# **Orginal Article**

# Being a Wife of a Veteran with Psychiatric Problem or Chemical Warfare Exposure: A Preliminary Report from Iran

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Tel: +98-21-22289941 Fax: +98-21- 222830262 **Objective:** The aim of the present study was to examine the relationship between marital satisfaction with psychological health in women whose husbands had either suffered from psychiatric problems or been exposed to chemical warfare during Iraq-Iran imposed war.

**Method:** Participants were selected from the war-affected women in Mazandaran province in north of Iran whose husbands had either suffered from a psychiatric problem (psychiatric group) or had been exposed to chemical warfare (chemical group) during Iran-Iraq war (each consisted of 52 women). Women were requested to fill in The Evaluation & Nurturing Relationship Issues Communication and Happiness(ENRICH) questionnaire, Symptom Check List 90-Revised (SCL-90-R) as well as a demograhic form.

**Results:** We found significant negative relationships between SCL-90-R scores and the marital satisfaction scores in both groups.

The results failed to indicate significant differences between the two groups on marital satisfaction and demographic characteristics such as age, number of children, handicapped percentage, and educational level.

**conclusion:** it seems that wives whose husbands had either psychiatric problems or had been exposed to chemical warfare, suffered from diverse psychological problems and medical ailments.

#### Key words:

Chemical warfare, Family relation, Iran, Mental health, War, Women.

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The families of military personnel require to make many personal and familial sacrifices in order to adapt themselves to military obligations such as relocations, long working hours, frequent family separations, and dangerous mission assignments. For some families these demands can become potential stressors and lead to marital conflict (1). These stressors may vary as a function of the nature of the military unit and its mission, as well as the type of job performance (2). Some military families experience frequent moves with accompanying housing, employment, school and community changes etc. Geographic mobility and long working hours interfere with family dynamics. As a result, many wives share symptoms of their husbands' work-related stress, in the form of developing sleeping problems, digestive disorders, aggression, and irritability (2,3). Military personnel also often face the risk of injury or death in the course of performing the

Studies showed that many husbands and wives were faced with violence in these situations (5-7). The MMPI profile of women in husband-blaming couples showed that they are disposed to expressing their unhappiness in a more dissatisfying and way; while the husbands demonstrate their unhappiness through a more distinct depressive mood along with the accompanying symptoms. These wives tend to see the world in right-wrong or balck- white terms (8). They

are likely to be rather whining somatizers and to project their anger on others. These angry spouses are at times resentful to the point of rage. They blame others, particularly their spouses (9). These blaming women are wary and suspicious (10). Greene reported marital difficulties, family problems, and sexual dysfunctions to be more comon with these women (9). Psychiatric problems such as post traumatic stress disorder (PTSD) are more frequently reported among families with members who had participated in wars. Studies on war veterans have showed that many of the soldiers who had been exposed to heavy combat suffered long-lasting emotional and psychological problems including nightmares, flashbacks, anxiety, bad meomries, depression, and guilt (11). These families, particularly their wives, are likely to burden themselves with these negative and resenful consenquences. Furthermore, research focused on some veterans of the Iran-Iraq war and the Persian Gulf war who were exposed to chemical warfare revealed that these soldiers suffered from complaints such as insomnia, disabling fatigue, malaise, hair loss, bleeding gums, joint and muscle pains, skin sores and rashes, and gastrointestinal and respiratory difficulties. Exposure to large amounts of nervous system agents may lead to loss of muscle control, twitching, paralysis, unconsciousness, convulsions, coma, and even death. In terms of psychological functioning, exposure to

Sel- 90-R Subscales and ENRICH	Psychiatric group Mean±SD		Chemical group Mean±SD		Total Mean±SD	
Obsessive- compulsive	1.07	0.74	1.21	0.72	1.14	0.74
Somatization	1.61	0.82	1.63	0.93	1.61	0.88
nterpersonal Sensivity	0.89	0.78	0.93	0.75	0.90	0.77
Deperession	1.22	0.79	1.23	0.88	1.22	0.84
Anxiety	1.29	0.89	1.30	0.95	1.29	0.92
Hostility	1.10	0.64	0.96	0.74	0.02	0.70
Phobic	0.92	0.72	0.60	0.62	0.61	0.68
Paranoid	1.20	0.74	1.26	0.83	1.23	0.79
Psychotism	0.60	0.62	0.62	0.67	0.61	0.65
ENRICH	173.69	28.56	170.98	27.54	1.12	0.68

Table 1- Mean scores and SD of varaiables of SCL-90 and ENRICH scales in groups

chemical warfare may produce confusion, drowsiness, difficultiy in concentration, and weak performance (12, 13). In general, it should be noted that the problems faced by survivors and their partners have been addressed frequently in the literature (14). There is substantial evidence to suggest that traumas including combat are associated with significant disturbances in overal social adjustment, with survivor couple (The term "survivor couple" is used as shorthand to refer to couples in which one or both partners report a histroy of combat, rape, or child sexual-abuse trauma) relationships being charaterized by dissatisfaction, turbulence, and conflict. Separation and divorce rates are higher among couples affected by trauma and many survivors avoid dating and establishing intimate relationships with each other. Traumatic life experiences appear to affect all levels of social functioning, including adjustment at work, parenting skills, and relationships with extended family members and friends. Physical violence (15-17).

The first aim of the present study was to verify the relationships between the psychological health and marital satisfaction in wives with husbands suffering from either psychiatric problems or chemical agent exposures. The second aim of the study was to find any possible significant differences in mental or psychological health between the groups. The third aim was to find whether or not there was significant differences in marital satisfaction between the groups.

### **Material and Methods**

Participants were selected from the war-affected women in Mazandaran province in north of Iran whose husbands had either suffered from a psychiatric problem (psychiatric group) or had been exposed to chemical warfare (chemical group) during Iran-Iraq war. Each group consisted of 52 women whose husbands had a record in the specialty clinic established for the war-affected veterans. To be eligible for inclusion in the study, only those women were selected whose husbands were veterans handicapped to a degree of 25-75% according to the Medical Committee. Wives were excluded if their husbands had psychotic disorders confirmed by psychiatrists. The

instruments used consisted of the Symptom Check List 90-R (SCL-90-R) (18) and The Evaluation & Nurturing Relationship Issues Communication and Happiness (ENRICH) (19,20).

The SCL-90 scale is a basic test of psychological health that assesses individual traits and characteristics. It consists of 9 subscales for somatization, obsessive-compulsive signs, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia, and psychotism. The Farsi version of the scale has a good validity and reliability confirmed by several reaserches.

The ENRICH questionnaire was developed by Olson and colleagues as a self-report measure of couple's marital satisfaction. Many studies have confirmed the reliability and validity of the scale. Cronbach's coefficient of 0.62 to 94 and test-retest reliability with one week interval of 0.94 for men and 0.94 for women were demonstrated by Soleymanian. The cut off scores of 41-60 is considered as the medium marital satisfaction and the scores below and above this range show the low and high maital satisfaction levels, respectively.

In keeping with the preferences of the Ethical Committee that approved the study, all participants were initially informed of the aim of the study and were invited to take part in the research. In all cases, a female assistant conducted the interviews; The interviewer was also always able to ask questions from the participants and to help them in filling the forms when neccessary. Subjects were requested to fill in both questionnaires as well as a demographic Form including age, number of children, handicapped percentage, and educational level.

## **Results**

The mean age of the psychiatric group was 38 years (SD=5.09); the figure for the chemical group was 36.8 years (SD=5.56). There was no significant differnces in age between the groups. The mean educational level of was 10 years for both groups. The mean number of children for the psychiatric group was 3.19 (SD=1.08), compared with 3.37 (SD=0.93) for the chemical group.

Table 2- Frequency and percentage of marital satisfaction in the two groups

Marital Satisfaction	Psychia N	tric group %	Chemica N	al group %	ENRICH t scores	Crude scores
Low	12	23	13	25	73-152	12-40
Medium	33	63.5	31	59.6	53-202	41-60
High	7	13.5	8	15.4	203-240	61-72
Total	52	100	52	100	-	-

Table 3- Corrolation analyses between SCL-90-R subscales and ENRICH scores

SCL-90-R Subscales	Psychiatric gp N=52		Chemical gp N=52		Total N=104	
	r	р	r	р	r	Р
Obsessive- compulsive	-0.31	0.02	-0.53	<0.01	-0.42	<0.01
Somatization	-0.15	0.27	-0.38	<0.01	-0.27	<0.01
Interpersonal Sensitivity	-0.38	<0.01	-0.50	<0.01	-0.44	<0.01
Depression	-0.38	<0.01	-0.46	<0.01	-0.42	<0.01
Anxiety	-0.29	0.04	-0.38	<0.01	-0.33	<0.01
Hostility	-0.33	0.02	-0.27	0.06	-0.28	<0.01
Phobic	-0.24	0.09	-0.29	0.03	-0.27	<0.01
Paranoid	-0.39	<0.01	-0.36	<0.01	-0.38	<0.01
Psychotism	-0.36	0.01	-0.43	<0.01	-0.39	<0.01

The mean war handicapped percentage for psychiatric group was 33% (SD=0.10), compared with 36% (SD=0.11) for the chemical group. Separate analyses revelaed that there were no statistically significant differences between the groups in educational levels, number of children, and warhandicapped percentage.

Table 1 shows the mean scores and SD on SCL-90-R and ENRICH scales for both groups as well as for the total sample. With respect to the cut off score (0.4) of the SCL-90-R subscales, it appears that the mean scores of both groups are more than the cut off score. Similar results were found for the total sample. These results showed that both groups had psychological problems in all subscales. However, analyses by t-test failed to show significant differences between the groups.

Table 2 indicates the frequency and percentage of marital satisfaction in both groups. Considering the cut off scores (41-60), it appears that the majority of the samples in both groups had moderate marital satisfaction. As the Table 2 shows, distribution of the marital satisfaction levels in both groups are similar to each other. Analyses by Chi square demonstrated that there were no statistically significant differences between the two groups (p=0.92).

In order to find out the relationship between the subscales of SCL-90-R with the ENRICH scores, corrolation analyses were conducted for each group as well as for the total sample. Significant and negative association between ENRICH scores with the SCL-90-R subscales scores for each group and also for the total sample (p=0.04 to p<0.01) was then found, except

between somatization and phobic scores of the SCL-90-R and ENRICH scores in the psychiatric group (Table 3).

### **Discussion**

The present study seems to be the first attempt at comparing the two groups of war affected wives whose husbands either suffered from psychological disorders or were exposed to chemical warfare during Iran-Iraq war, with regard to psychological health and marital satisfaction. According to the results, no significant differences were found between the two groups regarding age, number of children, war handicapped percentage, and educational level. Regarding the psychological problems, our results revealed that both groups with psychiatric and chemicals-affected problems had the mean scores of more than the cut off on all SCL-90-R subscales . With respect to marital satisfaction, we found that the majority of our study population in both groups had medium levels of marital satisfaction.

It seems that the increased risk for spouses living with war affected husbands is more related to the fact that women reported higher distress and psychological problems. It appears that war victims are not limited to war veterans, and the psychopathologic consequences of war are also observed in other populations in the community (2,3). It may be argued that women have a great risk toward developing psychological stress in their lives and marital relationships. The present data confirmed previous results and supported an increased vulnerability in spouses who live with a war affected husband.

In the first place, it was assumed that veterans exposed to chemical warfare have received more medical help and social support both from formal and infomal agents in the community and therefore, the family in general and the wife in particular, are more satisfied and the husband's needs are more gratified from different routes rather than from family members.

In contrast, due to psychological conflicts, other members of the family, especially wives, when living with a member suffering from war related psychiatric problems are more likely to experience distress and pscyhological problems from the family members. Our results revealed that all subjects both in the psychiatric and chemical group were more likely to experience high distress within themselves and in relationships with their husbands. As the results showed, our study strongly confirmed the significant and reverse aassociation between SCL-90-R subscales and marital satisfaction scores in both groups. One possible explanation for this may be that these spouses have shared and tolerated severe and long-lasting tensions receieved from their problematic husbands and environment.

They may be overloaded by different unsolved conflicts and involved in a vicious cycle. In addition, it is possible that these couples are more likely to blame each other and experience several resentful and aggressive attitudes in their mutal relations (8, 10, 11, 13).

Overall, these results are in agreement with previous studies and suggest that combat trauma and conflicts are associated with significant disturbances which may impose negative influence on marital satisfaction as well as on other mental functions (15, 16). In conclusion, it is a substantial fact that war affected husbands' partners are in a great risk of suffering from both psychological and physical ailments that may increase further psychological problems within the family and need more attention on both social and psychological welfare.

However, family readiness is important, as is a family's ability to positively adapt or effectively deal with inherent stressors in the military lifestyle. Wives share concerns about the impact of stress on the family members and seek ways to help themselves effectively adapt to and manage these challenges. Both husbands and wives are responsible in promoting supportive environment in their families by maintaining hope for the family's ability to cope, finding ways to anticiapte stress and learning productive ways to manage it.

Some ways that couples can use include:

1) demonstrating healthy coping by staying calm, controlling anger, and inducing planning processes; 2) planning activities that help family members express their feelings; 3) develping problem solving skills and finding time to talk about stressful events; 4) letting family members know that it is OK to feel angry, sad, scared, etc; 5) maintaining clear and consistent rules and expectations even when changes and stresses occur Being firm, yet caring and warm; 6) encouraging one's

partner to share her/his feelings with others and encouraging him/her to grieve for losses and readaptation; and 7) explaining the meaning of symptoms and recovery process.

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