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Check Out The Correlation Between Structural Social Determinants of Health and Quality of Life of Women Have Experienced Domestic Violence in Tehran Referred to Social Emergency in 2015

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The concept of quality of life, personal and social, is a critical concept and can also be happiness and life satisfaction and is related to factors such as age, education, culture, disease, environment, sex, socioeconomic status. These factors have indeed been associated with the occurrence of abuse. This study's aim is to determine the correlation between structural social determinants of health and quality of life of women with experience of domestic violence. This was a cross sectional study. The sample for study comprised 102 eligible women who had experienced domestic violence and had approached a social emergency in Tehran, Iran. Data collection tools included demographic questionnaire and socioeconomic status, domestic violence questionnaire and Short - Form26 of quality of life of the World Health Organization. Information obtained from the samples was analyzed by SPSS version 22 and descriptive statistics, independent T-test, chi-square were used. Result didn't show a relationship between quality of life and socio-economic class (p=0.410), quality of life and ethnicity (p>0.05), but significantly statistical relationship (p>0.05) existed between education, income, job and quality of life of women with experience of violence. Domestic violence could happen in all societies and regardless of level of education, socioeconomic status, income, occupation and various ethnic groups which are components of structural social determinants of health, and finally could have negative effects on mental, physical and social health which are dominant components of the quality of life. Some structural social determinants of health like socioeconomic status cannot fade domestic violence or increase the quality of life of women with domestic violence experience.

Key words: Domestic violence, quality of life, structural social determinants of health, social emergency.

Quality of life" literally means 'how to live'. It is well used in political, social and economic fields and has a more significant use in medical studies and in the eyes of most experts, includes physical, psychological, social, physical and spiritual aspects[1]. The World Health Organization defines quality of life as the perceptions of one's life according to the culture

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and value system in which a person lives and their relationship with goals, expectations, standards and the priorities of that person[2]. Social determinants of health are the conditions in which a person is born, grows up, lives and works. Health equity refers to the absence of preventable differences in well-being among the population or community groups that can be the result of differences in racial conditions, economy, demography or geographic location[3]. Structural social determinants of health are factors that bring social classes into existence, such as: age, gender, occupation, income, ethnicity, education, socioeconomic status[4]. Violence against women is a major public health problem and a human rights issue in today's world[5]. Surveys conducted in different countries suggest 60-25 percent of women suffer abuse at the hands of their husbands[6].In Iran, 83-27% of women are exposed to domestic violence[7]. A survey conducted in 28 provinces showed that in 66% of families surveyed, women have experienced violence at least once after marriage; 2/57 experienced verbal mental-verbal abuse, 8/37 percent experienced physical violence and 2/10 experienced sexual violence. 30% of families have reported acute and serious physical violence and10% have reported temporary or permanent injuries[8]. Researchers believe that domestic violence is prevalent among all classes and races and the prevalence of this phenomenon more among the lower classes than other classes is not confirmed. This is because middle and upper classes try to hide or deny violence[9]. Violence against women can threaten or disturb the quality of life of women and that of their children as well as their capabilities, independence and productivity[10]. Domestic violence is the most common form of violence against women[11] having a negative impact on their quality of life[12]. Mistreatment of wives reduces the participation and productivity of women in social and economic activities and thus lowers their quality of life[13]. Education, female employment and household income are factors that are associated with the incidence of abuse[14] and also affect the quality of women's lives[15]. Alsaker et al (2009) suggest that emotional abuse is more prevalent among housewives. On the other hand, the overall quality of life among working women subject to abuse is lower because they report feeling dizzy and sick and are forced to take days off work[16]. Highly educated couples are equipped with more knowledge and the ability to apply life skills to reduce incidence of abuse in the family and thus improve their quality of life[14]. Low income has also been more common in people subjected to domestic violence and it is a factor that threatens mental health[17]. The study of domestic violence is restricted to medical and social problems and enough data is not available in the field of the effect of domestic violence on quality of life and the impact of social determinants of health on quality of life of victims of domestic violence. The purpose of study about the quality of life of women who have experienced domestic violence is individual prosperity and cooperation in order to promote a sense of community planning and implementation of policies for positive changes in their quality of life and also, according to numerous studies and statistics as well as lack of studies in this area with such titles, the present study was carried out with an aim to determine the correlation between structural social determinants of health and quality of life of women with experience of domestic violence.

METHODS

This research is a cross-sectional study to determine the relationship between structural social determinants of health and quality of life of 102 abused women who had approached social emergency centers in Tehran. The researcher was approved by the ethics committee and received the necessary permits approached the State Welfare Organization of Tehran province (Ershad, martyr Nawab Safavi and Zulfiqar). First, the women who had sought refuge in these centers were asked to introduce themselves and were assured of the confidentiality of their responses, were provided with sufficient information in the field of research and study and then written consents were taken from women who had agreed to participate. Inclusion criteria were: Iranian, living in Tehran, married and currently living with the spouse, a history of addiction (alcohol, heroin, opium, hashish, hookah etc.), no history of mental disorders within the last one year. Exclusion criteria were the absence of any of the above mentioned criteria. Data collection tools included

questionnaires of demographic, socio-economic status, domestic violence and quality of life. Grade reliability socio-economic situation is based on Cronbach's alpha indicator 0.6[8]). Domestic violence questionnaire, modified and validated by Hajian *et al.*, (2014) and has been used by other researchers[19,20,21] and has 26 items on physical, sexual and psychological violence, with 10 items on physical violence, 5 on sexual and 11 on psychological violence based on a five-point Likert-type response format, was used to assess women's experiences of violence (never, one time, two times, 3-5 times, more than 5 times). Cronbach's alpha coefficient of the questionnaire for three areas is obtained for physical violence, psychological and sex 0.92, 0.89, 0.88, respectively. Validity and reliability of the questionnaire base on content validity index (CVI) is 0.8[19]. To evaluate the correlation coefficient Intraclass Correlation Coefficient (ICC) was used, which was equal to 0.99 and showed the reliability of the tool[22], and also according to Polit & Beck' study in 2004, ICC above 0.75 is acceptable[23]. Quality of Life questionnaire was translated and validated by Nejat et al (2006) for the first time. The alpha factor calculated for a healthy population within the physical area was 0.70, 0.73 for mental health, 0.55 for social relations and 0.84 for environmental communication. They reported a 0.7 reliability through test-retest method after two week. Likewise, in the results reported by the makers of the tools of quality of life of the World Health Organization that took place in 15 centers of this organization have been conducted by 15 international centers, Cronbach's alpha has been reported from 0.73 to 0.89 for the total. In this study, the Quality of Life Questionnaire-Short Form (WHO 2004) was used and consisted of 26 questions where 24 questions measure environmental health, physical health, social relations and mental health checks and the remaining two at the beginning just measure general life satisfaction[24]. Grading was based on 5 degree Likert scale scores and total score range considered was 0-100. According to the calculated score, people were divided into three groups: Undesirable quality of life (0-33.3), average (33.4-66.3), desirable (66.4-100) (25). Volume of sample size by use of similar studies, descriptive studies formula sample size and taking into account α=0.05 and β=0.20, the least expected correlation coefficient 0.3, including the loss of 20%, was estimated to be102 women. At first, researcher gave demographic and socio-economic status and domestic violence questionnaires to the participants. Women were asked a group of questions about whether they had ever experienced any kind of physically and/or mentally violent act in the 12 months preceding the study. Women who did not report any violence on part of their partners were categorized as 'never abused;' if they reported at least one violent act, they were categorized as'mild violence,' and three to five violent acts were categorized as 'moderate violence,' and more than five violent acts were categorized as 'severe violence.' Every question was graded from the score of 0 for "never" to the score of 3 for "more than 5 times" for violent behavior. Hence, women who reported having experienced any act of physical and/or mental violence in the past year were categorized as 'current violence.' Information obtained from samples was analyzed by SPSS version 22. In this study, descriptive statistics, chi-square test and independent t-test were used

RESULTS

In this study, 102 married women aged 17-67 (the mean age of women was 32.35±9.32 and that of their husbands was 46.40±11.) Among women with experience of domestic violence, 9.8% had primary education, 20.6% guidance school, 9.8% high school, 27.5% diploma, 7.8% upper diploma, 19.6% bachelors degree and 4.9% a post graduate degree and among their partners, the highest percentage had a high school education (25.5%) and the lowest a PhD degree (1 percent). 36.6% women were employed and 63.7% were housewives. 32.4% of the husbands were self-employed and 67.6% had government jobs. All of

Table 1. Distribution of samples in terms of socioeconomic status of women who had approached a social emergency in Tehran in 1394

N=102	Percentage	Distribution Socioeconomic Status
19	18.6	16>Undesirable
83	81.4	16<Desirable

the participating had experienced domestic violence at least once during the past year, the most common type of violence was psychological violence (97.1 %), followed by physical violence (84.3%) and sexual violence (62.7%) (Figure 1).

71.6% of the subjects had moderate quality of life. 36.3% of the subjects had never experienced sexual violence, 61.8% had experienced psychological violence once or twice, 30.4% had experienced physical violence 3-5 times and 15.7% had experienced physical violence more than 5 times. Socio-economic situation was determined based on Garmaroudi and Moradi's questionnaire (1389) (Table 1). 62.7 % of participants lived in an infrastructure larger than 60 square meters and the average size of their homes was 76/83 square meters. 58.8 % of subjects had a monthly income of more than a million tomans and the average income was 1,555,480 per month. 55.9 % of them had a private car excluding passenger vehicles as a means for earning a living. 52.9 % of the subjects had a personal computer.

Using the chi-square test, a statistically significant relationship between socioeconomic status and quality of life was not observed. (p=0.410) (Table 2)

63.1 % of housewives and 58.8% of working women had moderate quality of life. 45% of employed women had moderate quality of life and 45 % had desirable quality of life. On the whole, the relationship between women's employment and their quality of life was significant (p=0.049).

37.5 % jobless husbands had undesirable and 37.5 % had a moderate quality of life. 53.3 % of working husbands, 60.6 % employed husbands and 63 % self-employed husbands had moderate quality of life. There was no significant relationship with quality of life and the job of the spouse (p=0.603).There was a statistically significant relationship between family income and the quality of life (p=0.027). (Table 3)

Ethnicity of women and their husbands wasnot significantly correlated with quality of life (p=0.635).

54.8 % of women had a primary school education, 60.5 % had a high school education and 60.6 % were college-educated and all of them had moderate quality of life. There is a significant relationship (p=0.047) between women's educational levels and quality of life . 54.8 % husbands with primary school education, 61.5 % with secondary school education and 58.4 %

Table 2. Correlation between quality of life and socio-economic status of women who have experienced domestic violence and had approached a social emergency in Tehran in 1394

Desirable		Moderate		Undesirable		Quality of life
N	percentage	N	percentage	N	percentage	Socio economic status
3	15.8	10	52.6	6	31.6	16>Undesirable
18	21.7	50	60.2	15	18.1	16<Desirable
		0.41				Chi-square value

Table 3. The relationship between family income and quality of life of women with an experience of domestic violence who had approached a social emergency in Tehran in 1394

Desirable		Moderate		Undesirable		Quality of life
N	percentage	N	percentage	N	percentage	Socio economic status
1	3.6	17	60.7	10	37.7	400000 Toman>
7	18.9	24	64.9	6	16.2	401000-800000 Toman
6	30	10	50	4	20	801000-1000000 Toman
7	41.2	9	52.9	1	5.9	1000000 Toman <
			0.027			Chi-Square value

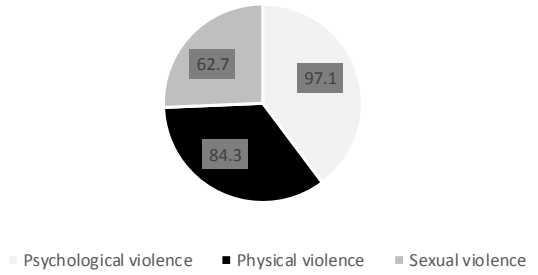

Fig. 1. Distribution of forms of violence (physical, sexual, psychological) in women who experience domestic violence in Tehran and approached a social emergency in 1394

college educated had moderate quality of life. There was a significant relationship between hubands' educational levels and quality of life (p=0.052).

DISCUSSION

Even in the studies of Amini et al., 2014. Tavoli *et al*., 2016. Sadeghi Fsaei, 2010) the level of women education was diploma[9, 26, 27]. But in the of study of Mirzaee *et al*.,(2014) more women had a bachelors education (24.2 %). This difference may be due to a higher number of samples[28]. In Razzaghi *et al.,* (2013)'s study, more women (50%) had primary and secondary education The reason for this difference may be that data collection was an interview, and women's education was not a criteria for responding to the questionnaire[29] but education was an inclusion criteria in our research. In Gharacheh et al (2011)'s study, the highest level of husbands' education was diploma[30] while in Bakhtiari *et al*.,(2004)'s study, more husbands were illiterate. This difference is probably due to the fact that the questionnaire was based on interviews and examination[31]. In studies of Amini et al., 2014, Razzaghi *et al*., 2013. Hajian et al., 2014, the majority of women were housewives[19, 26, 29]. In contrast, in studies of (Moasheri *et al*., 2012. Saher et al., 2009), most women were employed[32, 16] . This difference might be a result of employed women's strengthening of the family's economic situation leading to a higher quality of life and as a result, lessening the incidence of domestic violence because of which referral to legal medical and social emergency centers comes down. Quality of life for the majority of participants (71.6 %) was moderate and was matched with (Gharacheh *et al.,* 2011. Leung *et al*., 2005. McDonnell *et al*., 2005) (30, 33, 34). In studies of Gharacheh *et al*., 2011. Moasheri *et al*., 2012 psychological violence was more common[30,32]. In studies of Bakhtiari et al (2004) in Babol, the most common form of violence reported against women was physical violence. Sampling was done in the forensic medicine section and thus naturally, more clients had physical injuries[31]. Attending to the diversity of populations studied (forensic medicine, emergency department, women's clinic) and the type of of study (population-based, cross-sectional, etc.) and different cultural and socio-economic backgrounds, this wide range is not unexpected. Abbas zadeh et al have argued low socioeconomic status is associated with poor health[15] and is weakened because the quality of life includes public, mental, physical, social and environmental health. Studies of Dolatian *et al*., 2008 and Vameghi *et al*., 2013 expressed economic problems could raise levels of stress and tension. Long-term chronic stress lessens people's tolerance level and raises aggression and thus affects the quality of life[35, 36]. And the reason for this discrepancy may be the larger sample size and their sampling environment. Employed women have vitality and a sound mental health which are components of quality of life. Education, female employment and household income are factors that are associated with the incidence of abuse[14] and also affect the quality of women's lives[15]. Unemployment is related to physical and mental health problems such as depression, anxiety and high suicide rates. Income shapes a sense of character and structures the daily lives of individuals and unemployment causes social exclusion, mental stress and threatening behaviors[37]. Domestic violence was more common in households with low income and is a threatening factor to mental health that is a subscale of quality of life[17]. Studies show that there isn't a strong correlation between violence and race, while some studies have shown that in black families or ethnic minorities, incidence of domestic violence is more. Many humanities researchers believe that if socio-economic and demographic factors are controlled, there will be no difference in the incidence of violence among minorities and other groups in society[38]. Educated couples have knowledge and ability to use life skills which could reduce domestic violence and increase their quality of life.

CONCLUSION

Domestic violence could occur in all societies, regardless of education level, socioeconomic status, income, occupation, ethnic groups which are components of structural social determinants of health and thus have a negative effect on mental, physical and social health which are components of quality of life. Some of the structural social determinants of health such as socio-economic status cannot lessen the impact of domestic violence or increase the quality of life of women who experience domestic violence. So, the identification of abused women and the factors affecting their quality of life should be the main objective of centers of social protection as well as cultural and family centers, so that with the necessary skills to deal with violence and cooperation for social planning, policies that result in positive changes in lifestyle of these women and promote their happiness and tolerance are made. Also, forensic midwives can solve many of the problems of these women as they have knowledge of legal procedures about various forms of violence and also because of their direct communication with women living in the society.

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REFRENCES

1. Park, K., Park's Text Book of Preventive and Social Medicine. 17th ed. Jabalpur; *Banarsidas Bhanot*.2004; 11-43.
2. Wu, H.C., Lai, J.N. and Hwang, J.S., Quality of life and sleep quality amongst climacteric women seeking medical advice in Northern Taiwan. *Sleep medicine*, 2012; **13**(7): 906-912.
3. Asefzadeh S RA. Health Care Management. Qazvin: Hadis Publication; 2008: 122-123. [Full text in Persian].
4. Sajjadi H, Vameghi M, Madani Ghahfarokhi S. Health and Income in Iran: A Review on Published Studies in Farsi, 2000 to 2007 . *Hakim.* 2013; **15**(4) :309-320.
5. Vachher AS, Sharma AK. Domestic violence against women and their mental health status in a colony in Delhi. *Indian Journal of Community Medicine*. 2010; **35**(3):403.
6. Garcia-Moreno C, Watts C. Violence against women: an urgent public health priority. Bulletin of the World Health Organization. 2011; **89**(1):2-2.
7. Mafi M, Akbarzadeh N. Psychological characteristics of perpetrators of domestic violence. 2005; 71-86
8. Center for Women's Participation and Ministry of Social Affairs, National Survey of Domestic Violence against Women in centers in 28 Province, *Tehran*, 2001.
9. Sadeghi Fasaei S. Domestic violence and women's strategies in the face of it (qualitative study). *Journal of social issues*. **1**(1): 142-107.
10. Anderson, M., Thinking about Women: Sociological Perspective on Sex and Gender. Universty of Delware, New York, Allyn and Bacon, 4thed, 1997.
11. Flury, M. Nyberg, E. Riecher-Rossler, A., Domestic violence against women: Definitions, epidemiology, risk factors and consequences. Swiss Med Wkly. 2010; **140**:w13099.
12. Sarkar, N. N., The impact of intimate partner violence on women's reproductive health and pregnancy outcome. *J Obstet Gynaecol.* 2008; **28**(2): 266-71.
13. Diop-Sidibé, Nafissatou. Campbell, Jacquelyn C. Becker, Stan., Domestic violence against women in Egypt—wife beating and health outcomes. Social Science & Medicine. 2006; **62**(5): 1260-1277.
14. Balali Meybodi F, Hosni M., Prevalence of Violence against Women by their Partners in Kerman. *Iranian Journal of Psychiatry and Clinical Psychology*. 1388; **15** (3): 307-300.
15. Abbaszadeh F, Baghery A, Mehran NA. Quality of Life among Pregnant women. *Hayat*. 2009; **15**(1):41-8.
16. Alsaker, K. Moen, BE. Baste, V., Employment, experiences, of intimate partner violence, and health related quality of life. *Journal of Psychology and counseling*. 2009; **1**(4):60-63.
17. Tiwari, Agnes. Chan, Ko Ling. Fong, D. Leung, WC. Brownridge, Douglas A. Lam, H. Wong, B. Lam, CM. Chau, F. Chan, Anthony., The impact of psychological abuse by an intimate partner

on the mental health of pregnant women. BJOG: *An International Journal of Obstetrics & Gynaecology.* 2008; **115**(3):377-384.

18. Garmaroudi GH, Murad Ali. Develop a tool for measuring the socio-economic situation in Tehran in 1389. Quarterly monitoring. **9**(2): 144-137.
19. Hajian S, Vakilian K, Najm-abadi KM, Hajian P, Jalalian M. Violence against women by their intimate partners in Shahroud in northeastern region of Iran. *Global journal of health science.* 2014; **6**(3):117.
20. Agha khani KI. Agha Big Louie A, Chehrehsaz A. Investigation of men physical aggression against women attending at Forensic Medicine Center of Tehran. *Journal of Iran Medical Science University*.2002; **9**(31):485-490.
21. Kazemi Navaei F. Prevalence, Factors and Consequences of Domestic Violence Against Pregnant Women Referring to Labor Units of University of Medical Sciences, Tehran. [Thesis of Midwifery Education]. 2004. [Thesis in Persian].
22. Ahmadi M, Rahnavardi M, Kiyani M, Poor Hoseyn Gholi A. Relationship between Domestic Violence and Suicidal Thoughts on Women Referred to Rasht City Health-Medical Center and the Family Courts. 2013; **20**(4):201-209. [Persian].
23. Polit DF, Beck CT. Nursing research: Principles and methods. Lippincott Williams & Wilkins; 2004.
24. Nejat SA, Montazeri A, Holakouie Naieni K, Mohammad KA, Majdzadeh SR. The World Health Organization quality of Life (WHOQOL-BREF) questionnaire: Translation and validation study of the Iranian version. *Journal of School of Public Health and Institute of Public Health Research.* 2006; **4**(4):1-2.
25. Kuyken W, Orley J, Hudelson P, Sartorius N. Quality of life assessment across cultures. *International Journal of Mental Health.* 1994; **23**(2):5-27.
26. Amini L, Heydari M, Danesh Parvar HR, Gharaei B, Mehran A., The relationship of domestic violence with some structural social determinants of health. *Journal of Mazandaran University of Medical Sciences*. 2014; **24** (114): 134-130.
27. Tavoli, Z., Tavoli, A., Amirpour, R., Hosseini, R. and Montazeri, A., Quality of life in women who were exposed to domestic violence during pregnancy. *BMC pregnancy and childbirth*, 2016; **16**(1): 1.2.
28. Mirzaee H, Aghayari the Hare, the scribe., Quality of life of married women in the institutional framework of the sociology of social institutions Khanvadh.fslnamh 2014; **0.1** (3): 93-71.
29. Razzaghi N, Parvizi S, Ramezani M, TabaTabaei Nejad SM. [Consequences of violence against women in the family: Qualitative Study. *The Iranian Journal of Obstetric, Gynacology and Infertility* 2013; **16**(44): 11-20. [Article in Persian].
30. Gharache M, Azadi Sh, Afrasiabi A. Misbehavior Spouse and quality of life of married women. *Thought & Behavior in Clinical Psychology.* 2011; **5**(19): 55-64. [Persian].
31. Bakhtiari A, Omidbakhsh N. Backgrounds & effects of domestic violence against women referred to law-medicine center of Babol, Iran. *Journal of Kermanshah University of Medical Sciences (J Kermanshah Univ Med Sci).* 2004; **7**(4).
32. Moasheri N, Miri MR, Abolhasannejad V, Hedayati H, Zangoie M. Survey of prevalence and demographical dimensions of domestic violence against women in Birjand. *ModernCare Journal*. 2012; **9**(1):32-9.
33. Leung TW, Leung WC, Ng EH, Ho PC. Quality of life of victims of intimate partner violence. *International Journal of Gynecology & Obstetrics*. 2005; **90**(3):258-62.
34. McDonnell, K. A. Gielen, A. C. O'Campo, P. Burke, J. G., Abuse, HIV status and health-related quality of life among a sample of HIV positive and HIV negative low income women. *Qual Life Res.* 2005; **14**(4):945-57.
35. Dolatian M, Hesami K, Shams J, Alavi-Majd H. Relationship between domestic violence during pregnancy with breastfeeding. *Journal of Shahid Beheshti School of Nursing & Midwifery*. 2008; **18**(61).
36. Vameghi CE, God ardakani M, H sajadi., Domestic violence in Iran: Review Mtalat1387-1380. *Journal of Social Welfare.* 2013; **13**: 70-37.
37. Mikkonen, J. and Raphael, D., Social determinants of health: The Canadian facts. York University, *School of Health Policy and Management*, 2010.
38. Hutchison, I.W., Hirschel, J.D. and Pesackis, C.E., Family violence and police utilization. *Violence and Victims*, 1994; **9**(4): 299-313.