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ORIGINAL PAPER

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The Impact of Covid-19 Pandemic and Social Determinants of Health on the Prevalence of Intimate Partner Violence. A Systematic Review

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ABSTRACT

Background: The pandemic has increased the rates of violent behavior towards women by their partners worldwide. Increased time spent living with the abusive partner, working at home and limited social contact combined with socioeconomic characteristics contributed to the increase in this type of violence. **Objective:** To investigate the impact of pandemic COVID-19 and social determinants of health (SDOH) on the intimate partner violence (IPV) experienced by women from their partners. **Methods:** A systematic review was conducted to investigate the impact of COVID-19 and social determinants of health on violence experienced by women from their partner(s) as a consequence of incarceration. The Pubmed and Scopus databases were searched during December 2022, using the keywords “intimate partner violence”, “women”, “COVID-19”, “socioeconomic factors”, “social determinants of health”. **Results:** Of the 917 studies initially retrieved, 38 studies found an increased prevalence of women’s reported violence by their partners, 10 found a low prevalence, and 9 found no difference in prevalence before and during restraint. The most common forms of violence were psychological, physical and sexual. In 30 studies, social determinants such as socioeconomic level, education and living conditions were found to be associated with the prevalence of violence. **Conclusion:** There was an increase in violence against women during quarantine which was associated with the effect of social determinants. However, due to

research limitations of the studies, additional research is needed to draw firm conclusions that can be generalized to the population.

Keywords: intimate partner violence, women, COVID-19, socioeconomic factors, social determinants of health.

1. BACKGROUND

In an attempt to stop the COVID-19 pandemic from spreading, several nations adopted steps like travel restrictions, school closings, and restrictions on public spaces. Nevertheless, despite these attempts, there have been almost 767 million COVID-19 cases reported worldwide, and as of right now, there have been almost 6.9 million COVID-19-related deaths (1). Similar to previous significant catastrophes, the COVID-19 pandemic has effects that go beyond health and have an influence on the business and society as well (2). At the start of the pandemic, the World Health Organization pointed out that significant changes in developed daily patterns could result in an increase in the number of mental health problems for many people (3). According to a survey, the number of individuals experiencing anxiety, depression, or suicidal ideation has doubled since the pandemic began. Scientific studies carried out during the pandemic, such as those by Lorant et al. (4), Taylor et al. (5) and Whitehead et al. (6), emphasized the rise in psychopathological and sociopathological occurrences in addition to

healthcare groups. Especially referred to an increase in psychological suffering⁴, discovered an increase in drug misuse (5), and emphasized the risk of increased destitution due to pandemic-related unemployment (6).

The UN defines violence against women as any type of action that involves physical, sexual or mental abuse or threat of violence against women. It can be carried out in various forms, such as in public or private life. Intimate partner violence (IPV) is a type of behavior that involves the sexual or psychological abuse of a partner (7).

Before the coronavirus pandemic occurred, domestic violence was regarded as a major public health issue, especially in the form of intimate partner violence. According to the World Health Organisation (WHO), it is estimated that 1 in 3 or 30% of women around the world have experienced some form of physical or/and sexual intimate partner violence or non-partner sexual violence during their life. This type of abuse is more frequent in women than men, although men can experience intimate partner violence also. This type of violence is considered to be a violation of human rights, and it affects the mental and physical health of women (8).

The prevalence of this type of violence varies depending on the region and income level. For instance, in the Western Pacific region, it is around 20% while in high-income countries and Europe, it is estimated that around 22% of women have experienced some form of intimate partner violence. In the American regions of WHO it is estimated around 25%, 31% in the Eastern Mediterranean region and 33% in the South-East Asia. Regarding women aged between 15 to 49 years old, the higher rates of physical or/and sexual intimate partner violence were observed in the “least developed countries” and in Oceania reaching 37% while the lowest in Europe around 16% to 23%, in Central, Eastern and South-Eastern Asia around 18%, 20% and 21% respectively and also in New Zealand and Australia around 23%. Rates were also high in Africa and Southern Asia around 33% and 35% respectively (9). It should be noted that 38% of all femicides worldwide are committed by intimate partners (8).

According to the World Health Organisation (WHO) the social determinants of health (SDOH) are “the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems” (10). Those factors are capable of affecting the prevalence of violence against women (11). It is important to understand if the social determinants of health could affect the prevalence of intimate partner violence.

2. OBJECTIVE

The main aim of this systematic review was to assess the impact of the COVID-19 pandemic on intimate partner violence against women while the secondary objective was to assess the impact of social determinants of health on intimate partner violence against women.

3. MATERIAL AND METHODS

Search Strategy

A systematic review was conducted by three researchers based on Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (12), from November 2022 to March 2023. The research was conducted using the online databases Pubmed and Scopus, using a combination of the keywords “intimate partner violence”, “women”, “COVID-19”, “socioeconomic factors”, “social determinants of health”.

Inclusion Criteria

Studies that were included in the review were necessary to have been conducted after March 2020, when the COVID-19 pandemic occurred and more specifically should address incidents of intimate partner violence during lockdown. Only studies that referred to women that had undergone intimate partner violence were included in the review. Studies that addressed the effect of Social Determinants of Health (SDOH) on the prevalence of Intimate Partner Violence against women were also included.

Exclusion Criteria

Studies that explored the impact of previous psychological trauma and studies that investigated gender based or racial violence were excluded. Studies that the perpetrator of violence was not the partner of the victim and those that their primary research aim was to investigate the prevalence of violence against children were also excluded. Studies that gathered data from newspaper articles about intimate partner violence were also excluded.

Study Selection.

Initially 917 records were retrieved through the databases Pubmed and Scopus and 60 duplicate records were removed. After the screening of the title and abstract 652 research articles were removed and 205 full-text articles were sought for retrieval. From the 167 reports that were assessed for eligibility, 110 were removed and only 57 were included in the review (Table 1).

4. RESULTS

Study Type

Of the fifty-seven primary research studies that were included, thirty-nine were cross sectional studies (13-51), five studies were observational studies (52-56), five were qualitative method studies (57-61), two were cohort studies (62-63), three were ecological studies (64-66), one was a descriptive analytical study (67), one was referred to be a quality improvement pilot study (68) and one was a randomized control trial (69).

Geographical Distribution of Studies.

Nineteen studies were conducted in countries of Asia (13-27, 56, 57, 67, 69), thirteen studies were conducted in countries of Africa (28-34, 50, 51, 58, 59, 62, 63), ten in countries of North America (35-39, 52, 53, 60, 64, 68), eight were conducted in countries of Europe (40-44, 54, 55, 65), two were conducted in Australia (45, 61). One was conducted in South America (66). Four studies were conducted in countries that belonged both in Asia and Africa (46-49).

Table 1. Main Findings	Authors, Publication Year, Country	Population	Type of Study	Violence Types	Findings
	1. Akel et al., 2023. Lebanon	86 married couples.	Cross Sectional Study.	Physical Psychological Sexual	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
	2. Abujiban et al., 2022. Jordan	215 pregnant women.	Cross Sectional Study.	Psychological Physical Sexual	IPV ↓ Correlation between Social Determinants of Health and Intimate Partner Violence.
	3. Yilmaz Karaman et al. 2022. Turkey.	54 VAW cases 2019 61 VAW cases 2020	Retrospective Cross Sectional Study	Physical Violence Sexual Violence	IPV ↑
	4. Mahmood et al. 2022. Iraq.	346 married women.	Cross Sectional Study.	Emotional Violence Physical Violence Sexual Violence	IPV ↑
	5. Sharma & Khokhar. 2022. India	94 married adults. 55 women.	Cross Sectional Study.	Physical Violence Verbal Violence Sexual Violence Financial Violence	IPV ↓ Correlation between Social Determinants of Health and Intimate Partner Violence.
	6. Wu et al., 2022. China.	3434 pregnant women.	Cross Sectional Study.	Mental Violence Physical Violence Sexual Violence	IPV ↓ Correlation between Social Determinants of Health and Intimate Partner Violence.
	7. Lamichhane et al., 2021. Nepal.	Women 1314 women completed responses	Cross Sectional Study	Physical Violence Sexual Violence	IPV ↔ The experience of physical violence after COVID-19 was associated with education and ethnicity. Correlation between Social Determinants of Health and Intimate Partner Violence.
	8. Naghizadeh, Mirghafouvrand & Mohammadimad. 2021. Iran.	250 Iranian pregnant women.	Cross Sectional Study	Emotional violence Sexual Physical violence	IPV ↑
	9. Aolyamat. 2021 Jordan.	200 married women.	Cross Sectional Study.	NOT MENTIONED	IPV ↑
	10. Alhabri et al., 2021. Saudi Arabia.	Married women. 2254 participants	Cross Sectional Study.	Physical Psychological Sexual Economic abuse	IPV ↓
	11. Das, Roy & Roy. 2021 India.	159 migrant workers. Ever-married women.	Cross Sectional Study.	Physically Emotionally Never	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
	12. Indu et al., 2021. India	209 married women.	Cross Sectional Study	Physical Violence Psychological Violence Sexual Violence	IPV ↑
	13. Yari, Zahednezhad, Gheshlagh & Kurdi. 2021. Iran.	203 Iranian married women	Online Cross-Sectional Study	Physical Emotional Sexual violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
	14. Abuhammad. 2020 Jordan.	687 women in the final sample.	Cross Sectional Study.	Physical Violence Psychological Violence	IPV ↑
	15. Haq, Raza & Mahmoud. 2020. Pakistan.	389 married women.	Cross Sectional Study	Physical Violence Verbal Violence Emotional Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence..
	16. Shewangzaw Engda, Dargie Wubetu, Kasahun Amogne & Mollot Kitaw. 2022. Ethiopia.	700 women participated.	Cross Sectional Study.	Emotional Abuse Physical Abuse Sexual Assault	IPV ↓
	17. Fetene, Alie, Girma, & Negesse. 2022 Southest Ethiopia.	590 pregnant women.	Cross Sectional Study	Emotional Physical Violence Sexual Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
	18. Ditekemena et al., 2021. Democratic Republic of Congo.	4131 women	Cross Sectional Study.	Physical Violence Verbal Violence Sexual Violence Psychological Violence	IPV ↔ Correlation between Social Determinants of Health and Intimate Partner Violence.
	19. Rayhan & Akter. 2021. Bangladesh.	605 married women.	Cross Sectional Study.	Emotional Violence Physical Violence Sexual Violence Both Physical & Sexual Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
	20. Shitu, Yeshane & Abebe. 2021 Ethiopia.	448 reproductive age women have ever lived with a partner.	Cross Sectional Study.	Physical Violence Emotional Violence Sexual Violence	IPV ↓ Correlation between Social Determinants of Health and Intimate Partner Violence.
	21. Teshome et al., 2021. Ethiopia.	464 pregnant women.	Cross Sectional Observational Study.	Physical Violence Emotional Violence Sexual Violence	IPV ↓ Correlation between Social Determinants of Health and Intimate Partner Violence.
	22. Gebrewahd, Gebremeskee & Tadesse. 2020. Ethiopia.	682 reproductive age women.	Cross Sectional Study	Psychological Violence Physical Violence Sexual Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
	23. Drotning et al., 2023. U.S.A.	2891 participants. 1674 women. 1217 men.	Cross Sectional Study.	Physical Violence Verbal Violence Restricted Access	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
	24. Fedina et al., 2023. U.S.A	1169 women or transgender/nonbinary individuals	Cross Sectional Study.	Physical Violence Psychological Violence Sexual Violence	IPV ↓ Correlation between Social Determinants of Health and Intimate Partner Violence.
	25. MacGregor et al., 2022.	49 women from 9 agencies.	Cross Sectional Study.	NOT MENTIONED	IPV ↑

Table 1. Main Findings

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Canada.				
26. Mantler et al., 2022. Canada.	95 women who had experienced.	Cross Sectional Study.	Emotional Violence Physical Violence Sexual Violence	IPV ↔
27. Peitzemeier et al., 2022. U.S.A.	1169 Women, transgender and/or nonbinary people in sexual or romantic relationship in the last year.	Cross Sectional Study	Psychological Violence Technology-Based IPV Physical & Severe Physical Violence Sexual Violence	IPV ↔ Correlation between Social Determinants of Health and Intimate Partner Violence.
28. Glowacz, Dziewa & Schmits. 2022. Belgium.	1532 adults being in a romantic relationship. 1238 women. 294 men.	Cross Sectional Study?	Physical Violence Psychological Violence Sexual Violence	IPV ↑
29. Di Franco et al., 2021. Italy.	75 women 14-65 years old	Cross-Sectional Study	Domestic Violence Not Domestic Violence 80% OF THEM IPV	IPV ↑
30. Ebert & Steinert. 2021. Germany.	3818 partnered women.	Cross Sectional Study	Verbal Conflict Physical Conflict Emotional Abuse	IPV ↑
31. Plášilová, Hula, Krejčová & Klapilová. 2021. Czech Republic.	1200 participants (612 women, 587 men, 1 other) Final sample: 429 women. For the final analysis: 390 participants.	Cross Sectional Study part of the international I-SHARE	Intimate partner violence	IPV ↔ Correlation between Social Determinants of Health and Intimate Partner Violence.
32. Jung, Kneer & Krüger. 2020. Germany.	3545 participants 2946 women	Cross Sectional Study	Verbal Violence Physical Violence Sexual Violence	IPV ↑
33. Boxall, Morgan & Brown. 2020 Australia.	15000 female members of the research company's online panel.	Cross Sectional Study	Physical Violence Sexual Violence Emotional Violence	IPV ↑
34. Abu- Elenin, Sadaka & Abdeldaim. 2022 Egypt	2068 married women.	Cross-Sectional Study	Physical Violence Economic Violence Emotional Violence Verbal Violence Sexual Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
35. El-Nimr et al. 2021. Saudi Arabia, United Arab Emirates, Kuwait, Qatar, Oman, Yemen, Palestine, Iraq, Jordan, Syria, Egypt, Libya, Sudan, Morocco	490 Arab married women	Cross Sectional Study	Psychological Violence Verbal Violence Physical Violence Sexual Violence Financial Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
36. Moawad et al. 2021. Egypt.	509 women	Cross Sectional Study.	Physical Violence Emotional Violence Sexual Violence	IPV ↑
37. Esmat Tosson, Atta Saudi. 2021. Egypt.	2190 Egyptian women.	Cross Sectional Observational Study.	Physical Violence Emotional Violence Sexual Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
38. Miller et al. 2022. Uganda.	556 women.	Cross Sectional Study.	Verbal Violence Physical Violence Sexual Violence	IPV ↑
39. Tadesse et al., 2022. Ethiopia.	589 married/cohabitated women.	Cross Sectional Study	Physical Violence Emotional/Psychological IPV Sexual IPV	IPV ↔ Correlation between Social Determinants of Health and Intimate Partner Violence.
40. Hoehn-Velasco, Silverio-Morill & de la Miyar. 2021. Mexico.	All crimes targeting women in Mexico, 2019-2020 including IPV.	Observational Study.	Domestic Violence Sexual Crimes Femicides Failure to pay alimony	IPV ↑
41. Gosangi et al., 2021. U.S.A.	62 IPV victims during 2020 104 IPV victims during 2019 106 IPV victims during 2018 146 IPV victims during 2017	Observational Study	Physical Violence	IPV ↑
42. Panovska- Griffiths et al., 2022. United Kingdom	Data of women 16 years old or over. Data from 33 IRIS DVA sites.	Observational Study	Intimate Partner Violence NOT MENTIONED SPECIFICALLY	IPV ↓
43. Romito, Pellegrini & Saurel-Cubizalles. 2022. Italy.	Five AVCs (services dedicated to victims) in Italy. Women that sought AVCs were interviewed.	Observational Study.	Psychological Violence Physical Violence Sexual Violence Economic Violence Violence Against Children	IPV ↔
44. Asik & Ozen. 2021 Turkey.	Data collected from "Male Violence Monitoring Portal" database.	Observational Study 1951 femicides of which 65.8% were IPV cases.	Female Homicides	IPV ↔ Not statistically significant change in total female homicide probability in response to general social distancing measures related to the Covid-19 shock in either panels.
45. Huq et al., 2021. India.	586 women	Qualitative study.	Physical Violence Emotional Violence Economic Violence Sexual Violence	IPV ↑
46. Mahlangu et al., 2022 South Africa	18 men 19 women Cohabiting	Exploratory qualitative study.	Physical Violence Emotional Violence	IPV ↓ Correlation between Social Determinants of Health and Intimate Partner Violence.
47. Dekel & Abrahams. 2021 South Africa.	16 women from five shelters.	Qualitative Study.	Psychological Violence Physical Violence	IPV ↔ All expressed that the abuse worsened during the lockdown period. Correlation between Social Determinants of Health and Intimate Partner Violence.
48. Sabri et al., 2020.	45 immigrant survivors of IPV	Qualitative Study.	Psychological Violence	IPV ↑

(...continued) Table 1. Main Findings

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U.S.A.	17 service providers		Economical Violence	Correlation between Social Determinants of Health and Intimate Partner Violence.
49. Heward Belle et al., 2022. Australia.	21 women health professionals working with survivors of IPV.	Qualitative Study.	Psychological Violence Sexual Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
50. Decker et al., 2022. Kenya.	363 Young adults and adolescents, victims of IPV.	Cohort Study.	Physical Violence. Sexual Violence.	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
51. Wood et al., 2022. Ethiopia.	2868 pregnant women.	Cohort Multimethod Study.	Sexual IPV Physical IPV	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
52. Evans, Hawk & Ripkey. 2021. U.S.A.	Women telephone reporting domestic violence incidents to Atlanta Police Department.	Ecological Study.	Domestic Violence. Not mentioned specifically.	IPV ↑
53. Vives Cases et al., 2021. Spain.	Women between January 2015-September 2020: That called 016. Policy reports about IPV. Women killings. Protection orders about IPV across Spain.	Descriptive Ecological Study	Intimate partner violence Not mentioned specifically.	IPV ↑
54. Cantor, Salas & Torres. 2022. Chile.	1213 women aged 15 or older of each province in Chile.	Ecological Study.	Physical Violence (Femicide & Attempted Femicide)	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence.
55. Rashidi Fakan et al. 2022. Iran.	420 married Iranian women.	Descriptive Analytical Study	Physical Violence Psychological Violence Sexual Violence	IPV ↑ Correlation between Social Determinants of Health and Intimate Partner Violence..
56. Krishamurti et al., 2021. U.S.A.	284 pregnant patients during their first prenatal appointment.	Quality Improvent Pilot Study	Physical Violence Sexual Violence Psychological Violence	IPV ↑
57. Hamadani et al., 2020. Bangladesh.	2424 mothers.	Part of a RCT.	Emotional Violence Physical Violence Sexual Violence	IPV ↑

(...continued) Table 1. Main Findings

Prevalence of Intimate Partner Violence

In thirty-eight of the studies, the prevalence of IPV was found to be higher during lockdown (13, 15, 16, 20, 21, 23-27, 29, 31, 34, 35, 37, 40-42, 44-50, 52, 53, 57, 60-69), while in ten the prevalence of IPV (14, 17, 18, 22, 28, 32, 33, 36, 54, 58) was found to be lower during lockdown. In nine studies the prevalence of IPV did not have a significant change before and during lockdown (19, 30, 38, 39, 43, 51, 55, 56, 59) (Table1).

Prevalence of Intimate Partner Violence and Geographical Distribution

High Prevalence of IPV

Increase in the prevalence of IPV was found in thirteen studies that were conducted in countries of Asia (13, 15, 16, 20, 21, 23-27, 57, 67, 69), in seven studies that were conducted in countries of North America (35, 37, 52, 53, 60, 64, 68), in six studies that were conducted in countries of Africa (29, 31, 34, 50, 62, 63), in five studies that were conducted in Europe (40-42, 44, 65), in the two studies that were conducted in Australia (45, 61), in all four studies that were conducted in countries that belonged both in Asia and Africa (46-49) and in the one study that was conducted in South America (66).

Low Prevalence of IPV

Decrease in the prevalence of IPV was found in four studies that were conducted in Asia (14, 17, 18, 22), in four studies that were conducted in Africa (28, 32, 33, 58), in one study that was conducted in North America (36) and in one study that was conducted in Europe (54).

No Significant Change in IPV Prevalence

There was found no significant change in the prevalence of IPV in three studies that were conducted in countries of Africa (30, 51, 59), in two studies that were conducted in countries of Asia (19, 56), in two studies that were conducted in countries of Europe (43, 55) and in two studies that were conducted in countries of North America (38, 39).

Types of Intimate Partner Violence

Three types of intimate partner violence were identi-

fied and all three of them were applied by the perpetrators to the victim, as it was found in thirty-two studies(13, 14, 16-18, 20, 22, 24, 25, 27-34, 38-40, 44-46, 48-51, 55, 57, 67-69). Those were psychological, physical and sexual IPV. Psychological IPV took the form of verbal abuse, insults, yelling, abusive language, control, coercion, humiliation, threats, intimidation, bullying, divorce threats, isolation from family and friends, financial restrictions(13, 14, 22-36, 38-40, 42, 44-50, 55, 57-61, 67-69). Physical abuse was manifested as slaping, kicking, shoving, chocking, burning, throwing things, pulling hair pulling of knives and other sharp objects(13-20, 22-36, 38-40, 42, 44-53, 55-59, 62, 63, 66-69). Sexual IPV took the form of rape, sexual coercion, unwanted sexual comments, coercion to watch pornography and atypical sexual acts towards the female partner(13-20, 22, 24, 25, 28-34, 36, 38-40, 44-52, 55, 57, 61-63, 67-69).

In six studies the partners used only physical and psychological violence against their female partners(23, 26, 35, 42, 58, 59), in five only physical and sexual violence(15, 19, 52, 63, 64), in two studies women experienced only psychological and sexual violence(47, 62), in two only physical violence (56, 67), in one only psychological(60). In seven studies there was no specific reference on the type of intimate partner violence, but it was clear that women had experienced intimate partner violence(21, 37, 41, 43, 54, 65, 66).

Social Determinants of Health

In thirty studies was found a correlation between social determinants of health and intimate partner violence (13, 14, 17-19, 23, 25, 27, 29-36, 39, 43, 46, 47, 49, 51, 58-63, 66, 67). Nine of these studies were conducted in countries of Asia (13, 14, 17-19, 23, 25, 27, 67), eleven in countries of Africa (29-34, 51, 58, 59, 62, 63), four in North America (35, 36, 39, 60), one in Australia (61), one in Europe (43), one in South America (66) and three in countries that belonged in Asia and Africa (46, 47, 49).

In countries of Asia the social determinants of health that were correlated with increase in IPV were low in-

come, low educational status, lower age, rural area of living, loss of job due to COVID-19, unemployment, nuclear family, extra marital affairs, drug and alcohol misuse by the partner (13, 14, 17-19, 23, 25, 27, 67).

In countries of Africa the social determinants of health that were correlated with increase in IPV were lower age, low socioeconomic status, low income, unemployment, low or no social support regarding the women, living in rural areas, low educational level both of the perpetrator and the victim, arranged marriage, having children, long duration of marriage (29-34, 51, 58, 59, 62, 63).

In countries of North America the social determinants of health that were correlated with increase in IPV were lower income, unemployment, lockdown and housing insecurity (35, 36, 39, 60).

In Europe the only social determinant of health that was correlated with an increase in IPV was the low educational level of the partner and the women (43).

In Australia the social determinants of health that were correlated with increase in IPV were loss of job, financial insecurity and financial hardship (61).

In South America the social determinants of health that were correlated with increase in IPV were low age, living in rural areas and having children (66).

In countries that belonged both in Asia and Africa the social determinants of health that were correlated with increase in IPV were low educational level of women, living in rural areas, financial hardships due to lockdown, low social and educational level of partners and psychological problems (46, 47, 49). (Table1)

Studies Limitations

The studies that had been reviewed had certain limitations. Of the fifty seven studies that had been reviewed, twenty of them made clear that their results could not be generalized on the population (15, 17, 20, 22, 23, 30, 33, 36, 39, 46, 49, 54, 58, 60-64, 66, 69). Other study limitations included: a non-representative study sample (14-17, 19, 20, 22-24, 28, 29, 33, 35, 36, 38-40, 44-46, 48, 49, 51, 53-55, 60, 64, 65), small study sample (17, 25, 36, 37, 47, 53, 58, 61-63, 68, 69), a response bias in view of the fact that many women underreported IPV, because of the fear of being caught by the violent partner (13, 17, 20, 22, 25, 30, 37, 47, 48, 50, 51, 58, 67), limited access to the internet (14, 16, 25, 30, 38, 39, 43, 48, 67), the cross sectional study design (18-20, 26, 28-32, 36, 38, 39, 42, 45, 46, 50), self-reported study items (13, 14, 23, 26, 31, 36, 38, 40, 42, 43, 47, 60), recall bias (14, 19, 28, 29, 32-34, 39, 43, 49, 50), selection bias (33, 42), non validated measures or no tools (13, 22, 40, 43, 47, 50, 51, 62, 69), information bias (13, 40, 43, 54, 65, 66), the non-use of a control group (18), limited access to telephones (19, 57, 58, 69), uncertainty of results (42, 57, 58, 66), quality of data (24, 35, 36, 53, 57, 61, 63, 64, 68), social desirability bias (28, 29, 32, 33, 43, 44), recruitment bias (58), selection bias (14, 17, 42, 43, 45, 49), no randomization (39, 50), the time of the study (34, 35, 37, 54, 66), no long term follow up (38), ecological study design (65, 66). Six studies did not report any limitations (21, 27, 41, 52, 56, 59).

Review Limitations

This review had certain limitations. A major limita-

tion was the access to only two databases Pumbed and Scopus with specific inclusion and exclusion criteria as access to other databases were not possible, resulting in systematic and random error. Another limitation was the use of only English language during the search.

5. DISCUSSION

IPV is a perplexing issue that is impacted by factors of various types individual, context oriented, and underlying; in this manner, its emergences in a particularly extraordinary circumstance can be extremely heterogeneous (65). Innovative and creative methods and approaches to minimize women's abuse are currently accessible throughout the world. Nevertheless, in order to achieve longterm social change, many national and international non-governmental groups should collaborate collectively in a cohesive and coordinated way (11). Poor health is largely attributed to poverty in both the most prosperous and least prosperous nations as well as within the same nation's population. However contrasts in wellbeing likewise follow serious areas of strength for a slope. This is a reflection of the social position of an individual or group of people, which results in different levels of participation in civic society and control over one's life, as well as differences in access to and security of resources like housing, employment, and education (70).

Despite this data, numerous individuals continue to see women's violent encounters as isolated episodes that occur in the private domain of marital dispute and outside of the reach of policymakers and health-care practitioners. Many shame the women for being victims of violence, instead of the offenders. Women face accusations in instances of partner violence for speaking to another man, denying sexual contact, not requesting permission from their husband (e.g., for going out, visiting their family), or failing to adhere to their duty as wives/partners in every other manner (71).

Considering the diverse spectrum of perpetrators of intimate partner assault against suburban women, it is safe to say that this type of abuse is frequently prevalent in the developing world, and the variables that contribute to it may be avoided by health policies and public awareness. These nations' healthcare systems ought to respond with distinctive priority to health planning of women as the core of the family in the urban centers, and encourage both their mental and physical well-being, with a focus on vulnerable women and the reduction violence against women (11). Psychosocial support and psychological interventions for survivors of intimate partner violence are examples of promising interventions, as are combined socioeconomic empowerment programs; money transfers; assisting couples to enhance interpersonal and relationship skills; social mobilization interventions aimed at addressing uneven gender norms; educational initiatives that improve safety in educational facilities and reduce severe discipline, as well as courses designed to motivate students. Effective interventions should focus on women's safety; have essential features that entail confronting uneven gender power dynamics;

are participative; target various risk factors through integrated programming; and begin early during childhood. To accomplish a longterm transformation, it is critical to pass and put into effect gender equality legislation, establish and execute gender equality laws and regulations, dedicate resources to preventative measures and reaction, and contribute to women's rights groups (71, 9).

While in the majority of the studies an increase in the prevalence of violence was observed(13, 15, 16, 20, 21, 23-27, 29, 31, 34, 35, 37, 40-42, 44-50, 52, 53, 57, 60-69), in nine studies the prevalence was found to be stable(19, 30, 38, 39, 43, 51, 55, 56, 59)as in most cases the partner was already violent to his/her partner and simply continued to be violent at the same frequency and in ten studies it was found to be decreased(14, 17, 18, 22, 28, 32, 33, 36, 54, 58), that could be explained because there were difficulties in participation during lockdown. Furthermore in several cases the women because of fear of being confronted by the violent partner did not respond honestly regarding incidents of IPV, so the prevalence of violence either appeared stable or decreased during lockdown compared to the pre-pandemic period.

In terms of social determinants of health, there appeared to be a correlation between the determinants and violence (13, 14, 17-19, 23, 25, 27, 29-36, 39, 43, 46, 47, 49, 51, 58-63, 66, 67). It is worth mentioning that in European countries violence was mainly associated with low educational level, both of partners and women(43), while in other continents violence was mainly associated with low income, unemployment and economic inequalities(13, 14, 17-19, 23, 25, 27, 29-36, 39, 46, 47, 49, 51, 58-63, 66, 67). This finding is to be expected and easily explained as in recent years in Europe, although there are incidents of poverty, the economic level has improved compared to countries in Asia, Africa and America where many people still live on the edge of poverty(9, 70, 71).

Due to the multiple limitations and the methodological design of the studies, further investigation of the impact of the pandemic, with a larger sample covering a wide range of sociodemographic characteristics, as well as the design of randomized control trials with the use of a control group, especially now that the pandemic has ended and there is more freedom of movement, is necessary.

6. CONCLUSION

While in most studies there seems to be an increase in the prevalence of intimate partner violence against women and also a correlation between violence and social determinants of health among perpetrators and victims, because of the multiple study limitations and especially the underreporting of violence from women and in most cases cross sectional study design, the results of this review can not be generalized and further investigation is necessary.

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