

# THE IMPACT OF POSTTRAUMATIC STRESS DISORDER ON PARTNER OF IRANIAN VETERANS

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**Abstract-** Veterans with Post Traumatic Stress Disorder (PTSD) suffer from distressing and disabling symptoms. Many studies have shown that PTSD symptoms can negatively influence quality of life of their partners. This study was designed to assess general health, marital satisfaction and self-esteem levels of partners of Iranian veterans with PTSD. We performed a case-control study. Cases were comprised of 40 partners of veterans with PTSD. Controls were comprised of 40 married women referred to general health center in Rasht city. Three self report psychometric inventories including General Health Questionnaire (GHQ28), Evaluating and Nurturing Relationship Issues, Communication and Happiness questionnaire (ENRICH) and Cooper-Smith inventory-adult form were applied assessing general health, marital satisfaction and self-esteem levels in our subjects. Mean score of GHQ28 questionnaire was  $39.77 \pm 20.96$  in case group and  $17.12 \pm 9.08$  in control group ( $P = 0.0001$ ,  $t = 6.269$ ). Average scores of ENRICH questionnaire in case and control groups were  $133.7 \pm 28.05$  and  $165.90 \pm 31.10$  respectively ( $P = 0.0001$ ,  $t = 4.861$ ). Mean score of Cooper-Smith test was  $29.62 \pm 7.89$  in cases while it was  $39.92 \pm 6.36$  between controls ( $P = 0.0001$ ,  $t = 4.551$ ). We concluded that partners of veterans with PTSD significantly showed lower levels of general health, marital satisfaction and self-esteem than other women. In general, our results demonstrated that partners of veterans with PTSD had lower levels of quality of life comparing other women.

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**Key words:** Post Traumatic Stress Disorder, partner, quality of life, Iran

## INTRODUCTION

Post traumatic stress disorder (PTSD) is a common disorder between veterans. Studies on Vietnam veterans revealed that 30% of them suffer from PTSD (1). Veterans with PTSD suffer from distressing and disabling symptoms (2). A number of studies have shown that veterans' PTSD symptoms can negatively influence their family relationship and on the other hand problems between family members may exacerbate veterans' PTSD and comorbid conditions (3). Over 70% of PTSD

veterans and their partners report clinically significant levels of relationship distress comparing to about 30% of non-PTSD couples.(4) The partners of PTSD veterans experience more caregiver burden and poorer psychological adjustment (5), an increasing rate of violent behavior between family members, divorce and problems in parental skills (6), and more physical, verbal and psychological aggression (7). PTSD can also affect the mental health and life satisfaction of a veteran's partner (3). Partners of Vietnam veterans with PTSD showed higher levels of sadness and dissatisfaction in their lives in comparison to partners of Vietnam veterans without PTSD (6). They are more psychologically distressed and have lower levels of self-esteem(2). Sexual dysfunction is another major

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problem in PTSD veterans which leads to marital dissatisfaction (8).

Most of our knowledge regarding the effects of veterans' PTSD on their female partners is based on findings in other countries especially The United States and Vietnam. Regarding few studies about Iranian veterans with PTSD and the influence of their disease on their partners, this study was designed to assess general health, marital satisfaction and self-esteem of partners of Iranian veterans with PTSD.

## MATERIALS AND METHODS

We performed a case-control study. Case group was comprised of 40 wives of veterans with PTSD referred to Tolou psychiatric center in Rasht city in 2005. PTSD in the veterans was diagnosed according DSM IV criteria for PTSD by principal psychiatrists through clinical interviews. Control group was comprised of 40 married women who were referred to general health center in Rasht city. Inclusion criteria were: 1-educational level of 3<sup>rd</sup> grade of guidance school and higher, 2-partners had to live together (not engaged or separated). Subjects who didn't give consent to participate in the study and partners of veterans with untreated comorbid conditions were excluded. Our variables were included general health score, marital satisfaction score, self-esteem score and demographic data. In order to measure these variables, three self report psychometric inventories were administered: General Health Questionnaire, Evaluating and Nurturing Relationship Issues, Communication and Happiness (ENRICH) marital satisfaction questionnaire and Cooper-Smith inventory-adult form. Demographic data questionnaire was developed by project investigators to provide information on age, place of residence, number of children, educational level, vocational situation, income of the household, history of physical or mental disorder resulting in out-patient or in-patient treatment and substance use.

General Health Questionnaire (GHQ28) is an instrument designed to assess the rate of psychological distress in a population. It concerns

itself with two major classes of phenomena: inability to continue to carry out normal (healthy) functions and the appearance of new phenomena of a distressing nature. It examines symptoms present for few weeks prior to testing and compares current function with prior levels of wellness in the areas of somatic symptoms, anxiety and insomnia, social dysfunction and severe depression (9).

Using Licert scoring method, zero to three scores is assigned for A to D choices. This method was applied in present research. It has frequently used in Iranian investigations. The validity and reliability of the present questionnaire have been verified in Iranian studies. Palahang *et al.* studied reliability and validity of 28-item GHQ in Iran. He concluded that the best cut off value for Iranian men was 22. The sensitivity, specificity and over all misclassification rates in Iranian men were 88%, 78% and 19% respectively. In Iranian women, the best cut off value was 21. The sensitivity, Specificity and overall misclassification rate in Iranian women were 88%, 79% and 16% respectively. By using Pearson correlation, reliability coefficient of 28-item GHQ was 91% (10).

Cooper-Smith questionnaire (11) is a short self-inventory designed to measure individuals' self-esteem through their attitudes towards themselves in social, academic, familial and personal areas of life. High scores correspond to high self-esteem. The efficiency of this test has been evaluated in several studies in Iran. Madani calculated validity coefficient of this test in Tehran and by using statistical methods showed that its reliability coefficient was 93% (12). ENRICH questionnaire have been designed by Fowers *et al.* in 1986 in order to be applied by investigators and psychotherapists in the field of marital problems. They reported that the reliability coefficient of this test was 81% (13). In Iran, Soleimanian has translated and summarized this questionnaire to 47 items. He concluded that the validity coefficient of 47-item version was 95% (14). In order to obtain demographic data, administrative investigators asked the questions from the subjects and filled out demographic data questionnaires; however, other questionnaires were completed by subjects, individually. Administrative investigators were trained psychologists who were referred to Tolou psychiatric center and general health center in Rasht city. At Tolou center, after introductory explanation and taking subjects' consents, questionnaires were individually given to qualified

wives of referred veterans with PTSD and they completed the questionnaires in presence of a psychologist. At general health center, the questionnaires were given to volunteer married women referred to this center. Statistical analysis was performed with SPSS Statistical Package for Windows, version 11.5 using t-test.

## RESULTS

A total number of 40 individuals as case group and 40 individuals as control group were surveyed. Mean age in case group was  $37.17 \pm 5.28$  and in control group was  $35.48 \pm 7.79$  years. Demographic characteristics of both groups are shown in Table 1.

Average score of GHQ28 questionnaire was  $39.77 \pm 20.96$  in case group and  $17.12 \pm 9.08$  in control group ( $P = 0.0001$ ,  $t = 6.269$ ). Mean scores of different sections of GHQ28 questionnaire were as follows: mean score for somatic symptoms was  $10.22 \pm 7.81$  in cases and  $4.62 \pm 2.96$  in controls ( $P = 0.0001$ ,  $t = 4.238$ ). Average scores for anxiety and insomnia were  $10.92 \pm 5.59$  and  $4.55 \pm 3.86$  in case and control groups, respectively ( $P = 0.0001$ ,  $t = 5.927$ ). Mean score of social dysfunction was  $9.87 \pm 4.28$  in case group while it was  $6.47 \pm 2.45$  in controls ( $P = 0.0001$ ,  $t = 4.352$ ) and eventually average score of depression was  $9.40 \pm 7.46$  in cases and  $1.50 \pm 2.11$  in controls ( $P = 0.0001$ ,  $t = 6.443$ ). Mean score of ENRICH marital satisfaction questionnaire was  $133.7 \pm 28.05$  in case group and  $165.90 \pm 31.10$  in control group ( $P = 0.0001$ ,  $t = 4.861$ ). Average scores of Cooper-Smith self-esteem questionnaire adult form were  $29.62 \pm 7.89$  and  $39.92 \pm 6.36$  in case and control groups respectively ( $P = 0.0001$ ,  $t = 4.551$ ).

## DISCUSSION

Our results represent that partners of veterans with PTSD in comparison with other women have lower levels of general health. In other word they suffer from somatic disorder, anxiety and insomnia, social dysfunction and depression more than other women.

Our results are consistent with the findings of the same studies in this field. Waysman showed that

partners of Israeli veterans with PTSD are more anxious and depressed. They suffer from more somatic disorders and have more problems in their familial and social relationships (15). Partners of Vietnam veterans with PTSD had lower levels of happiness and markedly reduced satisfaction in their lives (6). Matsakis (16), Jordan et al (6) and Verbosky and Ryan (17) demonstrated that these women are depressed, anxious and have poor familial relationship. Westerink concluded that partners of Australian veterans showed higher levels of somatic disorders, depression, anxiety and insomnia comparing to other women (2). Regarding our results partners of veterans with PTSD showed lower levels of marital satisfaction. Cosgrove et al found that sexual dysfunction tends to be higher in combat veterans with PTSD (8). Solomon showed that sexual dysfunction in these patients leads to couple dissatisfaction (18). Related to impaired relationship functioning, there are higher rates of separation and divorce in veterans' population suffering from PTSD (3). Our study confirmed that partners of veterans with PTSD had significant lower levels of self-esteem compared to control group. Westerink et al. demonstrated these women had lower levels of self-confidence (2). Verbosky indicated that there was a significant relationship between PTSD symptoms in veterans and lower self-esteem and coping ability in their partners (17). To sum up, partners of veterans with PTSD have lower levels of quality of life. They suffer from somatic disorders, anxiety and insomnia, social dysfunction, depression, lower marital satisfaction and lower levels of self-esteem more than other women. Veterans with PTSD usually receive the support of social systems. By contrast, their partners are ignored and do not receive this support whereas supporting these women results in improving the conditions of both the veterans and their families.

Review of literature suggests effective treatment should involve family psycho education support groups for veterans and their partners, concurrent individual treatment and couple or family therapy (17, 19).

Our survey was carried out on patients referred to one clinic and it imposed some limitations. In addition the severity of PTSD symptoms in veterans

**Table 1.** Demographic data of partners of veterans with PTSD and matched control group in Rasht city in 2004

variables	Case group		Control group	
	number	%	number	%
Place of residence:				
urban area	38	95	39	97.5
rural area	2	5	1	2.5
total	40	100	40	100
Education:				
guidance school	23	57.5	18	45
high school	16	40	14	35
college degree	0	0	3	7.5
higher than college degree	1	2.5	5	12.5
total	40	100	40	100
Occupation:				
housewife	38	95	28	70
worker	1	2.5	5	12.5
employee	1	2.5	4	10
retired	0	0	1	2.5
others	0	0	2	5
total	40	100	40	100
House:				
personal house	28	70	20	50
rental house	9	22.5	15	37.5
parental house	3	7.5	4	10
others	0	0	1	2.5
total	40	100	40	100
Monthly income:				
< 1,500,000 Rials	24	60	16	40
1,500,000-2,500,000 Rials	12	30	14	35
>2,500,000 Rials	4	10	10	25
total	40	100	40	100
Substance use:				
cigarette	2	5	1	2.5
other substances	0	0	0	0
frequent use of sedatives without prescription	1	2.5	0	0
none	37	92.5	39	97.5
total	40	100	40	100
History of physical or mental disorders resulting in in-patient treatment:				
yes	9	22.5	3	7.5
no	31	77.5	37	92.5
total	40	100	40	100
History of physical or mental disorders resulting in out-patient treatment:				
yes	22	55	15	37.5
no	18	45	25	62.5
total	40	100	40	100
Pregnancy:				
yes	1	2.5	3	7.5
no	39	97.5	37	92.5
total	40	100	40	100
Current physical or mental disorder:				
yes	16	40	11	27.5
no	25	60	29	72.5
Total	40	100	40	100

## The impact of posttraumatic stress disorder

was not assessed. Since some studies have reported that caregiver burden, including psychological distress, dysphoria and anxiety increase with PTSD symptoms severity (5), further studies on the effects of the severity of PTSD symptoms on patients' partners is recommended.

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