, under 30 years old and married by matrimonial arrangements. Husband's higher educational level seems to be a domestic violence reduction factor (Gebremeskel, Gebremeskel, Tadesse et al., 2020).

Even though there was an increase in violence prevalence during the pandemic, there were not sufficient comparisons with previous periods to establish a direct relation between increased violence cases and social isolation process (Gebremeskel; Gebremeskel, Tadesse et al., 2020). Younger women propension to domestic violence can be related to other study results, that described lower violence prevalence in women over 40 years old (Haq, Raza, Mahmood, 2020).

The third study was conducted in Pakistan by an online questionnaire with 389 married women. It assessed the relation between COVID-19 lockdown in women empowerment, happiness and violence. Thirty-five percent of them reported suffering violence during isolation period, with notable aggression increase since the beginning of the quarantine; 28% suffered verbal and 34% emotional violence. Violence prevalence was smaller in nuclear families (couple and children) than in families with parents-in-law, grandparents, siblings-in-law and other relatives. Women's domestic overwork during the pandemic was correlated to aggression cases - 55% of women reported taking care of all domestic tasks, and 42% were entirely responsible for childcare (Haq, Raza, Mahmood, 2020).

Unemployed women also had greater chance of suffering violence; however, this correlation was observed only when a bad marriage relationship previously to the pandemic was reported. Women who worked and had a bad marriage relationship previously to the pandemic had even more chances to suffer violence, since they had more challenges in conciliating external job with domestic activities imposed as obligatory by society (Haq, Raza, Mahmood, 2020).

Events that were most related to violence episodes were: request help with domestic chores, ask for help with childcare or education, and maintain a formal job. In this context, Pakistani women with a higher education level had greater chances of suffering violence than women with less instruction, by the attempt of braking male domination and fighting for equal treatment between sexes (Haq, Raza, Mahmood, 2020). These data contrast to studies done in countries where women already have more civil, financial and social autonomy (WHO, 2020).

The fourth study was conducted in Tunisia, with 751 women responding an online questionnaire. It analyzed lockdown effect over their mental health and possible impact in violence against them. Participants were between 18 and 69 years old with average of 37 years old; 69% were married; 65.1% had children and 34.9% had no kids. Comparison of the three-year average prior to the pandemic with the results obtained, violence against women increased from 4.4% to 14.8% in the lockdown period. Among the types of violence, 96% suffered psychological, 41% economic and 10% physical violence. Approximately 78% were assaulted for the first time after the beginning of the pandemic, and 90% of them did not look for help (Seridi, Zgueb, Ouanes et al., 2020). Self-reported depression and anxiety were

considered factors associated to domestic violence occurrence in this and other studies from this review (Haq, Raza, Mahmood, 2020; Seridi, Zgueb, Ouanes et al., 2020).

Most women (73%) that had already suffered violence before the pandemic reported increase in aggression or evolution to physical violence; 38.7% were not able to maintain their jobs in the social isolation period (Seridi, Zgueb, Ouanes et al., 2020). These data support the findings of another study, where women's work overload was a predisposing factor to violence and to stress, anxiety and depression (Raj, Johns, Barker et al., 2020).

Study number five was conducted in a trauma Reference Hospital in the USA, where notified victims of physical aggression are attended. It evaluated incidence, patterns and gravity of violence to victims during the pandemic, in comparison with the previous three years. Sixty-two victims were attended, which was lower than that of previous years: 104 in 2019, 106 in 2018 and 146 in 2017. However, the number of victims by IPV was 1.8 times greater than the previous three years: 42% of victims reported suffering physical abuse in 2020, against 12% in 2017. The number of injuries per victims and its severity also increased. Severe injuries raised from 17% in 2017 to 38% in 2020. Assaults identified as severe were 5 times greater compared with the previous three years, and the incidence of violence with high risk of death doubled (Gosangi, Park, Thomas et al., 2020).

The most prevalent ethnic group attended was white (65%), contrasting with 26% white in the previous three years. This fact can be explained by the greater difficulty that minority women have to access health services during the pandemic. The decrease in the number of patients can indicate diminished opportunity to access health services, whilst the increase in more severe injuries indicate delay in reaching for help (Gosangi, Park, Thomas et al., 2020).

The sixth study was conducted in the USA and it investigated a possible association between the pandemic and anxiety, depression and domestic violence cases. Two thousand eighty-one residents, both male and female, answered an online questionnaire, with 53.5% maintained normal mental health state during social isolation, 26.8% reported depression or anxiety symptoms and 15.5% reported IPV. Women were more susceptible to violence than man (24% against 6.4%) and presented greater anxiety, depression and stress incidence, which enhanced this group's vulnerability to violence and assault. There were no pre and post pandemic comparisons; however, findings show women as more vulnerable to violence as they imposed to greater workload and domestic responsibilities and, therefore, they are more stressed, anxious and depressed, becoming an even more vulnerable population (Raj, Johns, Barker et al., 2020).

The seventh study was also conducted in the USA, with 45 immigrant women, supported by an immigrant in vulnerability community service, and 17 of its service providers. The interviews were qualitative and conducted by online platforms. It investigated the pandemic impact in this group of vulnerable women. All of them reported violence intensification during lockdown. Fear of deportation, social instability, financial difficulties and unemployment were the main causes of violence against women and abusive situation repetition. Living with the aggressor was an aggravating factor present in all recorded cases (Sabri, Hartley, Saha et al., 2020).

The victims reported an increased persecution behavior and financial control, restricted access to supplies, documentation and health services since the aggressor spent more time at home. There was also a frequent report of psychological manipulation: the aggressors said that, by leaving the house to try to

escape tense situations, women would be infected by COVID-19, or threatened to kick out women and force them to expose themselves to the virus on the streets (Sabri, Hartley, Saha et al., 2020).

Service providers argued that sheltering and intervention possibilities were limited by containment, because women do not have access to technologies, and those who do are under constant watch from aggressors. In addition, in total lockdown, home visits could not occur, police assistance is limited and escape possibilities from an aggression situation are drastically diminished. Incidents that are assisted by the police, usually, turn abuse situation worse, since women shelter services, considered non-essential, were closed during the pandemic. This forces women to go back to their home after filing a report or external intervention in an aggression situation (Sabri, Hartley, Saha et al., 2020).

The lack of presential relationship shattered the confidence relation established between victim and care provider. Even when these professionals are able to maintain a virtual conference routine, they feel insecure about women well-being veracity (Sabri, Hartley, Saha et al., 2020).

The eighth study was performed in Peru and determined call incidence to Línea 100 (helpline for domestic violence), to identify possible correlations with coronavirus pandemic. All call logs between 2007 and 2020 were analyzed. Calls to Línea 100 increased, progressively, in all states of the country according to the pandemic progress: 1.02 times greater in April and 2.12 times greater in July in comparison to the same period in previous years. Specifically, in 2020, there was a 48% increase in the number of calls after the beginning of pandemic, with further progressive increases in the isolation months. This increase was not associated to geographical areas where there was already IPV prevalence nor to specific sociodemographic conditions, such as educational level, health plan access, public services access or possession of durable goods (Aguero, 2020).

The ninth study was in Italy and also analyzed the number of calls to the anti-violence public service, from 2016 to 2020 and its objectives were similar to the previous (8th) study. Average number of calls in isolation period months went from 1306 to 2442 in 2020, a 59% increase if comparison to the previous three years. Women with violence history before the pandemic were responsible for less than one third of all calls (Lundin, Armocida, Sdao et al., 2020), which emphasize violence new cases during this period, in consonance with other studies (Raj, Johns, Barker et al., 2020; Abuhammad, 2020; Gosangi, Park, Thomas et al., 2020).

Study number 10 has the most different outcome of all studies included. It was conducted in the Netherlands, with mixed method and around 200 families in quantitative interview and 50 families in qualitative stage. It identified families assisted by health services during Coronavirus pandemic outcome. No significant differences in domestic violence incidence and child abuse before and after the pandemic were observed, even though one half of the families already lived with some kind of severe violence.

Families involved reported greater stress and family tension due to domestic activities overload and economic tension; however, they denied that these factors reflected in the increase of violence suffered or committed. The authors stated that it is possible to correlate diminished possibility to reach for external help with intrafamilial strategies developed to handle conflicting situations (Tierolf, Geurts, Steketee, 2020).

Some social assistants responsible for providing care to these families also were interviewed. Most of them stated they strived to maintain contact with the families, through phone calls and even meeting in

open places. Uncertainty about the reliability of remotely obtained information about family's well-being was present in most statements (Tierolf, Geurts, Steketee, 2020).

Some factors can be associated to the findings in the Netherlands: the country did not go through a total restriction during the pandemic and all professionals reported maintaining some sort of close contact with the families. Furthermore, a methodological bias was observed in the fact that the questionnaire was directed to the whole family, and not specifically to the violence victim. Since it was applied remotely, it is possible that the aggressor concealed the violent situation, forced or coerced the victim to lessened violence occurrence reports. The authors also highlighted divergences between data from the online questionnaire and directed survey, with an increase in violent reports in the second one (Tierolf, Geurts, Steketee, 2020).

Table 2. Objectives, study design, sample synthesis and main results of included studies

IN	Objectives	Study design and population	Main results
1	To determine prevalence of violence among Jordanian women and to identify correlations between violence against women and COVID-19 pandemic.	Quantitative, transversal; 687 adult women selected by convenience using an online questionnaire.	* Intra familiar patterns govern poly-violence dynamics with women and children; * 40% women reported that they suffered violence during the pandemic; * Violence against women predictors during the COVID-19 pandemic were: be unemployed and be married.
2	To determine violence prevalence against women in reproductive age by partners in the North of Ethiopia during COVID-19 pandemic.	Quantitative, transversal; 682 women in reproductive age, random sample.	* Violence prevalence against women by their partners was 24.6%; * Psychological violence was the most prevalent (13.3%), followed by physical (8.3%) and sexual (5.3) violence.
3	To portray women violence, happiness and empowerment dynamic during COVID-19 lockdown.	Quantitative, transversal; 389 Pakistani women, married, selected by convenience using an online questionnaire.	* 47% women do not consider themselves happy. The main reason for that was work overload, pandemic stress, violence by their partners; * Pakistani women considered very empowered before the pandemic has greater odds of suffering violence than less empowered ones.

4	Study lockdown effect over Tunisian women's mental health and its possible impact over violence against women.	Quantitative, transversal, snowball sampling method; 751 Tunisian women used an online survey.	<ul style="list-style-type: none"> * Violence Against women increased from 4.4% to 14.8% after lockdown started; * 85% women are anxious, stressed or have depressive symptoms, over one half of these had highly severe symptoms. * 73% women that had suffered violence before the pandemic reported increase in violence during lockdown.
5	To evaluate incidence, patterns and severity of injuries in intimate partner violence (IPV) victims during COVID-19 pandemic in 2020, in comparison with the previous three years.	Quantitative, observational, retrospective; patients reporting physical abuse between March 11 th and May 3 rd , 2020, during COVID-19 pandemic were compared with the same period in the previous three years.	<ul style="list-style-type: none"> * The total number of patients decreased, but radiographic findings showed violence against women increased 1.8 times in 2020; * The number of abuses identified as stage three was five times greater than the previous three years; * The total number of central injuries was greater (46/12 injuries) in comparison with the previous years (44/27). * Increase in the number of high-risk abuse, including strangulation, weapons and burns victims.
6	To investigate the association between the pandemic with anxiety, depression and domestic violence cases.	Quantitative, transversal; 2081 California residents above 18 years old selected by random sampling.	<ul style="list-style-type: none"> * 53.5% maintained a normal health state; * 26.8% reported depressive or anxious symptoms; * 15.5% reported violence history from their intimate partner; * 10.1% reported intimate partner violence repeatedly associated to sexual violence; * Intimate violence partner was considered as always associated to predictions of mental disorders; * Women are more liable to violence by intimate partner.

7	To investigate pandemic's impact specifically on intimate violence partner immigrant survivors.	Qualitative, exploratory; interview with 45 immigrants, victims of intimate violence partner and 17 care providers.	<ul style="list-style-type: none"> * All immigrants reported increase in violence during the pandemic period; * Financial and unemployment difficulties were the greatest amplifier of violence against women; * Increasing domestic workload demand due to isolation measurements was a crucial factor for job loss by women .
8	To determine call incidence to the helpline for domestic violence (<i>Línea 100</i>) and to identify correlations between number of calls and COVID-19 pandemic.	Quantitative, transversal; All call logs to <i>Línea 100</i> from 2007 to 2020.	<ul style="list-style-type: none"> * Calls to <i>Línea 100</i> increased progressively according to the pandemic progress; * 48% increase in calls since the beginning of pandemic.
9	To determine call incidence to anti violence help service in comparison with the four previous years.	Quantitative, transversal, with systematic analysis; Anti violence help service call logs from 2016 to 2020.	<ul style="list-style-type: none"> * 59% call increase to anti violence help service in comparison to the same period in the three previous years; * Women with call history to this help services were responsible for less than $\frac{1}{3}$ of calls.
10	To understand lockdown impact in families already known by social services.	Mixed method (quantitative-qualitative); transversal; 159 families recruited before COVID-19 crises and 97 families recruited during lockdown.	<ul style="list-style-type: none"> * There were no significant differences between before and during pandemic violence intensity occurrence; * Sense of safety among parents and children was the same before and during pandemic; * Tension and conflict increase were caused by school kids work, chore division at home or care and kids' education.

Source: Elaborated by the author, 2021. IN: Study Identification Number.

Only three of the ten studies selected mentioned potential strategies for the health professionals reach a better outcome in the identification, assistance and solution of violence cases Against women. Among the strategies mentioned was professional training to identify and assist cases of violence against women, especially during pandemic and natural disasters period and war situations (Tierolf, Geurts, Steketee, 2020).

Engagement of emergency services personnel in the identification of suspicious cases, and proper referral of women was also mentioned. This is an interesting approach, since access to less complex support is restricted during isolation, and women tend to look for assistance only in the worst cases (Gosangi, Park, Thomas et al., 2020).

Primary health care professional mobilization and community support were important strategies to assist women that had been in vulnerable situation. Establishing effective communication means with these women, in order to prevent aggravating violence; family, neighbors, friends, social groups and informal support networks, with contact strategies even if remote (one example given was pre-programmed periodic call: in case of no answer for a pre-set number of calls, police and help services are contacted) were positively listed (Sabri, Hartley, Saha et al., 2020).

Training of professionals responsible for monitoring violence cases is an important factor, since if this contact is made in an inadequate manner violence situation can worsen. Strategies, such as questions that have yes and no answers and using words as codes to identify if the call is in speaker, if the victim is alone or if she demands immediate assistance are important (Sabri, Hartley, Saha et al., 2020).

Despite the notorious practical difficulties due to service overload, the role of health systems assuring the rights of women that are victims of violence is extremely important, since it is in this environment that most cases are discovered, notified and treated (OMS, 2020).

Governmental actions were also pointed as extremely important to women rights compliance. Law implementation that punishes more effectively the aggressors and guarantees the victims safety is urgent, since most women chose to not report the violence suffered for fear of the aggressor or by not believing in a favorable outcome by justice (Abuhammad, 2020; Sabri, Hartley, Saha et al., 2020).

4. Conclusions

Regardless of divergencies and cultural peculiarities, violence against women is a global public health problem. Intense social tension situations, such as Coronavirus pandemic, were positively correlated to the expressive increase in gender-based violence occurrence in 90% of the analyzed studies. All these factors lead to the conclusion that women are a propense population to suffer violence during a pandemic period, especially those who did not have a good relationship before isolation.

Stress, anxiety and depression also had positive correlation with violence propension in most studies. Women work overload was also an important factor to mental disfunction occurrences and greater chance of violence. Vulnerable populations are even more exposed during moments of crises, for that reason implementation of public policies that consider these public specificities are extremely important.

Health professionals are placed in a constrained situation before the present scenario faced by women victims of violence. Most of them have reduced physical and technological resources, and little or no specific training to assist victims.

There are few studies conducted about this theme with methodological quality. Research development related to professional strategy implementation and the relation between pandemic and social isolation period and domestic violence increase in specific cultural contexts are important to understand the phenomenon and factors involved, as well as to guide professionals in their practices.

Limited actions and strategies were taken by governments and health agencies to capacitate professionals and reduce the abyss between women rights and what is really available to them in practice. Public policies that recognize and treat this problem specifically and assertively are necessary to guarantee human rights to women. Meanwhile, the “shadow epidemic” – as the increased number of violence cases against women was designated by the WHO (2020) – continues to take catastrophic proportions worldwide.

5. Acknowledgement

The research is financed by the authors.

6. References

- A. Raj, N. E. Johns, K. M. Barker, J. G. Silverman, “Time from COVID-19 shutdown, gender-based violence exposure, and mental health outcomes among a state representative sample of California residents”, *E Clinical Medicine*, United States of America, n 26, Ago. 2020, available at: <https://www.sciencedirect.com/science/article/pii/S2589537020302649>. Access Dec 01, 2020, pp. 1-7.
- B. Gonsagi, H. Park, R. Thomas, R. Gujrathi, C. P. Bay, A. S. Raja, S. E. Seltzer, M. C. Balcon, M. L. McDonald, D. P. Orgill, M. B. Harris, G. W. Boland, K. Rexrode, B. Khurana, “Exacerbation of Physical Intimate Partner Violence during COVID-19 Lockdown”, *Radiology*, United States of America, 298(1): E38-E45, Aug. 2020, available at: <https://pubs.rsna.org/doi/10.1148/radiol.2020202866>. Access Dec 01, 2020, pp. 38-45.
- B. Sabri, M. Hartley, J. Saha, S. Murray, N. Glass, J. C. Campbell, “Effect of COVID-19 pandemic on women’s health and safety: A study of immigrant survivors of intimate partner violence”, *Health Care for Women International*, United States of America, Out. 2020, available at: <https://pubmed.ncbi.nlm.nih.gov/33085577/>. Access Dec 01, 2020, pp. 1-16.
- B. Tierolf, E. Geurts, M. Steketee, “Domestic violence in families in the Netherlands during the coronavirus crisis: A mixed method study”, *Child Abuse & Neglect*, Netherlands, n. 4, De. 2020, available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/jftr.12113>. Access Dec 01, 2020, pp. 1-12.
- E. S. Ursi, C. M. Gavao, “Prevenção de lesões de pele no perioperatorio: revisão integrativa da literatura”, *Revista Latino Americana de Enfermagem*, Brazil, n 14, Fev. 2016, available at:

<https://www.scielo.br/pdf/rlae/v14n1/v14n1a17.pdf>. Access Dec 01, 2020, pp. 124-131.

J. M. Agüero, “COVID-19 and the rise of intimate partner violence”, *World Development*, United States of America, n. 137, Set. 2020, available at:

<https://www.sciencedirect.com/science/article/pii/S0305750X20303442>. Access Dec 01, 2020, pp. 1-8.

L. M. M. Souza, C. Marques-vieira, S. Severino, V. Antunes, “A metodologia de revisão integrativa da literatura em enfermagem”, *Revista Investigação em Enfermagem*, Brazil, n 21, nov. 2017, available at: https://www.researchgate.net/publication/321319742_Metodologia_de_Revisao_Integrativa_da_Literatura_em_Enfermagem/link/5d7d2525a6fdcc2f0f6fb0f9/download. Access Nov 01, 2020, pp. 17-26.

OPAS, “Violência contra as mulheres”, informative note, available at:

https://www.paho.org/bra/index.php?option=com_content&view=article&id=5669:folha-informativa-violencia-contra-as-mulheres&Itemid=820. Access Dec 01, 2020.

R. Ludin, B. Armocida, P. Sdao, S. Pisanu, I. Mariani, A. Veltri, M. Lazzerine, “Gender-based violence during the COVID-19 pandemic response in Italy”, *Jogh*, Italy, n 02, Dez. 2020, available at:

<https://europepmc.org/article/MED/33110555>. Access Dec 01, 2020, pp. 1-4.

S. Abuhammad, “Violence against Jordanian Women during COVID-19 Outbreak”, *The International Journal of Clinical Practice*, Jordan, e13824, Nov. 2020, available at:

<https://onlinelibrary.wiley.com/doi/10.1111/ijcp.13824>, access Dec 01, 2020, pp. 1-7.

S. Sediri, Y. Zgueb, S. Ouanes, U. Ouali, S. Bourgou, R. Jomli, F. Nacef, “Women's mental health: acute impact of COVID-19 pandemic on domestic violence”, *Archives of Women's Mental Health*, Tunisia, Dec. 2020, available at: <https://pubmed.ncbi.nlm.nih.gov/33068161/>. Access Dec 01, 2020, pp. 1-8.

T. F. Galvão, T. S. A. Pensani, D. Harrad, “Principais itens para relatar Revisões sistemáticas e Meta-análises: A recomendação PRISMA”, *Epidemiologia e Serviços de Saúde*, Brazil, n2 02, Jun. 2015, available at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S2237-96222015000200335. Access Nov 01, 2020, pp. 335-342.

T. G. Gebremeskel, G. G. Gebremeskel, D. B. Tadesse, “Intimate partner violence against reproductive age women during COVID-19 pandemic in northern Ethiopia 2020: a community-based cross-sectional study”, *Reproductive Health*, Ethiopia, n. 17, 2020, available at:

<https://pubmed.ncbi.nlm.nih.gov/33028424/>. Access Dec 01, 2020, pp. 1-8.

TJES, “Definição de violência contra a mulher”, informative note, Brazil, available at:

<https://www.tjse.jus.br/portaldamulher/definicao-de-violencia-contra-a-mulher#:~:text=De%20acordo%20com%20a%20Conven%C3%A7%C3%A3o,psicol%C3%B3gico%20>

%C3%A0%20mulher%2C%20tanto%20no. Access Dec 01, 2020.

U. Rana, J. Govender, “Indian Women 's mental calamity: A shadow pandemic”, Asian Journal of Psychiatry, India, commentary, Abr. 2020, available at: <https://thediplomat.com/2020/04/indias-shadow-pandemic/>. Access Nov 01, 2020.

W. Haq, S. H. Rasa, T. Mahmood, “ The pandemic paradox: domestic violence and happiness of women”, PeerJ, Pakistan, 8:e10472, Nov. 2020, available at: <https://peerj.com/articles/10472/>. Access Dec 01, 2020, pp. 1-20.

WHO, “COVID-19 e a violencia contra a mulher: o que o setor/sistema de saude pode fazer”, informative note, available at: <https://apps.who.int/iris/bitstream/handle/10665/331699/WHO-SRH-20.04-eng.pdf?ua=1>. Access Dec 01, 2020, pp. 1-3.

WHO, “Violence against women during COVID-19”, informative note, available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/violence-against-women-during-covid-19?gclid=CjwKCAjwltH3BRB6EiwAhj0IUCIrXvHgNhP3IE9VTONdKpp_Z0C8uTaDPtFj12M1zzW4rHtc_As22BoCz-MQAvD_BwE. Access Dec 01, 2020.

W. S. Richardson, M. C. Wilson, J. Nishikawa, R. S. Rayward, “The well-built clinical question: a key to evidence-based decisions”, ACP Journal Club, United States of America, commentary, Nov. 1995, available at: <https://www.acpjournals.org/doi/10.7326/ACPJC-1995-123-3-A12>. Access Dec 01, 2020.

Search strategy

Research date: 07/12/2020

Search terms, according to Decs:

mulheres

English: Women

Spanish: Mujeres

French: Femmes

Codes:

M01.975

SP3.001.004.080

SP4.127.413.649

AND (boolean descriptor)

violência doméstica

English: Domestic Violence

Spanish: Violencia Doméstica

French: Violence domestique

Codes:

I01.198.240.856.350

I01.880.735.900.350

SP2.006.052.073

OU (boolean descriptor)

violência de gênero

inglês: Gender-Based Violence

espanhol: Violencia de Género

francês: Violence sexiste

Codes:

I01.198.240.856.463

SP2.036.332.007

SP3.001.005.030.060.040

OU (boolean descriptor)

violência contra a mulher

English: Violence against women

Spanish: Violencia contra la Mujer

Franch: Violence Contre les Femmes

Codes:

SP2.006.052.078.010

SP3.001.005.030.060.040.010

AND (boolean descriptor)

Infecções por Coronavirus

Englis: Coronavirus Infections

Spanish: Infecciones por Coronavirus

French: Infections à coronavirus

Codes:

C01.925.782.600.550.200

PUBMED

-> The terms have been translated into Mesh:

#1 "Women"[Mesh] OR (Girls) OR (Girl) OR (Woman) OR (Women's Groups) OR (Women Groups) OR (Women's Group)

AND

#2 "Domestic Violence"[Mesh] OR (Violence, Domestic) OR (Family Violence) OR (Violence, Family)
OR

#3 "Gender-Based Violence"[Mesh] OR (Gender Based Violence) OR (Violence, Gender-Based) OR (Dowry Death) OR (Death, Dowry) OR (Dowry Deaths)

OR

#4 "Violence"[Mesh] OR (Atrocities) OR (Structural Violence) OR (Violence, Structural) OR (Assaultive Behavior) OR (Behavior, Assaultive)

OR

#5 "Intimate Partner Violence"[Mesh] OR (Partner Violence, Intimate) OR (Violence, Intimate Partner) OR (Intimate Partner Abuse) OR (Abuse, Intimate Partner) OR (Partner Abuse, Intimate) OR (Dating Violence) OR (Violence, Dating)

AND

#6 "Coronavirus Infections"[Mesh] OR (Coronavirus Infection) OR (Infection, Coronavirus) OR (Infections, Coronavirus) OR (Middle East Respiratory Syndrome) OR (MERS (Middle East Respiratory Syndrome))

OR

#7 "COVID-19"[Supplementary Concept] OR (COVID 19) OR (COVID-19 Virus Disease) OR (COVID 19 Virus Disease) OR (COVID-19 Virus Diseases) OR (Disease, COVID-19 Virus) OR (Virus Disease, COVID-19) OR (COVID-19 Virus Infection) OR (COVID 19 Virus Infection) OR (COVID-19 Virus Infections) OR (Infection, COVID-19 Virus) OR (Virus Infection, COVID-19) OR (2019-nCoV Infection) OR (2019 nCoV Infection) OR (2019-nCoV Infections) OR (Infection, 2019-nCoV) OR (Coronavirus

Disease-19) OR (Coronavirus Disease 19) OR (2019 Novel Coronavirus Disease) OR (2019 Novel Coronavirus Infection) OR (2019-nCoV Disease) OR (2019 nCoV Disease) OR (2019-nCoV Diseases) OR (Disease, 2019-nCoV) OR (COVID19) OR (Coronavirus Disease 2019) OR (Disease 2019, Coronavirus) OR (SARS Coronavirus 2 Infection) OR (SARS-CoV-2 Infection) OR (Infection, SARS-CoV-2) OR (SARS-CoV-2 Infections) OR (COVID-19 Pandemic) OR (COVID 19 Pandemic) OR (COVID-19 Pandemics) OR (Pandemic, COVID-19)

OR

#8 "severe acute respiratory syndrome coronavirus 2" [Supplementary Concept] OR (Coronavirus Disease 2019 Virus) OR (2019 Novel Coronavirus) OR (2019 Novel Coronaviruses) OR (Coronavirus, 2019 Novel) OR (Novel Coronavirus, 2019) OR (Wuhan Seafood Market Pneumonia Virus) OR (SARS-CoV-2 Virus) OR (SARS CoV 2 Virus) OR (SARS-CoV-2 Viruses) OR (Virus, SARS-CoV-2) OR (2019-nCoV) OR (COVID-19 Virus) OR (COVID 19 Virus) OR (COVID-19 Viruses) OR (Virus, COVID-19) OR (Wuhan Coronavirus) OR (Coronavirus, Wuhan) OR (SARS Coronavirus 2) OR (Coronavirus 2, SARS) OR (Severe Acute Respiratory Syndrome Coronavirus 2)

Search:

#9 #2 OR #3 OR #4 OR #5

119,922 results

#10 #6 OR #7 OR #8

94,811 results

#11 #1 AND #9 AND #10

TOTAL: 84 results

EMBASE

-> The search terms were translated into the Emtree language:

#1 'female'/exp OR (females) OR (woman) OR (women) OR (women, working)

AND

#2 'domestic violence'/exp

OR

#3 'gender based violence'/exp OR (gender-associated violence) OR (gender-based violence) OR (gender-

related violence)

OR

#4 'violence'/exp OR (dangerous behavior) OR (dangerous behaviour)

OR

#5 'partner violence'/exp OR (intimate partner violence) OR (partner abuse) OR (spouse abuse)

AND

#6 'coronavirus disease 2019'/exp OR (2019-nCoV disease) OR (2019-nCoV infection) OR (COVID 19) OR (COVID 2019) OR (COVID19) OR (nCoV 2019 disease) OR (nCoV 2019 infection) OR (novel coronavirus 2019 disease) OR (novel coronavirus 2019 infection) OR (novel coronavirus disease 2019) OR (novel coronavirus infection 2019) OR (Wuhan coronavirus disease) OR (Wuhan coronavirus infection)

#7 #2 OR #3 OR #4 OR #5

#8 #1 OR #6 OR #7

TOTAL : 158 results

Query('female'/exp OR 'female' OR 'females'/exp OR females OR 'woman'/exp OR woman OR 'women'/exp OR women OR (women, AND working)) AND ('coronavirus disease 2019'/exp OR ('2019 ncov' AND disease) OR ('2019 ncov' AND infection) OR (covid AND 19) OR (covid AND 2019) OR covid19 OR (ncov AND 2019 AND disease) OR (ncov AND 2019 AND infection) OR (novel AND coronavirus AND 2019 AND disease) OR (novel AND coronavirus AND 2019 AND infection) OR (novel AND coronavirus AND disease AND 2019) OR (novel AND coronavirus AND infection AND 2019) OR (wuhan AND coronavirus AND disease) OR (wuhan AND coronavirus AND infection)) AND ('domestic violence'/exp OR 'gender based violence'/exp OR ('gender associated' AND violence) OR ('gender based' AND violence) OR ('gender related' AND violence) OR 'violence'/exp OR (dangerous AND behavior) OR (dangerous AND behaviour) OR 'partner violence'/exp OR (intimate AND partner AND violence) OR (partner AND abuse) OR (spouse AND abuse))

COCHRANE

Search with Mesh terms:

#1 (Women) OR (Girls) OR (Girl) OR (Woman) OR (Women's Groups) OR (Women Groups) OR (Women's Group)

AND

#2 (Domestic Violence) OR (Violence, Domestic) OR (Family Violence) OR (Violence, Family)

OR

#3 (Gender-Based Violence) OR (Gender Based Violence) OR (Violence, Gender-Based) OR (Dowry Death) OR (Death, Dowry) OR (Dowry Deaths)

OR

#4 (Violence) OR (Atrocities) OR (Structural Violence) OR (Violence, Structural) OR (Assaultive Behavior) OR (Behavior, Assaultive)

OR

#5 (Intimate Partner Violence) OR (Partner Violence, Intimate) OR (Violence, Intimate Partner) OR (Intimate Partner Abuse) OR (Abuse, Intimate Partner) OR (Partner Abuse, Intimate) OR (Dating Violence) OR (Violence, Dating)

AND

#6 (Coronavirus Infections) OR (Coronavirus Infection) OR (Infection, Coronavirus) OR (Infections, Coronavirus) OR (Middle East Respiratory Syndrome) OR (MERS (Middle East Respiratory Syndrome))

#7 #2 OR #3 OR #4 OR #5

#8 #1 AND #7 AND #6

TOTAL: 1 result

BVS PORTAL

-> Search with Decs terms

#1 MH:"Mulheres" OR (Mulheres) OR (Women) OR (Mujeres) OR (Femmes) OR MH:M01.975\$ OR MH:SP3.001.004.080\$ OR MH:SP4.127.413.649\$

AND

#2 MH:"Violência Doméstica" OR (Violência Doméstica) OR (Domestic Violence) OR (Violencia Doméstica) OR (Violence domestique) OR MH:I01.198.240.856.350\$ OR MH:I01.880.735.900.350\$ OR MH:SP2.006.052.073\$

OR

#3 MH:"Violência contra a Mulher" OR (Violência contra a Mulher) OR (Violence Against Women) OR (Violencia contra la Mujer) OR (Violence Contre les Femmes) OR MH:SP2.006.052.078.010\$ OR

MH:SP3.001.005.030.060.040.010\$

OR

#4 MH:"Violência de Gênero" OR (Violência de Gênero) OR (Gender-Based Violence) OR (Violencia de Género) OR (Violence sexiste) OR MH:I01.198.240.856.463\$ OR MH:SP2.036.332.007\$ OR MH:SP3.001.005.030.060.040\$

AND

#5 MH:" Infecções por Coronavirus" OR (Infecções por Coronavirus) OR (Coronavirus Infections) OR (Infecciones por Coronavirus) OR (Infecciones à coronavirus) OR MH:C01.925.782.600.550.200\$

#6 #2 OR #3 OR #4

#7 #1 AND #6 AND #5

(mh:"Mulheres" OR (mulheres) OR (women) OR (mujeres) OR (femmes) OR mh:m01.975* OR mh:sp3.001.004.080* OR mh:sp4.127.413.649*) AND ((mh:"Violência Doméstica" OR (violência doméstica) OR (domestic violence) OR (violencia doméstica) OR (violence domestique) OR mh:i01.198.240.856.350* OR mh:i01.880.735.900.350* OR mh:sp2.006.052.073*) OR (mh:"Violência contra a Mulher" OR (violência contra a mulher) OR (violence against women) OR (violencia contra la mujer) OR (violence contre les femmes) OR mh:sp2.006.052.078.010* OR mh:sp3.001.005.030.060.040.010*) OR (mh:"Violência de Gênero" OR (violência de gênero) OR (gender-based violence) OR (violencia de género) OR (violence sexiste) OR mh:i01.198.240.856.463* OR mh:sp2.036.332.007* OR mh:sp3.001.005.030.060.040*)) AND (mh:" Infecções por Coronavirus" OR (infecções por coronavirus) OR (coronavirus infections) OR (infecciones por coronavirus) OR (infecciones à coronavirus) OR mh:c01.925.782.600.550.200*) AND (fulltext:"1" AND db:("LILACS" OR "PAHOIRIS" OR "IBECS" OR "WHOLIS" OR "BRISA" OR "MINSAPERU" OR "PREPRINT-SCIELO"))

63 results

43 after full text filter

30 excluded from Medline

TOTAL 13 articles

4 LILACS

4 PAHO-IRIS

2 IBECS

2 WHO IRIS

1 BRISA/RedTESA

1 MINSAPERÚ

1 SciELO Preprints

ENDNOTE

EndNote reference organizer was used. Excluding duplicate files, 211 articles out of 256 remain. (45 duplicates)

Data from 211 EndNote articles were exported to Rayyan after excluding duplicates, 199 were left (12 duplicates)

RAYYAN

auxiliary search terms

for include:

COVID-19

pandemic

Violence

Women

coronavirus

Domestic Violence

Intimate Partner Violence

Gender-Based Violence

covid 19

for exclude:

literature review

reviews

this review

systematic review

opinion

commentary

-> two reviewers were included, who selected the articles through the system with the "blind ON" tool for activated blind selection.

Reviewer 1, after reading the title and summary:

- incluidos: 51

- excluidos: 146
- maybe: 2

Reviewer 2, after reading the title and summary:

- incluidos: 60
- excluidos: 111
- maybe: 28

ALIGNMENT MEETING:

During the meeting, the blanking tool was deactivated. Reviewers were able to compare selections and discuss the inclusion of articles.

30 studies maybe

23 studies included

107 studies excluded

39 conflicting studies

After the resolution of conflicting and undecided articles, the full text of all articles selected for review was read.

TOTAL AFTER READING COMPLETE TEXT: 10 articles. Both reviewers agreed to the final inclusion of the articles.