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REVIEWS

Sleep Science

Sleep and women intimate partner victimization: prevalence, effects and good practices in health care settings

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ABSTRACT

Intimate Partner Violence is a global health issue with higher prevalence worldwide, mostly in women, higher social and economic costs and devastating physical and mental health consequences for the victims. Sleep disturbances has been associated with other mental health issues, being an important symptom when diagnosing post-traumatic stress disorder, depression or anxiety. It can also constitute an important sign to help health professionals to identify potential victims of intimate partner violence. This review paper main objectives are to address the connection between intimate partner violence and sleep disruption, the role and barriers of health professionals in screening this type of violence when sleep problems are present, and to describe good practices in order to identify these victims and to provide support. It has been found that intimate partner victims commonly experience significant sleep disturbances that include truncated sleep, nightmares and less restful sleep. Health professionals are first-line professionals with a pivot role to screen and identify women victims. However, a set of personal (e.g., lack of knowledge and inadequate perceptions about violence, cultural issues) and organizational barriers (e.g., time constraints, lack of training, absence of institutional protocols) may limit the accurate reading of those symptoms. Accordingly, health professionals must be alert not only to physical health conditions associated with violence (acute physical injuries, chronic physical injuries, obstetric and genital injuries), but also psychological problems, like depression, anxiety, post-traumatic stress disorder, alcohol or drug misuse, sleep disturbances, insomnia and nightmares. In the presence of alert symptoms related to violence, health professionals become able to screen, identify and provide ongoing care for women, promoting a trusting relationship and assuming an attentive non-judgmental listening.

Keywords: Intimate Partner Violence; Women; Sleep Disorder; Health Services.

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PREVALENCE OF INTIMATE PARTNER VIOLENCE

In the last decades, violence against women has received increasing political international attention. The World Health Organization (WHO) defined violence as the intentional use of physical force or power, real or a threat, against herself/himself, by another person, group, or community that may lead to injury, death, psychological damage, underdevelopment or deprivation[1].

More recently, the Istanbul Convention defined violence against women as a violation of human rights and as a form of discrimination against women, covering all acts of gender-based violence that result, or are likely to result, in injury or physical, sexual, psychological or economic suffering for women, including the threat of commitment of such acts, coercion or arbitrary deprivation of liberty, whether in public life or in private life[2].

The most common form of violence against women is the one perpetrated by an intimate partner or a former partner. Establishing the prevalence of Intimate Partner Violence (IPV) has been the aim of several epidemiological surveys. A transcultural review of approximately 50 surveys that were conducted in 35 countries before 1999 revealed that 10% to 52% of women have reported experiencing physical abuse, sexual abuse, or both, perpetrated by an intimate partner during their lives (Garcia-Moreno et al., 2006). More recent global estimates published by WHO[3] indicate that about 1 in 3 (35%) women worldwide have experienced either physical and/or sexual IPV or non-partner sexual violence in their lifetime.

Worldwide, almost one third (30%) of women who have been in a relationship reported that they have experienced some form of physical and/or sexual violence by their intimate partner in their lifetime. The world region with the highest prevalence of IPV was South East-Asia (37.7%), followed by Eastern Mediterranean (37%) and Africa (36.6%). In Europe, the prevalence of IPV was 25.4%[3].

In Portugal recent statistics revealed, in 2017, 22 599 complaints for IPV to justice authorities, 80% made by women. IPV is the second crime against persons with higher incidence, representing 27.6% of all crimes in Portugal[4].

Prevalence within Types of Violence

A Europen Union-wide survey "*Violence against women*" performed by the European Union Agency for Fundamental Rights [FRA][5]access to justice and gender equality. For example, one in three women has experienced physical and/or sexual violence since the age of 15; one in five women has experienced stalking; every second woman has been confronted with one or more forms of sexual harassment. What emerges is a picture of extensive abuse that affects many women\u2019s lives but is systematically under-reported to the authorities. The scale of violence against women is therefore not reflected by official data. This FRA survey is the first of its kind on violence against women across the 28 Member States of the European Union (EU included interviews with 42,000 women across the 28 Member States of Europe Union (EU). The main findings showed that violence affects many women, an extensive human rights abuse that the EU cannot afford to overlook. This survey presents prevalence of different types of violence, globally and per country.

Physical and Sexual Violence

The FRA[5]access to justice and gender equality. For example, one in three women has experienced physical and/or sexual violence since the age of 15; one in five women has experienced stalking; every second woman has been confronted with one or more forms of sexual harassment. What emerges is a picture of extensive abuse that affects many women\u2019s lives but is systematically under-reported to the authorities. The scale of violence against women is therefore not reflected by official data. This FRA survey is the first of its kind on violence against women across the 28 Member States of the European Union (EU survey estimated that 13 million women in the EU have experienced physical violence and 3.7 million experienced sexual violence in the course of 12 months. Out of all women who have a (current or previous) partner 22% have experienced physical and/or sexual violence by a partner since the age of 15. One third of victims (34%) of physical violence by a previous partner experienced four or more different forms of physical violence.

Whereas in most cases violence by a previous partner occurred during the relationship, one in six women (16%) who has been victimized by a previous partner experienced violence after the relationship had broken up. Of those women who experienced violence by a previous partner and were pregnant during this relationship, 42% experienced violence by the partner while pregnant. In comparison, 20% experienced violence by their current partner while pregnant.

In Portugal, 4% of women reported being victim of physical and/or sexual abuse by a current partner and 5% by any partner during their lifetime[5].

Psychological Violence

One in three women (32%) had experienced psychologically abusive behavior by an intimate partner, either by her current partner or a previous partner. Overall, 43% of women had experienced some form of psychological violence by an intimate partner, which includes other forms of abuse alongside psychologically abusive behavior. This may include psychologically abusive behavior and other forms of psychological violence such as controlling behavior (for example, trying to keep the respondent from seeing her friends or visiting her family or relatives), economic violence (such as forbidding a woman to work outside the home) and blackmail[5].

The most common forms of psychological violence involve a partner belittling or humiliating a woman in private, insisting on knowing where she is in a way that goes beyond general concern, and getting angry if she speaks to other men. One

in four women experienced each of these in their intimate relationships. Some 5% of women experienced economic violence in their current relationship, and 13% of women experienced some form of economic violence in past relationships. This includes the partner preventing her from making independent decisions on family finances or forbidding her to work outside the home[5].

Of women who were currently in a relationship, 7% experienced four or more different forms of psychological violence by their current partner. Most women who experienced several (four or more) forms of psychological violence also indicated in the survey that their current partner has been physically and/or sexually violent against them[5].

The statistics of FRA related to psychological violence in Portugal, showed that 47% of women were victims from this type of violence, perpetrated by a previous partner, 36% by a current and a previous partner, and 21% by a current partner[5].

Stalking

In the EU-28, 18% of women experienced stalking since the age of 15, and 5% of women experienced it in the 12 months before the survey interview. This corresponds to about 9 million women in the EU-28 experiencing stalking within a period of 12 months. Some 14% of women had received offensive or threatening messages or phone calls repeatedly from the same person, and 8% had been followed around or experienced somebody loitering outside their home or workplace.

Out of all women surveyed, 3% experienced stalking that involved the same person repeatedly damaging their property. One in 10 women (9%) had been stalked by her previous partner. Out of all women victims of stalking, one in five (21%) experienced stalking that lasted more than two years. One in five victims of stalking (23%) has had to change her phone number or email address as a result of the most serious incident of stalking[5].

Cyberstalking (stalking by means of email, text messages or the internet - concerns young women in particular) was experienced by 4% of all 18 to 29 year-old women, in the 12 months before the survey interview, compared with 0.3% of women who were 60 years old or older[5].

In Portugal, 9% of women was victim of stalking since 15 years old, and 3% in previous 12 months before interviews[5].

Costs and Effects in Mental and Physical Health

The Institute for Gender Equality[6] estimated that IPV costs 109 billion euro per year: 48.5% related to physical and emotional impact; 38.9% to the provision of health services, social welfare, and justice; 11.6% related to the loss of economic outputs (lost earning and absence from work) and 1.3% in specialized services (e.g., shelters, support centers counselling). In Portugal the estimated costs were 2.553.698.492 euros per year.

However, the impact of IPV in the victims and in society goes far beyond economic issues. Research has shown that women victims of IPV, sexual abuse, rape and stalking are more likely to develop mental and physical health problems[3,7-10]. A systematic review of literature, which includes contributions from 75 studies published between 2006 and 2012, concluded that IPV is associated with depression, post-traumatic stress disorder (PTSD), anxiety, self-harm and sleep problems, as well as poor physical health including poor functional health, somatic disorders, chronic disorders and chronic pain, gynecological problems, and increased risk of sexually transmitted infections [STIs][11].

IPV has been shown to affect women's physical and mental health in many ways, reducing sexual autonomy and increasing the overall risk of unintended pregnancies and multiple abortions[12,13] increase difficulties in daily activities and decision making, substance abuse and suicidality[3].

Sleep Disturbances as a Symptom of IPV

Hauri and Fisher[14] proposed a theoretical framework of how stressful events may lead to enduring sleep disturbances. According to their learning perspective, a stressful event may cause insomnia which subsequently leads to associations of the sleep environment with frustration and arousal, which then becomes a maintaining factor of the insomnia after the termination of the stressful event. Sleep disturbance, particularly sleep deprivation, can undermine attention, cognition, memory processes and decision making, relevant to perform well in academic, professional, and motherhood settings, for example. Low self-esteem associated with IPV was the most relevant predictor of depression, anxiety, insomnia, and somatic symptoms[15].

Theories about insomnia specifically state that problems initiating and/or maintaining sleep are caused by biopsychosocial stressors[16,17], including actual and/or perceived threat[17] related to violence, that is a strong life stressor event**.** Actual or perceived threat is supposed to be the main triggering factor for acute, if not chronic, insomnia, with women who experienced extreme danger reporting higher levels of clinical-level insomnia[18]. This is perhaps even more salient for IPV relative to other stressors and life events, as safety issues may be more acutely felt when one's home and sleep environment (i.e., the bed) represent past or present danger and when one's closest friends and family are (or were) the source of threat[19].

Sleep disturbances has been associated with other mental health issues, being an important symptom when diagnosing depression, anxiety and PTSD. Studies of IPV victims have found associations between sleep disruption and PTSD symptoms, and associations between sleep disruption and depression, suicidality, nightmares[20-23], anxiety and social dysfunction[22], and insomnia[20,21,23-26]

Sleep disturbances, in particular, may be a product of complex relationships among the physical, psychological, and environmental mechanisms in play for those who endure IPV. The connection between sleep disruption and IPV has been the

focus of some important researchers, that found that IPV victims commonly experience significant sleep disturbances that include truncated sleep, nightmares and less restful sleep[21,23,27-29].

Some studies had demonstrated that sleep disorders and symptoms of PTSD are more frequent in female victims of rape in comparison with general population[30,31]as well as to clarify existing results and to provide guidelines for future research. We conducted searches in the electronic databases PsycINFO and PubMed up until October 2010 for studies on sleep disturbances in sexually abused samples. Thirty-two studies fulfilled the inclusion criteria (reported empirical data, included sexually abused subjects, employed some form of sleep measurement, English language and published in peer reviewed journals, that 46% of women with a history of IPV indicated clinically significant insomnia[21], and IPV within the past 5 years predicted increased insomnia, anxiety, depression, and psychotropic medication use[32].

Compared with women experiencing IPV during lifetime, the likelihood for stress-related sleep disturbance associated with each type of IPV were: physical abuse about 1.24, sexual abuse about 3.44, and physical and sexual abuse about 2.51. The corresponding likelihood for poor sleep quality were: 1.72, 2.82, and 2.50, respectively in women victims of physical abuse, sexual abuse and physical and sexual abuse. Women reporting any IPV in the year prior to pregnancy had increased 2.07 likelihood of stress-related sleep disturbance and 2.27 of poor sleep quality during pregnancy[33]. In Portugal, 41% of victims of sexual violence and 23% of victims of physical violence reported sleep difficulties[5]

Another study in Brazil concluded that IPV women victims showed prevalent insomnia, high sleep fragmentation, intense daily snoring, a tendency to disregard sleep hygiene rules and thus feel sleepy during the day, sleep complaints, high alcohol intake, and high anxiety levels. Also, increased aggressiveness from their partners after a poor night sleep was reported by 58% of IPV victims, and half of them reported having been battered on those days[34].

Although sleep disruption has been identified as a secondary symptom of PTSD, there is growing evidence that sleep disruption (particularly insomnia and nightmares) may be a core component of PTSD. Moreover, nighttime symptoms of PTSD may be linked to the development and maintenance of sleep disturbance[35] Between 63% (18) and 70% of those who have been diagnosed with PTSD describe insomnia as a significant problem[36].

Coping and Helpseeking Behaviors

Coping was defined as "*constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person*"[37]. The same authors referred that there are two main dimensions of coping, the problem-focused coping strategies (intended to alter a stressful situation) and the emotion-focused coping strategies (to reduce the emotional distress associated with a situation). A third coping dimension, known as avoidance coping strategies, was latterly proposed by Krohne[38].

Several authors studied the coping strategies used by IPV victims. High levels of avoidance coping predicted higher levels of drug use problems as well as intimate partner aggression-related shame[39] PTSD symptom severity was associated with alcohol-related problems, a positive alcohol screen, and physical IPV severity was related to alcohol dependence[40,41].

A prospective population-based cohort study in Oslo, that aimed to investigate the prescription of potentially addictive drugs (analgesics and central nervous system depressants) to women who had experienced IPV, concluded that prescription rates for potentially addictive drugs were clearly higher among women who had experienced physical/sexual IPV (RRs 3.57, 95% CI 2.89, 4.40), and psychological IPV alone (RRs 2.13, 95% CI 1.69,2.69). Prescription rates were increased both for potentially addictive analgesics and central nervous system depressants. Furthermore, women who reported IPV were more likely to receive potentially addictive drugs from multiple physicians[31]

Other authors studied the use of medications for sleep, depression and anxiety in adults in the 1999 Canadian General Social Survey[32]. Rates of medication used by adults exposed to IPV (physical, sexual, emotional and financial) were compared to rates of those reporting no IPV. Results showed that more women (14.9%) than men (9.6%) reported use of psychotropic medications in the preceding month, and rates were significantly higher in both women and men who reported IPV. Women victims of IPV were more likely to use all types of psychotropic medication, including sleep medication (OR 1.55, 95%CI 1.35, 1,79), anxiety medication (OR 1.54, 95%CI 1.30, 1,83) and depression medication (OR 1.65, 95%CI 1.36, 2.01)[32].

Adequate coping strategies to deal with IPV are related to seeking for specialized help. Although the prevalence of the demand for help varies across studies and participants, researches have shown consistently that most victims do not seek help[42,43], especially from formal sources (e.g., social/health/police/judicial system)[44]. It is estimated that 55-95% of women victims never sought help from formal sources or authorities[45].

A very recent study concluded that victims with high perceived risk of injury from physical and emotional violence were significantly more likely to seek help from both formal and informal support networks than those who saw themselves at no risk.[46] Those with high levels of trust in formal and informal institutions were more likely to seek help from those networks[43].

According Liang et al.[43] helpseeking is an idiosyncratic process that comprises three stages that are related to each other: a) the recognition of the problem and definition; b) the decision to seek help and c) the choice of the source of support. At each stage, there is an interaction of personal (e.g., definition of violence), interpersonal (e.g., nature, severity, cycle of violence) and sociocultural factors (e.g., belonging to community, religious beliefs).

A systematic review of literature about the biopsychosocial sphere of women victims of violence[47] concluded that there are two categories of variables that influence victims' decisions to seek help: the meanings of the experience endured by

women (e.g., cultural principles, blame, shame) and reasons related to perpetuation or a break in the cycle of violence (socioeconomic factors such as unemployment or fear of losing their jobs; sexual, physical and psychological coercion perpetrated by intimate partners and family; the difficulty in accessing services to file a complaint; fear of death; fear of the family or fear of disappointing the family; and the desire not to abandon the children and their home).

The IPV stigma is an additional barrier to seek help, once anticipated stigma, internalized stigma, and cultural stigma were prominent barriers to help seeking from formal and informal support networks[48]. Moreover, that stigma barriers adversely impacted every stage of the help-seeking process from recognizing abuse as intolerable to selecting a source of support[48]. A woman who have to be treated in hospital, as a consequence of IPV, feel ashamed and embarrassed, denying often her history of abuse. That denial could be resultant from a lack of comprehensive care perceived by women, as result of professionals who are unprepared to deal with their own values and beliefs related to IPV[47].

For women, informal sources (i.e., family, friends, neighbors) were commonly reported across all IPV subgroups. The most commonly reported formal sources for women and men were health professionals (i.e., doctors, nurses, counselors, psychologists) and the police. However, the importance of almost all of the formal sources (e.g., health professionals, police, lawyers, shelters, crisis centers) increased as the severity of the violence[49].

IPV and the pivot role of health professionals regarding the victims

Health professionals, as well as social professionals and police, are considered first-line support providers to women victims of IPV. Health care providers are in an excellent position to screen, counsel, and recommend treatment for IPV victims[50], being expected that health professionals are able to pay attention to four kinds of victim's needs: immediate emotional/psychological health needs; immediate physical health needs; ongoing safety needs; ongoing support and mental health needs[51]. It is important that health-care providers be aware that physical and mental health problems such as sleep disturbances and others (e.g., alcohol and drug use, depression, anxiety) could be caused or exacerbated by violence[51].

However, to accomplish this goal, remains an urgent need to integrate information on IPV into medical and health care curricula, and to train future physicians and other health care providers about the pervasiveness of IPV and the far-reaching implications for patient health[7]. Providers are urged to adopt universal screening practices, educate themselves on the nature of interpersonal violence and engage in screening, education, collaboration, and social justice activities to reduce interpersonal violence[52]. The Author(s. The evidence shows that screening increases the identification of women experiencing IPV in healthcare settings[53].

Barriers to assess women victimization among health professionals

There are many challenges in the healthcare field to screen patients for IPV, including (1) different cultural perspectives on IPV, (2) time constraints, (3) language barriers (4) lack of knowledge and (5) healthcare practitioner's negative perception[54].

There are still some inadequate beliefs (e.g., only occurs in problematic families, in socioeconomic lower level families), some health professionals appeared to be judgmental in terms of what preceded violence, and would insist on extracting a woman's disclosure that violence had occurred[55], and many health caregivers do not believe IPV is a common problem[56]

Contrary, other findings suggest that health professionals seem to perceive IPV against women as a serious problem, presenting, in general, adequate perceptions about the phenomenon[57], and that the majority of health professionals perceive IPV as an unjustifiable act, assuming that they have an important role in providing support to women and collaborating with other institutions[55].

Despite these results, some researchers concluded that health professionals consider to have little information to deal with IPV[58] lack of training about the phenomena, resulting in lower clinical practices integrating IPV screening, difficulties in communicate with victims, and lack of knowledge about how to start the IPV conversation with their patients[59] Findings suggest, for example, that the implicit understanding of the dynamics of violent relationships and the behaviors of the perpetrator of domestic violence are essential components of health care provision to avoid inadvertent inappropriate interactions with women[60].

In a systematic review of literature, the authors identified five categories of barriers that difficult the assessment of women victimization, by health professionals: personal barriers (personal discomfort discussing IPV, concern for personal safety, and concern of misdiagnosis); resource barriers (time constraints, lack of knowledge, education or training about IPV); perceptions and attitudes (to screen for IPV is not a role of health professionals; these have more pressing issues to address; abused women should be blamed for the abuse, abuse is rare); fears (fear of invading the patient's privacy and fear of offending patients who were not abused; fear of the partner's reaction and making life more difficult for the victim; fear of police involvement and fear that the patient would stop seeing the health professional if he or she asked about abuse); and patient-related barriers (patient's language interfered with effective screening; perception that patients with psychosocial issues and/or difficult personalities were difficult to screen; that the abused victim would stay with the abuser anyway; the perception that patients would deny battering as a cause of injury, that patients feared repercussions of being identified, that patients would not mention abuse in their medical history, and that patients would not be aware of their rights[61]

Another very recent systematic review of literature concluded that the main barriers identified by health

professionals are related to organizational issues, namely lack of training, lack of knowledge of their legal responsibilities, absence of institutional protocols related to IPV, lack of specialized supervision, insufficient resources and difficulty in networking with community services[62].

Women also face some barriers to IPV disclosure, which reinforce the importance of engagement between patient and the health professional: shame and embarrassment, fear of discussing violence, guilt or self-blame, fear that the professional won't believe them or will minimizes IPV, fear of consequences, fear of disruption to family, lack of social support and cultural differences[63].

Cultural issues assume equally an important role in IPV, especially when health professionals deal with patients from multicultural contexts. One important issue related with the decision to seek formal help when facing violence is related to perception of lower cultural competences in first line services[64].

Good practices: Screen, Identify and Intervene

According American Medical Association (AMA) "*physicians have a duty to protect the welfare of all members of society by working to reduce the prevalence of violence and abuse amongst the general population.*"[65].

The recognition of the damaging health effects associated with IPV has encouraged international governmental and professional medical associations to recommend universal screening for IPV in the health care setting. However, despite the prevalence of IPV and its harmful effects on exposed women and despite current and long-standing international guidelines in support of screening and counseling for IPV in health care settings, IPV screening rates in family practice and in emergency settings remain low worldwide[54,66,67]

AMA states that health professionals should make appropriate efforts to ensure that all patients are routinely assessed for violence and abuse, not just those from population groups believed to be at high risk[65]. The complexity of the issues arising IPV requires three distinct sets of guidelines related to assessment, prevention, and reporting IPV[65].

Accordingly, health professionals must be alert not only to physical health conditions associated with violence (acute physical injuries**,** chronic physical injuries**,** obstetric and genital injuries), but also psychological problems, like depression, anxiety, PTSD, self-harm, social isolation, exacerbation of psychotic symptoms, suicidal ideation alcohol or drug misuse, sleep disturbances, insomnia and nightmares[7,63,68]

In the presence of alert symptoms related to violence, health professionals, as first line support professionals, must be able to screen and provide ongoing care for women, according to five important tasks that protect women´s LIVES: Listen (listen to the woman closely, with empathy, and without judging); Inquire about needs concerns (assess and respond to her various needs and concerns—emotional, physical, social and practical, for example, childcare); Validate (show her that he/she understand and believe her, without blaming her); Enhance safety (discuss a plan to protect herself from further harm if violence occurs again); Support (support her by helping connect to information, services and social support)[69].

Despite the previous identified barriers, there are some facilitators and strategies that could help health professionals to overcome them, namely a trusting relationship with women, attentive non-judgmental listening, participate in the community, team-work, continued education[61] and training in how to respond and intervene, multi-agency training on what services are available, standardized procedures for dealing with IPV, directing patients to independent IPV advisory services, private space or office for questioning without partner and raising awareness of IPV in departmental training[63].

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