

## Stress and Personal Well-being among a Sample of Iranian Disabled Veterans' Wives

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**Objective:** The aim of this study was to compare overall life satisfaction, subjective well-being, family stress, and stress symptoms of wives of three groups of Iranian disabled veterans.

**Method:** Participants included 97 wives of three groups of disabled veterans (Group 1 with 25-49% disability; Group 2 with 50-69% disability; and Group 3 with larger or equal to 70% disability). The participants were selected randomly by computers of Iranian Martyrs and Veterans Foundations. Personal Well-being Index-Adult, Family Inventory of Life Events and Changes and Stress-related Symptoms Inventory were used to measure overall life satisfaction, family resources of stress and stress symptoms. Data were analyzed by ANOVA and linear multivariate regression analysis.

**Results:** Results showed that there are no differences in stress symptoms among the 3 groups. However, the wives of group 2 showed less stress and more global life satisfaction and subjective well-being; whereas, wives of group 3 showed more family stress and less global life satisfaction and subjective well-being. However, the wives of group 1 showed less global life satisfaction, subjective well-being and less family stress.

**Conclusion:** Based on other studies, the results of group 1 is abnormal. This abnormality in results is due to two reasons: first, the participants tried to show poorer quality of life. Second, these women have not received enough facilities and services. Therefore, they lost their natural homeostasis. It seems that the last reason is more real because of equality in stress symptoms between the 3 groups.

**Key words:** *Personal satisfaction, Psychological stress, Veterans, Women*

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Unfortunately, war is an inseparable element of human life. In general, offensive and defensive wars produce many losses and injuries. A large part of war-related injuries may appear in next generations. During the last few decades, Iran has experienced a revolution and eight years of war. In modern life, women experience war-related stresses as much as men during war. Some of women's' war-related stresses are as follows: providing care for disabled veterans, children of veterans, managing the family and bearing veterans' PTSD. Studies suggest that wives of injured men experience more distress than mothers and that the impact of a traumatic injury upon a marriage partnership is different from that of a parent-child relationship (1-4). There are many researches suggesting that veterans' wives experience more stress, show more stress-related symptoms and have poor quality of life or subjective well-being (5-9).

As Whalley Hammell (10) reported that the rehabilitation process had been focused upon the injured person and had rarely included their wives, in Iran, wives of disabled veterans receive a monthly nursing fee and an ordinary insurance without any complementary insurance that disabled veterans have. Furthermore, Iranian wives of prisoners of war rarely

receive rehabilitation skills, but wives of killed veterans can receive psychological counseling services although they do not look forward to these services. Wives of traumatized and disabled veterans are one of the various groups of women who have been identified as suffering psychological consequences of war which they did not experience at first hand, but through their close proximity to a direct victim. In the first stage, it seems that veterans have been confronted with war consequences. However, disabled veterans carry their health and socio-economic problems to the person who lives with them. Secondary traumatization is one of several terms, including: "compassion stress," "compassion fatigue," and "secondary victimization" (11), "co-victimization" (12), "traumatic counter transference" (13), and "vicarious traumatization" (14), that have been used to label the manifestations and processes of distress reported by persons in close proximity to victims of traumatic events. The first descriptions of the secondary traumatization of wives of traumatized veterans were clinical descriptions of living with veterans of the Vietnam War which was published in the 1980's. These descriptions do not use the term "secondary traumatization" and do not mention PTSD, which was not well known at the time. They do, however, provide clear testimony of the great

distress the women suffered. Williams (15), based on group therapy sessions with veterans' wives, relates the "spread of effect" of the traumatized veterans' symptoms; the distress the women suffered as a result of their husbands' distancing and violence; and the "compassion trap" in which they found themselves when they sacrificed too many of their own needs in their efforts to improve their husbands' situation and to preserve their family life. The first large systematic study that examined the impact of PTSD on the emotional life of veterans' wives was Kulka et al.'s (7) national epidemiological study of the impact of PTSD on the families of Vietnam War era veterans. The study reports indications of secondary traumatization in both the wives and children, though it does not identify it as such. In a sub-sample of 466 families, the authors found that the wives of PTSD veterans had lower subjective well-being and a greater sense that they were on the verge of a nervous breakdown than the wives of non-PTSD veterans. Then, in a further analysis of this sub-sample, Jordan et al. (1992) found that the wives of PTSD veterans reported significantly lower happiness and life satisfaction and higher demoralization than the wives of veterans without PTSD.

Davidson et al. (16) reported that in veterans with current PTSD, older veterans show more symptoms. Therefore, we may face lower well-being in older wives. Most of researches have focused on PTSD in veterans and its effects on their wives (17- 20). However, fewer studies have focused on those disabled veterans who suffer both from PTSD and other psychological and physiological problems.

In disabled veterans, women find that they are living with a man who is unable to provide the emotional and practical support (21, 22). Husband's frustration, depression, decreased social activity, social isolation, anger and low financial security will affect his wife and constitute a sense of burden for her (23- 26).

It has been shown that caregivers are especially taxed by their care giving responsibilities to the extent that their role as a caregiver interferes with their other social roles ( 27, 28). Care giving accounts as a secondary role for women. And a few studies have demonstrated either higher levels of reported psychological stress among women with multiple roles (29, 30), or little or no effect of multiple role commitments on various measures of well-being (31-34). Longer duration in disabled veterans may produce higher level of burden as Katz et. al. (35) found that the wives of the traumatic brain injured (TBI) reported a statistically significant higher level of burden, when have used low coping flexibility than other wives. Some studies in western countries have suggested that the rates for separation and divorce are higher following a traumatic injury than for the general population (36), others have indicated that there is no significant impact.

In Iran, there is no evidence to support the increasing rate for divorce after traumatic injury or disability of

partners. Culturally, Iranians believe that men and women must support each other after marriage and any separation or divorce will receive public blame. Both husbands and wives may prefer to be cared by their partners. Whalley Hammell (10) believes that the disabled husband is likely to feel more secure with his wife as a care giver. As many authors suggest, marriage will form an inter-dependence relation between partners that some call it "reciprocity of dependency" (37- 39). Nevertheless, as we mentioned above, care giving has some psychological and physical consequences on the health of the caregiver. The wife caregiver experiences guilt feelings, conflicts and stresses during the time she provides care for her husband. Gardner et. al. (40) suggests that the greatest degree of stress is experienced by wives who care for more than one individual (such as their husband and their parents or disabled children) and must try to balance all their needs and demands. As some authors have noted (41, 10, 42- 45), caregiver wives receive the least rehabilitation help to adjust their situation , and experience more depression and anxiety. During the last few years, the Iranian Martyrs and Veterans Affairs Foundation began to help the wives of disabled veterans to cope with their problems by encouraging them to participate in some classes. There are many researches that have focused on caregivers in physical diseases such as AIDS, brain damage, stroke, spinal cord damage, Alzheimer, and so on (46, 4, 21, 47, 35, 44, 25, 48, 1, 49,3,50,2 ).

However, in veterans cases, most researches have focused on PTSD (16, 51- 57). In physical cases, researchers have focused on caregivers of severe disabilities, generally. The main aim of this study is to compare the caregivers' health problems and subjective well-being based on their husbands' disability.

In general, many studies have been done on veterans' wives in Iran . For example,

Ahmadi et. al. (58) studied vicarious PTSD in Sardasht veterans' wives. The results showed that the prevalence and severity of PTSD in veterans' wives were sensibly more than the control group. The total Mississippi score in veterans was higher than normal people. In another research, Panahi et. al. (59) studied dermatology related quality of life in Sulfur Mustard exposed Veterans. The results showed that Pruritus severity was correlated with quality of life and also correlated with other quality of life subscales including expected work and school subscale.

Allover pruritus, Burn sensation were also related with Quality of life. Majidi ( 60) studied the prevalence of psychiatric co- morbidity with PTSD at hospital in the Iran -Iraq war veterans in Zahedan in 2005-2006 . According to the results of this research, PTSD disorder consisted of a vast spectrum of psychic disorders. Tahmasebi (61) studied the effectiveness of administration stress in decreasing pressure and increasing function of spouses of sacrificers' PTSD. Findings showed that administration stress was effective on decreasing the pressure of spouses of

sacrificers' PTSD and also on family functioning recovery. Noorai (62) studied quality of life in the sample of PTSD sacrificers in Baghiatallah hospital in 2005-2006. Results showed a significant relationship between the age variable and life quality. However, some other variables; namely, marriage situation, education, occupation and, illness intensity did not show a significant relationship to life quality. Mortazavi nejad (63) compared the depression level of martyrs' children of stepfathers and regular fathers. According to the results of this research, there is not any significant difference between depression level of martyrs children of stepfather and regular fathers.

## Materials and Methods

### Participants

The sample included 97 disabled veterans' wives who were selected randomly by central computerized data bank in "Iranian Martyrs and Veterans Affairs Foundation- Qom branch" (IMVAF-Qom state). There were 3 groups of wives of disabled veterans (according to IMVAF classification, their husbands recognized to have 25% to 70% and above disability). The sample included 30 wives of the veterans with 25-49% disability; 36 wives of 50-69% disabled veterans; and 31 wives of the veterans with 70% and upper disability. Participants were varied on their cultural-economical class and were selected randomly.

### Instruments

*Personal Well-being Index-Adult (PWI-A)*: It is generally agreed that subjective wellbeing (SWB) can be measured through questions of satisfaction directed to people's feelings about themselves (64). It is based on life domain scale in which there is a domain-level representation of global life satisfaction and 7 other domains whose scores are computed as personal well-being.

Each item refers to a specific life domain (aspect) and the scores of all items are averaged to produce a measure of SWB. The PWI scale contains seven items of satisfaction, each one corresponding to a quality of life domain as: standard of living, health, achievement in life, relationships, safety, community-connectedness, and future security. These seven domains are theoretically embedded, as representing the first level deconstruction of the following global question: "How satisfied are you with your life as a whole?" (64).

Its basic psychometric characteristics in Australia have been described (65). Chronbach's alpha lies between 0.70 and 0.85 in Australia and overseas (64). In this study, we computed its Chronbach's alpha of the Persian translation as high as 0.845. PWI-A in this study showed a negative correlation with Family Inventory of Life Events and Changes Scale (64). Its correlation coefficient was -0.178 with 0.002 insignificance level. Furthermore, PWI-A showed a negative correlation of as high as 0.498 with Stress-related Symptoms Checklist –  $\alpha = 0.0001$ .

*Family Inventory of Life Events and Changes*: Prior stressors, strains, and transitions were measured with the Family Inventory of Life Events and Changes. This scale has 71 items in 9 sub-scales that assess life events in the general areas of family conflicts, marital relations, births/pregnancies, money, jobs, moves, deaths, and other and developed by McCubbin, Patterson & Wilson (66). This self-report instrument was designed to assess the normative and non-normative family life events, transitions, and strains a family unit may have experienced during the past year. Higher scores indicate greater stress. The alpha coefficient for the total scale was reported as 0.81, and test-retest reliability was reported as 0.80. Ripper (67) reported a reliability of as high as 0.83. Its reliability for mothers has been reported up to 0.87 and for fathers from 0.70 to 0.83 (47). In this study, its reliability was 0.722.

*Stress-related Symptoms Inventory*: This inventory included 41 stress-related symptoms which were adopted from 56 ones of Casanova-Rosado et. al. (68). In this study, Stress-related Symptom Inventory showed a positive correlation with Family Inventory of Life Events, and Changes Scale as high as 0.19 (in 0.001 significance level) and negative correlation (0.498) with PWI.

### Procedure

We used computerized random sampling in veterans' data bank in the "Iranian Martyrs and Veterans Affairs Foundation- Qom branch" (IMVAF-Qom state). Then, we trained graduated psychologists to call each participant and if she agreed, they referred to her home and executed the measures. The psychologists passed on an invitation of the researcher to the participants and described the aim of the research to them to increase their interest for participation. This study is an ex-post facto research design.

For those uneducated or low educated subjects, the questionnaires were completed through an oral procedure similar to the Wexler test of intelligence.

Regarding the ethical principal of research procedures, it should be mentioned that the interviewers presented a written introduction about themselves and no personal indicator of samples were registered in questionnaires. The subjects were familiar with the main researcher of the study as a clinical physiologist. No responsibility or promises were assumed for samples for any reason.

No awards or wages were assumed for such voluntary partnership of the samples and they just participated in the study only based on their familiarity with the researcher.

### Statistical Analysis Methods

To compare the three groups of the participants, ANOVA was used. Furthermore, linear multivariate regression analysis (stepwise method) was used to assess which variable could predict personal well-being.

**Results**

We compared personal well-being, overall satisfaction of life, family stresses and stress-related symptoms in three groups of participants- wives of martyrs, disabled veterans and prisoners of war. Its results are shown in table 1. According to the results of ANOVA in table 1, there are significant differences between the three groups in all variables (overall satisfaction of life, personal well-being and total family stress scores), but stress-related symptoms did not differ in the three groups. Thus, we administered Tukey HSD method to identify which groups differ from one another. The results of Tukey HSD are demonstrated in graphs 1 to 3. In graph 3, it has been shown that the wives of disabled veterans with more than 70% disability have had more scores in Family Inventory of Life Events and Changes. Although the wives of this group had less personal well-being and overall life satisfaction, they experienced more stress by their family.

It is important to know which sub-scales of Family Inventory of Life Events and Changes predict the total score. The results of linear multivariate regression analysis are demonstrated in table 2. According to the results in table 2, the wives of disabled veterans have had more family conflicts, and family conflicts were their main resource of family stresses. Family conflicts have predicted 96/2% of variances of the total score of Family Inventory of Life events and Changes. In second order, economic problems have produced family stresses by predicting 2.6% of variances of the total scores of Family Inventory of Life events and Changes. Other resources of stress in family have had least affects, and stress by marital relations has had no significant effect.

**Discussion**

The wife caregiver experiences guilt feelings, conflicts and stress when caring for her husband. Gardner et. al. (40) suggests that the greatest degree of stress is experienced by wives who care for more than one individual (such as their husband and their parents or disabled children) and must try to balance all their

needs and demands. There are many evidences that support stress effects on well-being. These suggest veterans' wives experience more stress, show more stress-related symptoms and have poor quality of life or subjective well-being (5- 9). In this study, there were three groups of wives: the wives of veterans with 25-49% disability (group 1); those with 50-69% disability in their veteran husbands (group 2); those whose husbands had larger or equal to 70% disability (group 3). Wives in group 3 have shown more family stress and have perceived less overall life satisfaction and personal well-being. In group 2, wives have experienced less family stress and have shown more overall life satisfaction and personal well-being. Results in these two groups are supported by findings of other researchers. The results of groups 2 and 3 reflect a negative correlation between perceived stress in one hand, and overall life satisfaction and subjective well-being in the other hand. Nevertheless, wives in group 1 have shown less perceived stress in their family, but have assessed their overall life satisfaction and personal well-being in lower rates. It is possible that the wives of this group (group 1) have tried to show a poorer quality of life. It is notable that husbands of these wives received the least facilities and services. Iranian Martyrs and veterans Foundation have tried to decrease the number of the covered disabled veterans during the last decade. PTSD and other psychological disturbances receive poorer attention and rehabilitations. They must live almost independently. Then, their stresses make them sick and their wives experience stress symptoms as much as other groups of wives. Thus, their perceived stress is lower but their personal well-being and global life satisfaction is also low. By this approach, we can justify it as frustration in homeostasis to maintain equality. As Lazarus and Folkman (69) have noted, effectiveness of coping will increase sense of well-being. Therefore, we can conclude that wives of groups 1 and 3 have used ineffective coping ways. Future studies can focus on coping ways that these wives use in stressful situations. As observed in graph 1, the wives of disabled veterans

**Table 1. ANOVA results to comparing groups**

	Sum of Squares	df	Mean Square	F	Sig.
overall satisfaction of life	105.480	2	52.740	6.951	0.002
Personal well-being	8942.709	2	4471.354	16.909	0.0001
Total family stress score	317188.2	2	158594.121	1134.922	0.0001
Stress-related symptoms score	2873.285	2	1436.643	2.785	0.067

**Table 2. results of linear multivariate regression analysis (stepwise method)**

Predictor	R Square	F	Sig. of F	B	Beta	T	Sig.
Family conflicts	0.962	2422.896	0.0001	1.147	0.303	13.843	0.0001
Money	0.988	4035.540	0.0001	1.056	0.245	10.865	0.0001
Problems with law	0.993	4319.458	0.0001	1.863	0.077	4.103	0.0001
Loss	0.994	4143.064	0.0001	0.915	0.069	4.919	0.0001
Jobs	0.995	3776.391	0.0001	0.831	0.100	6.171	0.0001
Family care giving	0.996	3794.653	0.0001	0.846	0.105	6.916	0.0001
Moves from & to home	0.997	3938.155	0.0001	1.514	0.089	5.592	0.0001
Births/Pregnancies	0.997	4115.273	0.0001	1.415	0.057	4.270	0.0001



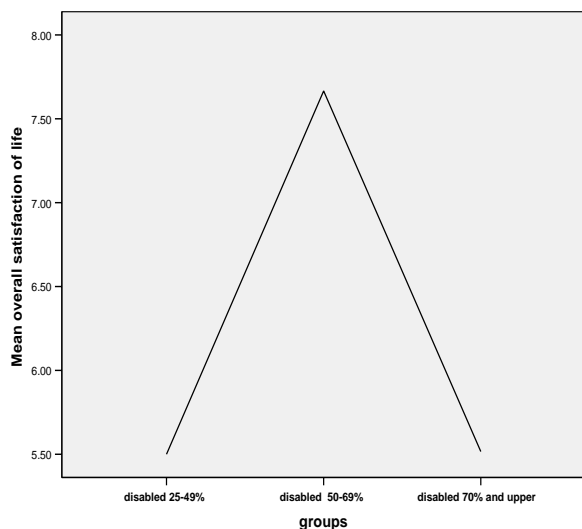


Figure 1. Comparing three groups by overall life satisfaction

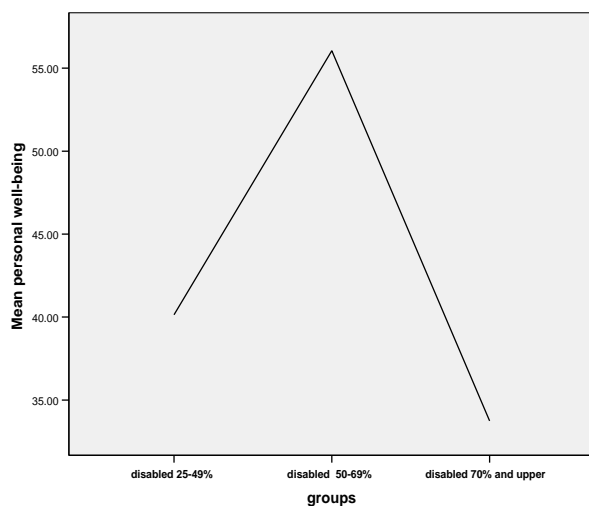


Figure 2. Comparing three groups by personal well-being

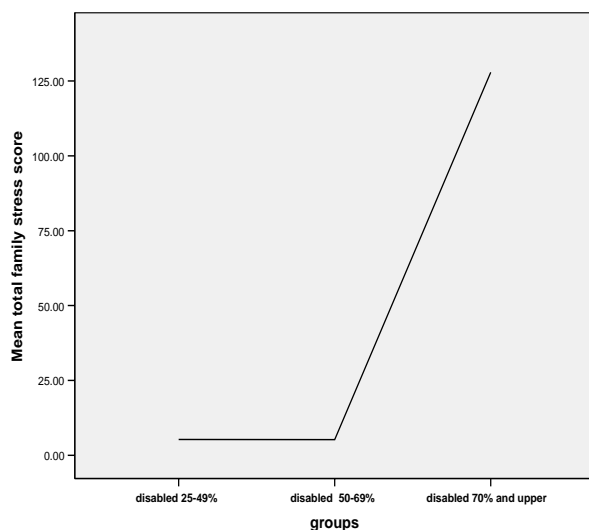


Figure 3. comparing three groups by total family stress scores

with 50-69% disability have more overall life satisfaction in compare with the other two groups. Overall satisfaction of life in wives of disabled veterans with 25-49% and  $\geq 70\%$  disability is approximately equal.

According to graph 2, the wives of disabled veterans with 50-69% disability (according to Iranian Martyrs and Veterans Foundation classification) experienced more personal well-being. The other two groups had no significant differences in this area.

In graph 3, it has been shown that the wives of disabled veterans with more than 70% disability have had more scores in Family Inventory of Life Events and Changes. Although the wives of this group had less personal well-being and overall life satisfaction, they experienced more stress by their family.

### Conclusion

Based on evidences of other studies, the results of group 1 is abnormal, and it is due to two reasons: first, participants have tried to show poorer quality of life. Second, these wives have not received enough facilities and services. As a result, they lost their natural homeostasis. It seems that the last reason is more real because of equality in stress symptoms between the 3 groups.

### Limitations

Gathering the needed official data was not easy because of some limitations from the related organizations, and the researcher had to obtain different eligibilities for accessing such data.

Some financial problems also limited the study as the researchers performed many of the processes of the research by themselves.

Finally, the following suggestions are offered for future research:

- 1) Some solutions should be found for attracting the attention and more participation of spouses by providing desirable opportunities, directly and indirectly to create positive changes in their attitude.
- 2) Personal Well-being, stress and stress symptoms should be evaluated in other cities of Iran and other social classes.
- 3) More samples should be studied in order to extend the results.

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