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On the Relationship Between Intimate Partner Violence and Quality of Life Among Menopausal Women

Masumeh Ghazanfarpour [1], Zari Dolatabadi [1], Masumeh Saeedi [2], Shahin Shojania [3], Mohammad Ali Kiani [4], Mohsen Mohsen Abadi [5] and Masoudeh Babakhanian [6,*]

[1] Student Research Committee, Kerman University of Medical Sciences, Kerman, Iran
[2] Department of Medical Education, Faculty of Medicine, Tehran University of Medical Sciences, Tehran, Iran
[3] Semnan University of Medical Sciences, Semnan, Iran
[4] Department of Pediatrics, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
[5] Mazandaran University of Medical Sciences. Sari, Mazandaran, Iran
[6] Abnormal Uterine Bleeding Research Center, Semnan University of Medical Sciences, Semnan, Iran

[*] *Corresponding author*: Abnormal Uterine Bleeding Research Center, Semnan University of Medical Sciences, Semnan, Iran. Email: babakhanian.m@gmail.com

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Abstract

Background: This study aimed to assess the relationship between intimate partner violence (IPV) and quality of life (QOL) among menopausal women.

Methods: The present cross-sectional study was conducted on 202 postmenopausal women admitted to different healthcare centers. The primary data collection tools were the revised Conflict Tactics Scale (CTS2) and Menopause-Specific Quality of Life (MENQOL).

Results: The participants encompassed 202 postmenopausal women with the mean age of 52.14 ± 5.93 years. The analysis revealed that 70.8% of women were 45 - 55 years, 29.2% of women were 56 - 65 years, and 62.7% of the participants had more than two children. Compared to the non-smoking participants, the smoking women reported more injury violence (P = 0.008). In this study, the effect of the husband and wife's level of education on IPV was not significant. The menopausal women or their spouses experienced more psychological (P = 0.008) and injury (P = 0.01) violence following their second marriage. The present findings suggested that three types of violence, including psychological (P < 0.001), physical (P = 0.003), and injury (P < 0.001), reported higher levels of psychological symptoms. The women experiencing psychological (P < 0.001) and sexual (P = 0.012) violence reported more severe physical problems than those with no history of violence in menopause.

Conclusions: This study provided more profound insights into the relationship between menopause-related quality of life and types of violence among menopausal women. The quality of life in postmenopausal women is significantly declined under domestic violence. Healthcare providers are recommended to be trained on detecting and managing IPV and the corresponding physical and psychological problems.

Keywords: Intimate Partner Violence, Quality of Life, Postmenopause, Relationship

1. Background

Violence against women is considered an inevitable event worldwide, the most frequent type of which is intimate partner violence (IPV) (1). Many social, psychological, and economic problems are rooted in domestic violence targeting women's lives (2).

IPV refers to any violence imposed by a current or former intimate partner on another partner and encompasses physical (ie, hitting, slapping, and breaking bones), sexual (ie, coercion, unwanted touching, and rape), and emotional/psychological (ie, yelling, insulting, degrading, threatening and controlling) violence. IPV is predominantly and purposefully associated with the punishment or control of victims (3, 4). On average, about one out of three women experiences IPV (5).

The global prevalence of IPV among women aged 15 years or above was 30.0% in 2010 [95% confidence interval (CI): 27.8 to 32.2%] (1), and this rate varied between 15 - 80% in different parts of Iran (6-8). The IPV prevalence was lower in the midlife and older age group when compared with reproductive age. According to a previous report, 4.1% of women aged 45 - 54 years and 1.2% of women aged 55 - 64

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years experienced more physical violence during the last five years than women aged 35 - 44 (6.7%) and 25 - 34 years (6.7%) (9). Female gender, low income, low literacy rate, and partner unemployment are the leading causes of IPV; however, IPV may affect everyone regardless of the level of education, gender, religion, ethnicity, and socioeconomic status. Alcoholism and mental illness are also health risk factors for IPV (10).

Moreover, women who are economically dependent on their husbands are at greater risk of IPV as such, the degree of dependence is directly correlated with the severity of violence (11).

Women's employment, increasing age, and years of marriage, and literacy levels are protective factors against IPV (12).

IPV has devastating effects on women's mental health. Women experiencing IPV are at risk for psychological trauma such as anxiety, depression, anxiety, and suicide (13). Evidence shows that many psychological problems women face in society directly result from IPV (11). Regardless of whether or not a woman quits the relationship, these consequences persist for a long time and affect the woman long after the main event (14).

Women with IPV experience face many barriers to health care, such as financial pressure, instilling fear and control over their husbands, fear of being blamed, and feeling ashamed, and many women who seek treatment never experience IPV (13).

Menopause accounts for one-third of a woman's life, exposing her to extensive physical and mental changes. Decreased estrogen can affect a woman's physical, mental, and sexual health (15). It also affects social activities, mood, communication with others, and ultimately QOL (QOL) (16). Physiological changes in the body, psychological disorders, and lack of sexual awareness lead to sexual disorders during the same period, which increases disagreement and aggression between couples (17). Menopausal women who experience IVP may change their physiological response to stress (15, 18).

QOL in women with rape or physical assault has been remarkably decreased (19). Women who experienced abuse have had numerous consequences such as physical problems, HIV/AIDS, gynecological problems, bladder infections, chronic pelvic pain, depressive symptoms, and low social functioning scores (19, 20). According to a case-control study during 2005 - 2006, there was a relationship between IPV with anxiety, psychiatric problems, calls for a head injury, and mental health problems (9). A relationship has been reported between physical health problems (such as pain or bronchitis, bowel problems, breathing problems, fatigue, and hearing problems) and domestic violence in middle-aged women (21). Some studies assessed the relationship between mental health and type of violence in the age group of 18 - 65 years (22, 23) and middle life (9). No study has assessed the relationship between types of violence and physical, psychological, sexual, and vasomotor in the specific age menopause.

2. Objectives

The present study aimed to investigate the relationship between IPV and Menopause-Specific Quality of Life (MENQOL) in menopausal women.

3. Methods

This cross-sectional study evaluated the relationship between types of violence and MENQOL among menopausal symptoms. This study was conducted in 2015 and lasted about six months. It was approved by the Ethics Committee (code: IR.SEMUMS.REC.1397.183) of the Semnan University of Medical Sciences, Iran. Semnan province is one of the eastern provinces of Iran, with an arid climate, and 202 postmenopausal women referred to health centers in this province were randomly selected as a study sample. Post-menopause is a natural stage when a woman has no menstrual periods for more than 12 consecutive months.

3.1. Inclusion and Exclusion Criteria

Inclusion criterion was natural menopause status, and the exclusion criterion was a history of hormone replacement therapy (HRT), chemotherapy-induced menopause, and hysterectomy.

3.2. Data Collection Instruments

The required data collection tool was a questionnaire with two sections. Demographic variables such as age, level of education, and history of smoking (yes or no) were first recorded. The second section contained two separate questionnaires.

3.3. Menopause-Specific Quality of Life Questionnaire

The self-administered MENQOL questionnaire with 29 items was developed by Hilditch et al. It consists of four dimensions: physical (16 items), psychosocial (7 items), and sexual (3 items), vasomotor (3 items). Women need to remember their experiences of the past month. If their answer to one item is negative, they can go to the next question. Then women are asked to rate their symptoms on a 7-point Likert scale ranging from 0 (not at all bothered) to 6 (extremely bothered), with

higher scores indicating lower QOL (24, 25). Many studies validated the Persian version of MENQOL (24, 25). The questionnaire was nationalized in Iran by Ghazanfarpour et al. (24). Cronbach's alpha coefficient was 0.9, and an acceptable internal consistency was found for the vasomotor, physical, and psychosocial dimensions but not for the sexual dimension (24).

3.4. Revised Conflict Tactics Scale

Revised Conflict Tactics Scale (CTS2) is a validated questionnaire examining the extent to which both of the partners have enacted violent actions. This questionnaire is the most widely used tool for collecting data on domestic violence and IPV. It assesses the prevalence and timing of violence in two dimensions simultaneously in terms of sexual coercion (7 items), psychological aggression (8 items), physical assault (12 items), and physical injury (8 items). The negotiation subscale (6 items) assesses the couple's non-violent relationship.

The conflicts are grouped by CTS2 into six levels in accordance with the number of violent episodes in IPV, indicating Level 1 - 2 (1 - 2 episodes), Level 3 (5 episodes), Level 4 (10 episodes), Level 5 (11 - 20 episodes), and Level 6 (> 20 episodes) as such a score > 25 means severe IPV. Perpetration and victimization are both asked for each violent behavior. The IPV perpetrators were those women committing violent behaviors in the last year, and the IPV victims were those women experiencing violent behaviors exhibited by their partners, meaning the women could be grouped only as victims or perpetrators but not both. The Cronbach's alpha coefficients for the five subscales of aggression, psychological aggression, negotiation, physical assault, sexual coercion, and physical injury were 0.79, 0.86, 0.86, 0.87, and 0.95, respectively (26). Sleath et al. reported satisfactory and multiple factor structure and reliability of CTS2 (27). In Iran, Cronbach's alpha coefficient was 0.79 for psychological aggression and 0.91 for negotiation (28). The menopausal women explained the violence experienced by their partners during the last years. This study included victim women and excluded the perpetrator ones.

3.5. Statistical Analysis

The collected data were analyzed with SPSS Software version 11 (SPSS Inc., Chicago, IL). ANOVA, Student's *t*-test, and Shapiro Wilk test were used to determine the normal distribution of data. Statistically, the significance level was set as $P < 0.05$.

4. Results

The participants encompassed 202 postmenopausal women with the mean age of 52.14 ± 5.93 years. According to the analyses, 70.8% of women were 45 - 55 years, 29.2% of women were 56 - 65%, 62.7% of the participants had more than two children, 20.3% of the participants were illiterate, 27.2% had primary school, 23.8% had middle school, 20.3% had high school and higher education degrees, and 8.4% of these individuals reported no academic education (Table 1). The average number of children was 3.38 ± 1.38, and most participants had three children. Furthermore, 26.2% of the participants smoked cigarettes or hookah.

Table 1. Frequency and Percentage of Research Variables

Variables	No. (%)
Level of education	
Illiterate	41 (20.3)
Primary school	55 (27.2)
Middle school	48 (23.8)
High school	41 (20.3)
Academic	17 (8.4)
Smoking	
No	149 (73.8)
Cigarette	11 (5.4)
Hookah	39 (19.3)
Cigarette-hookah	3 (1.5)
Age	
45 - 55	143 (70.8)
56 - 65	59 (29.2)
Number of children	
0	8 (4.0)
1	10 (5.0)
2	43 (21.3)
3	54 (26.7)
4	30 (14.9)
> 4	57 (28.2)

Women aged above 55 years reported more violent episodes during IPV compared to those aged 55 - 65 years (P = 0.016). Compared to non-smokers, smoking women reported more psychological violence (P = 0.008). Moreover, the impact of the husband and wife's level of education on IPV was not significant. The menopausal women or their spouses experienced more psychological (P = 0.008) and injury (P = 0.01) violence after their second marriage (Table 2). There was no relationship between

Table 2. Relationship Between Demographic Characteristics and Type of Violence

Variables	Physical Assault		Sexual Coercion		Injure		Psychological Violence	
	Mean ± SD	P-Value	Mean ± SD	P-Value	Mean ± SD	P-Value	Mean ± SD	P-Value
Age (y)		0.101		0.385		0.086		0.016
45 - 55	1.89 ± 1.12		31.75 ± 8.39		20.83 ± 5.47		9.23 ± 2.43	
55 <	2.59 ± 1.90		55.04 ± 20.93		28.29 ± 13.89		18.37 ± 6.32	
Women' educational level		0.485		0.684		0.697		0.951
Illiterate	2.20 ± 1.44		41.25 ± 11.75		25.51 ± 6.80		7.15 ± 2.34	
Primary school	1.38 ± 0.97		45.58 ± 12.45		11.02 ± 4		20.08 ± 5.40	
Middle school	1.77 ± 1.13		36.05 ± 9.4		31.86 ± 11.81		7.40 ± 2.23	
High school	2.44 ± 1.5		42.10 ± 14.18		23.53 ± 7.90		11.56 ± 3.55	
Academic	1.80 ± 0.6		0.26 ± 0.07		2.28 ± 1		6.41 ± 1.66	
Smoker women		0.150		0.141		0.395		0.028
Non-smoker	1.76 ± 1.03		35.24 ± 8.38		18.57 ± 6.25		13.05 ± 3.25	
Cigarette	3.56 ± 2.5		38.78 ± 15.83		14.69 ± 6		9.62 ± 6.71	
Hookah	2.74 ± 2.23		52.96 ± 23.67		36.48 ± 14.19		11.88 ± 4.2	
Smoker husband		0.916		0.846		0.069		0.862
Non-smoker	1.79 ± 1.15		42.03 ± 10.68		20.74 ± 7.20		14.62 ± 3.32	
cigarette	2.36 ± 1.46		36.23 ± 12.26		23.45 ± 6.90		10.95 ± 3.87	
Hookah	2.65 ± 1.83		50.54 ± 17.50		36.24 ± 18.33		7.34 ± 2.8	
Husband' opioid abusing		0.512		0.185		0.933		0.168
No	2.14 ± 1.33		39.96 ± 11.84		22.06 ± 7.54		12.90 ± 3.44	
Yes	52.17 ± 1.5		41.26 ± 12.94		29.99 ± 10.57		10.41 ± 4.52	
Husband' educational level		0.755		0.529		0.252		0.361
Illiterate- primary school	2.14 ± 1.37		16.37 ± 50.50		23.27 ± 6.23		17.88 ± 5.55	
Middle school	1.82 ± 1.05		37.28 ± 10.58		32.50 ± 10.97		4.31 ± 1.10	
High school and higher	2.34 ± 1.48		24.21 ± 7.67		16.78 ± 7.86		12.67 ± 3.58	
The second one or both		0.008		0.329		0.290		0.01
Yes	2.82 ± 2.75		47.01 ± 18		39.13 ± 13.15		16.48 ± 7.72	
No	1.96 ± 1.14		39.11 ± 10.70		20.62 ± 7.06		12.18 ± 3.04	

the type of violence with MENQOL vasomotor and sexual domains.

The present findings suggested that three types of violence, including psychological (P <0.001), physical (P = 0.003), and injury (P < 0.001), were associated with psychological symptoms. The women experiencing psychological (P <0.001) and sexual (P = 0.012) violence reported more severe physical problems than those without a history of violence in menopause (Table 3).

5. Discussion

This study, for the first time, assessed the relationship between four domains of MENQOL and IPV among menopausal women attending healthcare centers. In a meta-analysis, Yon et al. reported that the prevalence of elder abuse was 11.6% (8.1 - 16.3) for psychological abuse, 6.8% (5.0 - 9.2) for financial abuse, 4.2% (2.1 - 8.1) for neglect, 2.6% (1.6 - 4.4) for physical abuse, and 0.9% (0.6 - 1.4) for sexual abuse (26). Screening and referral for violence in later life should be considered an integral part of healthcare assessments (9). The present study revealed a significant relationship between all types of violence and the psychological domain of MENQOL among menopausal women. This finding is consistent with those of previous studies (9, 22, 23, 29). A case-control study among midlife American women revealed that anxiety, psychiatric problem, and mental health problem were associated with IPV (9). Moreover, other studies on the age group 18 - 65 years indicated a significant relationship between mental health problems and IPV (22, 23). In a study by Halpern et al. (22), the women experiencing IPV reported more mental problems such as anxiety, difficulty concentration, and memory loss. In a

Table 3. Relationship Between Types and Aspects of Violence and Menopause-Specific Quality of Life (MENQOL)

Type of Violence	Vasomotor		Psychological		Physical		Sexual	
	Mean ± SD	P-Value	Mean ± SD	P-Value	Mean ± SD	P-Value	Mean ± SD	P-Value
Psychological violence		0.825		< 0.001		< 0.001		0.425
No	3.46 ± 3.33		5.688 ± 7.05		13.18 ± 15.01		2.4 ± 2.63	
Yes	3.08 ± 2.38		8.26 ± 6.34		22.19 ± 15.12		2.45 ± 2.24	
Physical assault		0.61		0.003		0.104		0.803
No	3.27 ± 3.11		6.35 ± 7.17		16.56 ± 16.51		2.48 ± 2.61	
Yes	3.34 ± 2.39		8.9 ± 5.50		17.65 ± 11.09		2.1 ± 1.95	
Injury violence		0.297		0.001		0.13		0.364
No	3.31 ± 3.13		6.1 ± 6.67		16.25 ± 16.39		2.41 ± 2.6	
Yes	3.55 ± 2.13		10.1 ± 7.3		20.80 ± 13.01		251 ± 1.92	
Sexual coercion		0.390		0.08		0.012		0.89
No	3.30 ± 3.18		6.47 ± 7.2		16.27 ± 16.96		2.52 ± 2.62	
Yes	3.42 ± 2.43		7.52 ± 6		20.08 ± 12.75		2.38 ± 2.17	

sample of 1402 Spanish women (positive IPV, n = 445 and negative IPV, n = 947), Ruiz-Perez and Plazaola-Castano found out that the experience of violence was more likely to be associated with tranquilizer use, antidepressants, painkillers, alcohol, illicit drugs, psychological distress, and lower self-perceived health (23). Further, our findings are consistent with the findings of studies on younger age groups. In a cross-sectional study on 502 Italian university students, Romito and Grassi documented that the more the types of violence experiences, the greater the risk of mental health, including such as GHQ < 5, panic attack, heavy alcohol use, eating problem, and suicide attempts (29).

The present study indicated that the most common types of violence were psychological, physical, and traumatic, respectively.

The victims of partner violence face several mental disorders. In the present study, three types of violence, including psychological (P < 0.001), physical (P = 0.003), and trauma (P < 0.001), were associated with psychological symptoms. The women experiencing psychological (P < 0.001) and sexual (P = 0.012) violence reported more severe physical problems than those with no history of violence in menopause.

Our findings suggested that three types of violence, including psychological physical (P = 0.003) and injury, were associated with psychological symptoms. Gonzalez Cases et al. found out that the prevalence of violence in women admitted to psychiatric wards over the last year was 16.6% for psychological violence, 9.9% for physical violence, and 2.8% for sexual violence, respectively (28). In another study, women with mental distress were 4.3 times more likely to be exposed to abuse than those who were not exposed to abuse (30). Concerning the relationship between physical symptoms and IPV, the findings are in a similar line with Halpern et al.'s findings (22). In this cross-sectional study on 87 women aged 18 - 64 years, IPV-positive women reported health problems such as memory loss, fatigue/tiredness, upset stomach/heartburn, joint and muscle pain, and sleeping difficulty (insomnia), compared to IPV-negative subjects.

A systematic review assessed the effect of economic empowerment on the IPV risk. Their findings revealed that women's higher level of education was associated with lower IPV in middle-income countries (31).

In the study by Abramsky et al., level of education was identified as one of the protective factors in exposing to violence (32).

Due to increasing women's awareness and skills in solving life problems, higher levels of education lead to women's employment and subsequent financial assistance to the family, which significantly reduces violence (33).

By promoting women's knowledge and skills in solving life problems, higher levels of education leads to women's employment and, consequently, financial assistance to the family. This factor plays a critical role in reducing violence.

In contrast, the present study found no significant relationship between the types of violence with women's level of education. This difference in findings can be attributed to the research population, study design, and the participants' age. Moreover, the present study was performed on menopausal women, almost two-thirds of whom had low levels of education.

The present study detected no significant difference between smokers and nonsmokers regarding different types of violence, except for psychological violence. Similarly, Maziak and Asfar reported no significant difference between smokers and non-smokers regarding physical violence except (30).

The findings of a meta-analytic review on 31 peer-reviewed articles showed that the positive IPV was at greater smoking risk than negative IPV (small to medium pooled effect size = 0.41, 95% CI = 0.35 - 0.47). This finding is consistent with the present findings as cigarette smoker women reported more injuries compared to non-smokers (34).

In the present study, the menopausal women themselves or their spouses with the second marriage experienced more psychological (P = 0.008) and injury (P = 0.01) violence Mohammadbeigi et al. also reported a significant relationship between the history of divorce and violence, which is consistent with the findings of the present study (35).

There was no relationship between type of violence with MENQOL vasomotor and sexual domains. However, in Gibson et al.'s study, women who experienced IPV were more likely to have menopausal symptoms (18).

5.1. Conclusions

Psychological violence had a relationship with age, smoking, and second marriage. The psychological violence was associated with the mental and physical dimensions of QOL, and the physical assault and injury were also related to the psychological dimension of QOL, as well as sexual coercion was correlated with the physical dimension of QOL. The present study showed that QOL in postmenopausal women significantly declined under domestic violence. Detecting women vulnerable to violence and factors affecting QOL should be placed on the agenda of health centers. Furthermore, providing training to staff and physicians to properly detect and manage IPV, dealing with relevant physical and psychological problems, and empowering staff are the main strategies to assist women at risk of violence. Establishing social support systems in high-risk populations or even the general population can also alter the impact of violence on psychological health and improve mental health in women exposed to IPV.

Footnotes

Authors' Contribution: Masumeh Ghazanfapour and Masoudeh Babekhanian designed the study; Zari Dolatabadi and Mohsen Mohsenabadi analyzed the data; Shahin Shojania and Masoudeh Babakhanian gathered the data; Mohammad Ali Kiani, Masumeh Saeidi, Masumeh Ghazanfarpour, and Masoudeh Babakhanian wrote and edited the final manuscript. All authors Confirmed the final manuscript.

Conflict of Interests: The authors have no conflict of interests.

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