Mental Health and Social Function Among Women Subjected to Intimate Partner Violence: A Cross-Sectional Study

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Abstract- Intimate partner violence is a serious public health problem in all societies that affects all aspects of the victim’s health, especially mental health. The present study aimed to determine the relationship between intimate partner violence and mental health among Iranian women who referred to the Forensic Medicine Center in Tehran. This cross-sectional study was done on 196 married women who referred to the south center of Forensic Medicine in Tehran. Data were collected in 2013 by using three questionnaires: a demographic questionnaire, CTS-2, and GHQ-28. Data analyzed by using SPSS-14 software. The age of participants was 29.9±6.3 years (range 18-57 years). Most women were housekeepers (73%) with moderate economic status (48.5%). Physical violence had the highest mean score (37.29±16.80); and after that, highest mean scores are related to Psychological violence 29.37±7.01, verbal violence 14.83±8.15, Physical violence leading to injury 14.47±6.85, and sexual violence 8.38±7.36, respectively. Verbal violence didn’t show any relation with all subscales of mental health. The somatic and anxiety symptoms were significantly correlated to total, and all violence subscales score (P<0.001). Also, social function was correlated to total violence score (P=0.032), Sexual (P=0.002), and psychological violence (P=0.025). Depression symptoms were correlated to total violence score (P<0.001), physical leading to damage violence (P<0.001), Sexual violence (P<0.001), Psychological violence (P=0.002), and physical violence (P<0.001). Our results showed IPV is related to the mental health of battered women, but verbal violence didn’t show any statistical relationship with somatic, anxiety, and depression symptoms and social function.

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Keywords: Domestic violence; Mental health; Intimate partner violence; Anxiety; Depression

Introduction

Violence against women, especially Intimate Partner Violence (IPV), is one of the most important issues in all societies (1), with social, economic, and health burden (2). According to WHO reports, 14-74% of women in developing countries and 24% of women in developed countries experience IPV at least once in their lifetime (3). In Iran, the prevalence of emotional-mental, physical and sexual violence is 59%, 45%, and 32%, respectively (2). Violence targets not only the physical health of victim women but also impairs the social, psychological, spiritual, economic, and emotional health of these women. Since the victims experience a lot of physical and psychological tensions, they will be at risk of reproductive and sexual disorders, too (4). The mental health impacts of domestic violence have been well documented in many studies (5-7). Abused women mostly suffer from self-perceived mental health and psychological distress, including depression, post-traumatic stress disorder (PTSD), anxiety, self-harm attempts and suicide, and sleep disorders (8,9). Having an abuse experience is a risk factor for mental health conditions, and in a bi-directional effect, women who had...
mental health conditions are more vulnerable to experience abuse (10). Abused women are likely to feel some bad senses such as guilt, shame or self-blame, and low self-esteem (11). IPV is related to personality disorders, too (12). In addition, Fowler (2007), in his research among 102 battered women, found more than two-thirds of these women are in the moderate to high risk of substance abuse (13). This study aimed at determining the association between Domestic violence and general health in women who referred to Tehran Forensic Medicine, Iran.

Materials and Methods

This cross-sectional study was done on 196 married women who referred to the Tehran Forensic Medicine South Center. The study was confirmed by the Ethical committee of Tehran University of Medical Sciences (No: 91/D/130/2981, 16/02/2013).

The sampling method was consecutive. After obtaining informed consent from all the participants, demographic questionnaire, Conflict Tactics Scales (CTS-2) and GHQ-28 (General Health Questionnaire-28) were used for data collection. Informed consent obtained from all women who met inclusion criteria, including Iranian women without any history of known mental and physical chronic disease or drug abuse. All women completed a demographic questionnaire, CTS-2, and GHQ-28.

CTS-2 is a well-known instrument for assessing violence aspects and containing 36 questions that evaluated women in terms of physical, sexual, psychological, verbal violence, and physical violence leading to damage. The reliability and validity of the questionnaire were confirmed by Behboodi Moghadam et al. (2010), with a correlation coefficient of 0.8 (14).

GHQ-28 was used to assess the mental health of the study population. GHQ-28 questionnaire was developed by Goldberg and Hillary in 1979 (15). The standard questionnaire GHQ-28 consisted of four subscales; each included seven items. The subscales are Somatic Symptoms (items 1-7), anxiety (items 8-14), social dysfunction (items 15-21), and severe depression (items 22-28). In this research, the cut-off point, specificity, sensitivity, and the overall classification error were reported to be 24, 0.99, 0.80, and 0.10, respectively, in Iran. In addition, it reported the criterion validity to be 0.78, the co-efficient registers to be 0.90, and finally, the Cronbach’s alpha as 0.97. (16,17).

Data analysis was performed by using statistical software SPSS (version 14). Pearson’s correlation coefficient was used for analyzing data. P<0.05 was considered as significant level.

Results

The mean and standard deviation (SD) age of the women who participated in the study was 29.9±6.3 years (range 18-57 years). Most of the subjects had middle and high school education (52.6%) and were housekeepers (73%). The mean and standard deviation age of woman’s husband was 34.3±7.7 years (range 19-79 years), and most of them had middle and high school education levels (48%), and also they were employees (91.8 %). Most participants in this study had moderate economic status (48.5%). Table 1 shows the details of the demographic characteristics of the study samples.

Table 1. Demographic characteristics of participates

| Variables                     | Variable classification | N (%)   |
|-------------------------------|-------------------------|---------|
| Age of woman (year)           | ≤ 20                    | 7(3.6)  |
|                               | 21-30                   | 97(49.5)|
|                               | 31-40                   | 77(39.3)|
|                               | >40                     | 15(7.6)|
|                               | ≤ 20                    | 1(0.5)|
|                               | 20-30                   | 55(28.1)|
|                               | 30-40                   | 103(52.5)|
|                               | >40                     | 37(16.2)|
| woman’s education level       | Primary school          | 17(8.7)|
|                               | high schools            | 103(52.5)|
|                               | University education    | 74(37.8)|
|                               | Illiterate              | 12(6.1)|
|                               | Primary school          | 190(97)|
|                               | high schools            | 94(48.0)|
|                               | University education    | 71(36.2)|
|                               | housekeeper             | 143(73.0)|
|                               | Employed                | 53(27.0)|
| Husband’s education level     | Poor                    | 52(26.5)|
|                               | Moderate                | 95(48.5)|
|                               | Good                    | 49(25.0)|
|                               | unemployed              | 16(8.2)|
|                               | employed                | 180(91.8)|
| women’s profession            |                         |         |
| Economic Status               | Poor                    | 52(26.5)|
|                               | Moderate                | 95(48.5)|
|                               | Good                    | 49(25.0)|
|                               | unemployed              | 16(8.2)|
|                               | employed                | 180(91.8)|

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The results of this study showed physical violence have the highest mean score (37.29±16.80); and after that, highest mean scores are related to Psychological violence 29.37±7.01, verbal violence 14.83±8.15, Physical violence leading to injury 14.47±6.85, and sexual violence 8.38±7.36 respectively.

Table 2 shows the correlation coefficient of mental health subscales and domestic violence dimensions. As this table presents, the somatic symptoms are significantly correlated to total violence score (P<0.001), physical leading to damage violence (P<0.001), Sexual violence (P<0.001), Psychological violence (P=0.001), and Physical violence (P=0.001). The anxiety symptoms are significantly correlated with total violence score (P<0.001), physical leading to damage violence (P<0.001), Psychological violence (P<0.001), physical leading to damage violence (P<0.001), and Psychological violence (P=0.025). The depression symptoms are significantly correlated to total violence score (P<0.001), physical leading to damage violence (P<0.001), Sexual violence (P<0.001), and Physical violence (P<0.001), and finally total score of general health is significantly correlated with violence total score and all dimensions score (P<0.001) except verbal violence.

| Dimensions of violence general | Total violence score | physical leading to damage violence | Sexual violence | Psychological violence | Physical violence | Verbal violence |
|-------------------------------|----------------------|-----------------------------------|----------------|------------------------|------------------|----------------|
| General health subscales      | r*  | P      | r*  | P      | r*  | P        | r*  | P        | r*  | P        |
| Somatic symptoms              | 0.316 | 0.000 | 0.248 | 0.000 | 0.293 | 0.000 | 0.226 | 0.001 | 0.236 | 0.001 | -0.047 | 0.514 |
| Anxiety symptoms              | 0.407 | 0.000 | 0.351 | 0.000 | 0.389 | 0.000 | 0.311 | 0.000 | 0.289 | 0.000 | -0.083 | 0.247 |
| Social dysfunction            | 0.154 | 0.032 | 0.134 | 0.061 | 0.221 | 0.002 | 0.161 | 0.025 | 0.064 | 0.375 | -0.045 | 0.533 |
| Depression symptoms           | 0.361 | 0.000 | 0.315 | 0.000 | 0.349 | 0.000 | 0.221 | 0.002 | 0.268 | 0.000 | -0.060 | 0.403 |
| General health                | 0.399 | 0.000 | 0.338 | 0.000 | 0.400 | 0.000 | 0.288 | 0.000 | 0.280 | 0.000 | -0.073 | 0.306 |

*Pearson correlation coefficient

Discussion

Participants in this study were 196 married women, 18-57 years of age, with an average age of 29.9±6.3 years. The most percentage of our participants were 21-30 years (49.5%). In this age range, the mental and physical health of women is a very important issue because this is one of the most active years of life. Violence in every form can affect all aspects of young women’s health (18). IPV even can increase HIV infection risk in these women (19). Kusunoki et al., (2017) reports that physical intimate violence in young women is related to the prediction of the contraceptive method and the use of victims (20).

In our study, physical violence got the highest mean scores. Although other studies did not report physical violence as the most violence experienced by battered women (21,22) since our study population was women who reoffered to the Tehran Forensic Medicine and in general, women who abused physically referred to this center, it can be expected that physical violence got the highest mean (23). On the other hand, it seems women reported other types of IPV less than physical violence because of three reasons: 1. personal, resource, attitude, perceptions, and fears barriers (24); 2. Women often are not aware of all violence types except physical violence. There is a lack of knowledge, especially about emotional and verbal violence, and 3. Since it is not accepted in some cultures, women never want to talk about violence.
and even violence is accepted by women from these cultures (25,26). Furthermore, women may think other types of IPV are not as important as physical violence for talking about it.

The results of our study also showed a significant correlation between total and sexual and psychological subscales score of CTS-2 questionnaire with all subscales and total score of GHQ-28. Also, physical violence showed a significant correlation with all subscales of GHQ-28 except social dysfunction. Previous studies have found a correlation between exposure to various types of violence with psychological factors (25,27), as well as social determinants (28), and somatic syndrome and disease (29). Indeed, all types of IPV can expose women to many psychological disorders such as depression, anxiety, PTSD, suicidality, self-harm, sleep disorders, or physical and chronic health conditions from pain to hypertension and stroke (8).

Interestingly, verbal violence didn’t show any significant correlation with GHQ-28 total and subscales scores. It seems these results are due to cultural factors; women believe and attitudes to violence. Women in some societies tend to favor IPV because IPV is considered as a gender issue and affected by admitted difference roles and manners of men and women (30) (e.g., men are predominant, and women should be obedient). This means the husband is appertaining to stronger gender, and therefore he has the right to treat his wife with abusive behavior if necessary (31). On the other hand, in some societies, women justify abusive behavior of their husbands and believe in this idea that the wife often deserves the violence because of their provocative behavior, and therefore abuse is due to their fault (31,32). Besides, since verbal abuse does not show any physical marker so it may not count as an abuse form by some victim women (33). Therefore, one possible explanation for this result is that when verbal abuse seems like normal behavior, it doesn’t make sense of belittlement and insult in abused women. So, in these women, psychological consequences may not be revealed.

In conclusion, our results showed IPV is related to the mental health of battered women, but verbal violence didn’t show any statistical relationship with somatic, anxiety, and depression symptoms and social function. The explanation of the current result needs to more investigations.

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References

1. World Health Organization. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and no partner sexual violence. Geneva: WHO Press; 2013. (Accessed at http://apps.who.int/iris/bitstream/10665/85239/1/9789241564625_eng.pdf).
2. Adineh HA, Almazi Z, Rad ME, Zareban I, Moghaddam AA (2016) Prevalence of Domestic Violence against Women in Iran: A Systematic Review. Epidemiology 2016;6:276.
3. M A. Violence against women in Ghana: A look at women's perceptions and review of policy and social responses. Soc Sci Med 2004;59:2373-85.
4. Kaur R, Garg S. Addressing Domestic Violence against Women: An Unfinished Agenda. Indian J Community Med 2008;33:73-6.
5. Campbell JC. Health consequences of intimate partner violence. Lancet 2002:359:1331-6.
6. Avdibegovic E, Sinanovic O. Consequences of Domestic Violence on Women’s Mental Health in Bosnia and Herzegovina. Croat Med J 2006;47:730-41.
7. Tolman RM, Rosen D. Domestic violence in the lives of women receiving welfare: mental health, substance dependence and economic well-being. Violence against Women 2001;2:141-58.
8. Dillon G, Hussain R, Loxton D, Rahman S. Mental and Physical Health and Intimate Partner Violence against Women: A Review of the Literature. Int J Family Med 2013;2013:313909.
9. Kuehner C. Gender differences in unipolar depression: an update of epidemiological findings and possible explanations. Acta Psychiatr Scand 2003,108:163-174.
10. Ferrari G, Agnew-Davies R, Bailey J, Howard L, Howarth E, Peters TJ, et al. Domestic violence and mental health: a cross-sectional survey of women seeking help from domestic violence support services Glob Health Action 2016;9:29890.
11. Karakurt G, Smith, D, Whiting J. Impact of Intimate Partner Violence on Women’s Mental Health. J Fam Violence. 2014; 29:693-702.
12. Amini L, Heidary M, Daneshparvar H. Personality Traits and their Impacts on the Mental Health of Battered Women. JMRH 2015;3:349-54.
13. Fowler D. The extent of substance use problems among women partner abuse survivors residing in a domestic violence shelter. Fam Community Health 2007;30:106-8.
14. Behboodi Moghadam Z, et al. Domestic violence in

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infertile women, it analyzes factors and prevention strategies. For getting the degree of PhD. School of Nursing and Midwifery, Tehran University of Medical Sciences and Health Services, 2010.

15. Goldberg D, Hillier V. A scaled version of the General Health Questionnaire. Psychol Med 1979;9:139-45.

16. Behjati Ardekani, Z. Akhondi, M. Kamali, K. Fazlikhalaf, Z. Eskandari, S. Ghorbani, B. Mental Health Status of Patients Attending Avicenna Infertility Clinic. J Reprod Infertil 2010; 11:319-24.

17. Ebrahimi A, Molavi, H. Moosavi, G. Bornamanesh, A. Yaghobi, M. Psychometric Properties and Factor Structure of General Health Questionnaire 28 (GHQ-28) in Iranian Psychiatric Patients J Res Behav Sci 2007;5:5-12.

18. Martín-Baena D, Montero-Piñar I, Escribà-Agüir V, Vives-Cases C. Violence against young women attending primary care services in Spain: prevalence and health consequences. Fam Pract 2015;32:381-6.

19. Jewkes RK, Dunkle K, Nduna M, Shai N. Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. Lancet. 2010;376:418-25.

20. Kusunoki Y, Barber J.S, Gatny H.H, Melendez R. Physical Intimate Partner Violence and Contraceptive Behaviors among Young Women. J Womens Health 2018;27:1016-25.

21. Setayesh N, ezoji K, bakhshizade M, Nojomi M. Domestic violence and physical and mental state of women. RJMS 2017;24:20-6.

22. Shakerinezhad M. Domestic Violence and Related Factors in Pregnant Women. zumsj 2013;21:117-26.

23. Amini L, heydari M, Daneshparvar H, Gharae B, Mehran A. The Relationship between Dimensions of Domestic Violence and Social Structural Determinants of Health in Women. J Mazandaran Univ Med Sci 2014;24:130-4.

24. Sprague S, Madden K, Simunovic N, Godin K, Pham NK, Bhandari M, Goslings JC. Barriers to Screening for Intimate Partner Violence. Women & Health 2012;52:587-605.

25. Vives-Cases C, Ruiz-Cantero MT, Escrivà-Agüir V, Miralles JJ. The effect of intimate partner violence and other forms of violence against women on health. J Public Health 2011,33:15-21.

26. Nojomi M, Akrami Z. Prevalence of physical violence against pregnant women and effects on maternal and birth outcomes. Acta Med Iran 2006,44: 95-100.

27. Stickley A, Carlson P: Factors associated with non-lethal violent victimization in Sweden in 2004–2007. Scand J Public Health 2010;38:404-10.

28. Winnersjö R, Ponce de Leon A, Soares JF, Macassa G: Violence and self-reported health: does individual socioeconomic position matter? J Inj Violence Res 2012;4:87-95.

29. Eberhard-Gran M, Schei B, Eskild A. Somatic Symptoms and Diseases are more Common in Women Exposed to Violence. J Gen Intern Med 2007;22:1668-73.

30. Taylor S, Xia Y, Do KA. Attitude towards intimate partner violence in two Asian cultures. Int J Asian Soc Sci 2017;7:182-91.

31. Do K N, Weiss B, Pollack A. Cultural Beliefs, Intimate Partner Violence and Mental Health Functioning among Vietnamese Women. Int Perspect Psychol 2013;2.

32. Tiwari A, Wong J, Brownridge DA, Chan KL, Fong DYT, Leung WC, Ho PC. Psychological Intimate Partner Abuse among Chinese Women: What we know and what we still need to know. Open Soc Sci J 2009;2:32-6.

33. Quintana, SM. Parental and Cultural Influences on Hispanic College Women’s Verbal Intimate Partner Violence Victimization: An Examination of Within-Group Differences. FIU Electronic Theses and Dissertations 2014;1453.