



# Intimate partner violence and physical health problems in women: a systematic review of the literature

Intimnopartnersko nasilje in telesne zdravstvene težave pri ženskah: pregled literature

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## Abstract

Numerous findings in scientific literature consistently show the association of intimate partner violence (IPV) and domestic abuse with the risk for and incidence of a series of different physical health conditions and problems. Studies have shown the association of IPV and overall health and wellbeing especially in women. The purpose of the paper is therefore to present an overview of the research in the field of IPV and women's mental and physical health. Both quantitative and qualitative research studies published from 2012 to 2018 were included in the review. The results show that IPV is associated with several mental health problems in women, such as depression, anxiety and post-traumatic stress disorder, as well as with women's worse physical health, chronic pain, substance abuse, gynaecological, cardiovascular and gastrointestinal problems and behavioural syndromes associated with physiological disturbances and physical factors. The article reviews current studies and confirms that the experience of IPV in women has long-term consequences for their physical and mental health.

## Izvleček

Številne raziskave opozarjajo na povezanost intimnopartnerskega nasilja (IPN) in zlorab v družini s tveganjem za pojav različnih bolezenskih stanj in težav. Študije kažejo povezanost med IPN in splošnim zdravjem ter dobrim počutjem zlasti pri ženskah. Namen prispevka je predstaviti pregled raziskav na področju IPN ter duševnega in telesnega zdravja žensk. V pregled smo vključili kvantitativne in kvalitativne raziskave, objavljene med letoma 2012 in 2018. Rezultati kažejo, da je IPN povezano s številnimi težavami na področju duševnega zdravja pri ženskah, kot so depresija, tesnoba in posttravmatska stresna motnja, pa tudi s slabšim telesnim zdravjem žensk, kot so kronične bolečine, zloraba substanc, ginekološke, srčno-žilne, prebavne težave in vedenjski sindromi, povezani s fiziološkimi motnjami in telesnimi dejavniki. V pregledu raziskav potrjujemo ugotovitev, da ima izkušnja IPN pri ženskah pomembne dolgoročne posledice za telesno in duševno zdravje žensk.

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## 1 Introduction

Violence could be defined in many ways. The World Health Organization defines violence as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation.” Violence in other words means the use of physical or psychological force against another person, in which one’s bodily integrity, freedom of movement and decision-making is attacked. Violence is distinguished from unintended events that result in injuries and harms. The perpetrator is fully responsible for all his violent acts. On the other hand, WHO states that a violent intent to use force does not necessarily mean that there was an intent to cause damage (1). That means that the perpetrator may not always be fully aware of intentionality although the act itself can be judged by objective standards as hazardous and can very likely have harmful consequences for the victim’s health. Perpetrators perceive violence as an acceptable behavioural pattern and are, on the other hand, often helpless and dependent by their nature. They justify their actions by denying and devastating the victim and by projecting guilt or responsibility onto the victim.

The world report on violence and health (WRVH) presents violence in four modes: psychological, physical, sexual and deprivational. The WRVH further distinguishes three main categories of violence according to the characteristics of those who commit violence: self-directed, interpersonal and collective violence. Self-directed violence is subdivided into self-abuse, consisting of acts such as self-mutilation, and suicidal behaviour, e.g. suicidal thoughts, attempts at or deliberate self-injury. Interpersonal violence involves family and intimate partner violence and community violence. Collective violence is subdivided into social, political and economic violence.

Domestic violence is largely present among intimate partners and family members, mostly happening in their home. Violence in the family is a phenomenon associated with personality, situation, social and cultural factors. It is often prolonged, with interruptions. There is a confidential relationship between the perpetrator and the victim (2).

Intimate partner violence (IPV) is a pattern of physical, sexual, or emotional violence by an intimate partner in the context of coercive control (3). Harm, stress, fear,

and injuries caused by IPV can lead to various acute and chronic health problems such as recurring central nervous system symptoms including fainting and seizures and chronic pain (e.g. headaches, back pain). Abused women frequently (10–44%) report choking and blows to the head, which can result in the loss of consciousness and serious medical problems (4). Physiological problems such as functional gastrointestinal disorders (e.g. chronic irritable bowel syndrome), gastrointestinal syndromes (e.g. captured digestion problems), behavioural syndromes associated with physiological disturbances, and physical factors (e.g. eating disorders) and self-reported cardiac symptoms (e.g. hypertension and chest pain) have been associated with IPV and chronic stress in women (5) and may also be related to child sexual abuse (6).

The WHO multi-country study on domestic violence against women showed important findings regarding women’s health. The survey included women aged 15–49 years and consisted of the questions about their experiences of physical and sexual violence and violent acts within their former or current intimate relationships, and about symptoms related with mental and physical health. The results showed significant correlations between lifetime experiences of partner violence and self-reported poor health, and specific health problems in the previous 4 weeks: difficulty walking, difficulty with daily activities, pain, memory loss, dizziness, and vaginal discharge. Women who reported partner violence at least once in their life reported significantly more emotional distress, suicidal thoughts, and suicidal attempts than non-abused women (7).

Sexual violence likely leads up to worse health conditions for many victims of intimate partner violence. Abused women have a 50% to 70% increase in central nervous system problems, experience distress and have diverse gynaecological problems (8). Sexually victimized women were more likely to experience distress and difficulty sleeping (9).

Another study (10) found a strong association of partner violence with a wide range of psychological, social and medical conditions in women. Abused women had significantly higher relative risks of musculoskeletal (degenerative joint disease, low back pain, trauma-related joint disorders, cervical pain, acute sprains and strains) and female reproductive disorders (menstrual disorders, vaginitis, vulvitis, and cervicitis) as well

as mental disorders (depression, anxiety) in comparison with never-abused women. Another study (11) confirmed an increased risk for sexually transmitted diseases, lacerations, acute respiratory tract infection, gastroesophageal reflux disease, chest pain, abdominal pain, urinary tract infections, headaches, and abrasions in abused women. Health consequences of IPV can remain long after the sexual, physical or psychological violence has ended.

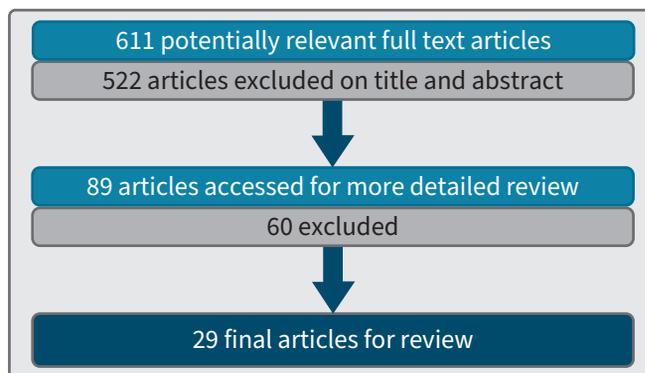
The extent of the literature in the field of IPV, even though it is focused only on the health aspect, might lead to confusion in identifying the most probable correlates and effects of violence. One reason is the problem of sampling; most study samples include participants from crisis centres, emergency rooms, maternity homes, etc. and these samples are not randomly gained, therefore the question of generalisability still remains open. The aim of the article is to review recent scientific studies and articles in the field of IPV and health. Moreover, the aim is to review the studies that examined the associations between women's mental and physical health and the experience of IPV.

## 2 Methods

Systematic review was conducted to examine recent research literature exploring women's health and IPV experience. Systematic review provides an objective, systematic and transparent qualitative overview and therefore offers a good insight into scientific field. It is composed of three phases: identification, critical evaluation, and the integration of findings (12). The method is based on the detailed analysis protocol and the search for literature should seek appropriate studies that meet the pre-defined inclusion and exclusion criteria (13). The results present a comprehensive and systematic review of a large number of quantitative and qualitative research studies, thereby offering an insight into the existing research knowledge and practices at the time when the review was conducted (12).

The search of qualitative and quantitative scientific articles was undertaken within three main online databases: Scopus, Web of Science and Sage. The time period from January 2012 to December 2018 was selected to capture the most recent papers. The terms »intimate partner violence« and »physical health« were searched within the title, keywords and abstract.

We first evaluated the articles based on the content of the title and abstract. Next, full-text potentially relevant articles were included in the review. In search for



**Figure 1:** The selection process of literature review.

relevant studies, the following criteria were considered:

- The full-text original scientific articles which had been published between 2012 and 2018 in peer-reviewed journals in English or Slovene language;
- Psychophysical consequences or associations of IPV were the focus of the review;
- The research focused on IPV against women at any time in adulthood in the current or past intimate relationship.

Initial search yielded 611 articles, which were further reviewed based on the mentioned criteria within the title, abstract and keywords (Figure 1). Next, 522 articles were excluded and 89 were accessed for more detailed review. The application of criteria excluded another 60 articles, leaving 29 studies that are presented in this review.

## 3 Results

### 3.1 Study settings and IPV prevalence

Almost half of the studies were population-based, 31% of the studies utilized data from local communities, 10% of the studies collected data from medical settings, and two studies from domestic violence shelters (Table 1).

In population-based and community-sample studies the reported lifetime prevalence of IPV differed widely. Studies that were carried out in domestic violence shelters reported prevalence of 100% as the participants of these studies were women who had protection order against abusive and violent partners. Most studies used quantitative research method, one study used qualitative methodology, and one study used a mixed method.

**Table 1:** Study settings, sample average and range of IPV prevalence.

Study settings	N (%)	Sample average	Reported lifetime prevalence of IPV Range (%)
Population-based	15 (52)	21362 (Me = 8428)	2–33
Local communities	9 (31)	513 (Me = 308)	22–100
Medical settings	3 (10)	1325 (Me = 553)	35–37
Domestic violence shelters	2 (7)	122	100

Legend: N (number), % (percent), Me (median).

### 3.2 Health outcomes

Of the 29 studies reviewed, 12 (41%) reported both physical and mental health problems, another 9 (31%) studies dealt exclusively with physical and chronic health issues, and 8 (28%) studies reported exclusively mental health problems.

### 3.3 Mental health

The mental health conditions in association with the experience of IPV in women were reported in 21 (72%) articles. All these studies showed consistent results of lower mental health in women who had experienced physical, sexual and psychological violence from their partners. The studies explored general categories of self-reported mental health with a variety of measurement instruments, such as General Health Questionnaire (GHQ-12), The European Health Interview Survey-Quality of Life (EUROHIS-QOL), Patient Health Questionnaire Depression Module (PHQ9), Impact of Event Scale—Revised (IES-R), Posttraumatic Stress Diagnostic Scale (PDS), Conflict Tactics Scale (CTS2) and other.

Depression, anxiety and PTSD symptoms were the most frequently studied aspects of mental health in association with IPV. Depression was found in 19 of the reviewed studies, followed by anxiety symptoms in 12 studies and PTSD symptoms in 11 studies (Table 2). One population-based study (N = 3,110) found poorer mental health days in women with a history of IPV compared with women without a history of IPV (14). The study by Lippus (22) showed that women who had been exposed to all types of partner violence reported poorer self-perceived health and had higher risk for limited daily activities because of stress, feelings of depression and dissatisfaction with life. In their study, Wathen and colleagues (35) found out that working and non-working

participants who experienced IPV reported significantly poorer mental health than those with no IPV experience. The authors concluded that the employment status moderated the relationship between IPV exposure and health status, with those who were currently working and had experienced IPV having similar health status to those without IPV experience who were not employed. Nur (25) reported that women exposed to IPV were more likely to suffer from mental distress which was significantly associated with physical violence, regardless of the timing of IPV episodes, and with sexual violence in the current episode. In his qualitative research on women who experienced IPV and their day-to-day living, Thananowan (33) found several major themes such as keeping silent, disconnection between the fantasy of love and reality, seeking emotional support, ambivalence surrounding leaving, living with negative emotions, and despair and suicide. Sillito (31) showed that women exposed to physical situational couple violence are more likely to report depression and fear than control-group women. Fleming (19) researched a history of stalking victimization accompanied by fear and threat and found that it was positively correlated with PTS symptom severity, after accounting for other partner abuse. The presence of fear-and-threat stalking history doubled the odds of symptomatic levels of hyperarousal in women. Nur (25) reported that different types of IPV was independently associated with mental health status and showed immediate as well as long term effects of IPV on mental health.

Generalized anxiety symptoms among women who have experienced recent IPV were predicted by four forms of support: spiritual, family, friend, and community, in Schaefer's study (29). Findings showed that of all four, spiritual and community support may contribute most importantly to reduction of anxiety symptomatology. In the study that aimed to elucidate the potential mediating role of avoidant coping in the relations among

**Table 2:** Mental health conditions after IPV.

First author	Year	Depression	PTSD	Anxiety	Substance abuse
Bosch (14)	2017	•		•	•
Cavanaugh (15)	2013	•	•	•	
Coker (16)	2012	•	•		
Coker (17)	2017	•	•	•	
Fernbrant (18)	2014	•	•	•	
Fleming (19)	2012		•		
Heath (20)	2013	•	•		
Hernández (21)	2018	•			•
Lippus (22)	2018	•		•	
Loxton (23)	2017	•	•		
Nakamura (24)	2018	•		•	
Nur (25)	2012	•		•	
Pengpid (26)	2018				•
Schackner (27)	2017		•		
Schaefer (28)	2018	•		•	
Selič (29)	2014	•			
Sillito (30)	2012	•		•	
Southerland (31)	2013				•
Stöckl (32)	2015	•	•	•	
Thananowan (33)	2018	•			
Tiwari (34)	2013	•	•		
Wathen (35)	2018	•		•	
Young-Wolff (36)	2013	•	•	•	•

negative and positive social reactions to IPV disclosure and PTSD symptom severity, Schackner (28) found that victimized women who experienced greater negative social reactions to IPV endorsed higher levels of avoidant coping and greater PTSD symptom severity. Moreover, avoidant coping (e.g., physical and psychological withdrawal) mediates the relationship between negative social reactions and PTSD symptom severity association, such that negative social reactions to IPV disclosure are related to higher levels of avoidant coping, which in turn predicted greater PTSD symptom severity.

Mental health consequences of IPV among women are very wide-ranging; in addition, it should be pointed out that mental health problems were more common

among participants with higher probability of witnessing family violence as a child as well as lower probability of all events except lifetime sexual assault comparing to participants that had a low probability for all events (15).

### 3.4 Physical health

The experience of IPV increases the risk of chronic pain problems, poor reproductive health, cardiovascular problems and gastrointestinal disorders. Review has also shown various risk behaviours in women victims of IPV, such as smoking, alcohol and drugs abuse (Table 3). All these studies researched self-perceived physical health and showed consistent results that women with

**Table 3:** Physical health conditions after IPV.

First author	Year	(Chronic) pain	Gynecological	Cardiovascular	Gastrointestinal
Bosch (14)	2017			•	
Cavanaugh (15)	2013				
Coker (17)	2017	•		•	
Hahn (37)	2014	•			
Hernández (21)	2018	•			
Kerridge (38)	2016		•		
Lippus (22)	2018	•	•		
Loxton (23)	2017	•			
Mason (39)	2012			•	
Nakamura (24)	2018	•			
Pengpid (26)	2018	•	•	•	•
Renner (40)	2017			•	
Selič (30)	2014		•		
Southerland (27)	2013		•		
Spiwak (41)	2013		•		
Stephenson (42)	2016		•		
Stöckl (32)	2015	•		•	•
Tiwari (34)	2013	•			
Wathen (35)	2018	•			

IPV experience reported poor self-perceived health. The studies used measurement instruments, such as the SF-8 Health Survey Questionnaire (SF-8), The Medical Outcome Study Short-Form (SF-36), Functional Assessment of Cancer Therapy-Breast Cancer questionnaire (FACT-B), The Framingham Risk Score (FRS), as well as questions regarding self-perceived health and health problems or chronic illnesses.

Exposure to any lifetime physical, sexual and psychological violence in intimate relationships was correlated with poorer self-reported quality of life and general physical health. Several studies demonstrated these results. Wathen (35) found that individuals with both recent IPV and IPV experience over 12 months ago had the poorest health. Lippus (22) also reported that the association between IPV and poorer health was stronger among those who have been poly-victimized.

In a study that aimed to determine the impact of IPV on women's mental and physical health over a 16-year period across three generations, the results showed that all women who lived with intimate partner violence, had

as well the highest risk of reporting limited everyday activities because of long-term illnesses, health problems and higher levels of bodily pain (23). Emotional and psychological types of abuse in intimate relationships were associated with lowered levels of physical health in two studies. Selič (30) found the correlation of psychological IPV and sexual and reproductive health problems. Tiwari (34) found that PTSD symptom severity mediated relationship between psychological abuse severity and chronic pain severity.

Substance abuse such as drinking, smoking and drug abuse have been reported in five studies. Sutherland (27) and Hernández (21) found in their studies that severe partner violence increased harmful alcohol and tobacco consumption in women. Bosch (14), Pengpid (26) and Young-Wolff (36) found similar results in researching the relationship between lifetime spousal violence victimization, spousal violence perpetration, and physical health outcomes and behaviours such as smoking, binge drinking and using drugs among women.

Gynaecological symptoms, such as sexually

transmitted diseases, genital discharge and sores, in association with a history of IPV in women were reported in seven studies. Selič (30) found more complaints regarding sexual and reproductive health in women exposed to IPV in the previous year. Sutherland (27) found that women who were recruited at an emergency department with high rates of abuse were at risk for sexually transmitted infections, while Spiwak (41), on the other hand, found the association between physical IPV and sexually transmitted infection. Stephenson (42) found that women who experienced physical violence had a significantly higher probability of reporting a subsequent induced abortion, whereas women who had an induced abortion have significantly higher odds of reporting subsequent sexual and verbal violence.

Cardiovascular problems (e.g. heart disease, heart attack, stroke, and hypertension) have been associated with the experience of IPV in five studies. Renner (40) found that participants who experienced severe poly-victimization had higher 30-year cardiovascular disease risk scores when compared to participants who experienced two or fewer forms of victimization. Women reporting the most severe emotional abuse had an increased rate of hypertension (24%) when compared to women unexposed to emotional abuse (39). Bosch (14) found that demographic variables (e.g. employment status) in women who were victims of or had a history of IPV moderated the relationship between IPV, obesity, smoking, high blood pressure, and high cholesterol. The study showed that women with a history of IPV are more likely to report current activity limitations due to physical, mental, or emotional problems, which can consequently affect their ability to work, which again may be a sequela of the violence.

Gastrointestinal problems were reported in two studies. Pengpid (26) found that lifetime spousal violence victimization was positively correlated with being underweight, high random blood glucose levels, and anaemia, and negatively correlated with being overweight or obese. Stöckl (32) found that all forms of IPV had significant associations with women's gastrointestinal problems. Cancer has been positively correlated with a history of IPV in two studies. Current and past IPV, as well as psychological abuse, were associated with poorer well-being (16) as well as poorer mental and physical health functioning among women with a recent cancer diagnosis (17).

## 4 Conclusion

An overview of the articles has confirmed the assumption that the physical and psychological health of women with an IPV experience is worse than the health of women

who do not have this experience. It is not just about the direct effect of physical violence, such as injuries, but also about the exposure to IPV and its long-term effects on both mental and physical health of women throughout their lifespan. Dealing with the chronic stress of IPV may contribute to even poorer mental health such as the feelings of depression or anxiety (14-25,29-36). These negative health behaviours and poor mental health may then lead to further health deterioration. Research studies are constantly confirming that the effects of IPV persist even when violence stops. The more severe violence or abuse are and the longer they last, the more severe the health consequences (1). The studies review showed that women with lifetime spousal physical, sexual and psychological victimization and perpetration are at an increased risk of chronic conditions, physical illnesses, and health risk behaviours. Therefore, active ongoing observation and screening for current IPV as well as IPV history in health care settings and communities can lead to earlier mental and physical health interventions for women. In screening for the types and history of IPV victimization, questions about controlling behaviour as well multiple mental and physical health outcomes among women across all ages should be considered.

Certainly, the review has some limitations. Firstly, causal implications cannot be made. Secondly, in this review three online databases were used, therefore elsewhere published or unpublished articles may have been missed in this search process. Thirdly, the limitation to Slovene- and English-language-published studies may have contributed to the possibility that some important articles have been missed.

To conclude, IPV takes a serious toll on the general psychophysical health and well-being of women. Every system in the body, especially cardiovascular, gastrointestinal, gynaecological, respiratory, endocrine, and nervous systems can be affected in harmful ways. Various behaviours that contribute to poor psycho-organic health can worsen, thus additionally affecting how one functions and feels. Future research should focus more on long-term effects of IPV, on both mental and physical consequences. Moreover, different types of IPV and their cumulative effect on women's functioning should be considered.

## Conflicts of Interest

None declared.

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