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Depression, Anxiety, and Stress in the Families of Martyrs and War Veterans: Impacts on Mental Health Disorders

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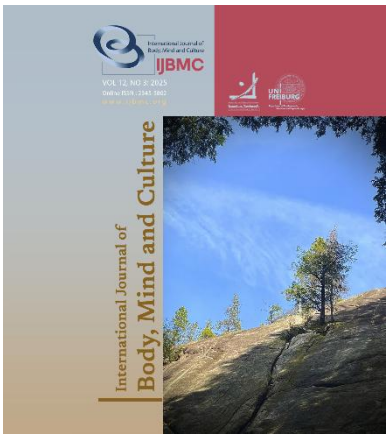

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ABSTRACT

Objective: This study investigates the relationship between depression, anxiety, and stress in the families of war veterans and martyrs with panic attacks, and their impact on the overall mental health of family members.

Methods and Materials: The study was conducted as part of cross-sectional research method and utilized a descriptive-correlation research method. The statistical population for this study was all immediate family members of martyrs and war veterans in Tehran from April to November 2023. A purposive sample of 111 individuals was selected for the study. The research instruments included the Perceived Stress Questionnaire (PSQ), Beck Anxiety Inventory (BAI), Symptom Checklist-90-R (SCL-90-R), and Beck Depression Inventory-II (BDI-II). Data analysis involved Spearman correlation, multiple regression, and software such as SPSS version 27 and SmartPLS version 4.

Findings: The results indicated that Stress (P=0.039), Anxiety (P=0.000), and Depression (P=0.002) were significantly associated with Physical complaints or somatization. Furthermore, Anxiety (P=0.001) and Depression (P=0.002) showed a positive and significant impact on obsessive-compulsive disorder. Stress (P=0.029), Anxiety (P<0.001), and Depression (P=0.034) were found to have a substantial effect on Interpersonal sensitivity.

Conclusion: The research showed that anxiety, depression, and stress in families of veterans/martyrs can lead to various mental disorders. These findings suggest the need for targeted mental health interventions for families of martyrs and war veterans.

Keywords: Depression, Anxiety, Stress, Veteran, Martyrs.

Introduction

According to the World Health Organization, mental health encompasses overall physical, mental, and social well-being and comfort in individuals. Conflict, such as war, can often lead to psychological stress for both individuals and their families (Ghovati et al., 2022). Veterans and martyrs, due to their unique physical and mental conditions, are more susceptible to various issues in different aspects of life. These challenges not only

impact the veterans and martyrs themselves but also extend to their families, who are also affected by the anxieties and trauma (Tajik Esmaeili, 2022). The families of veterans can experience a decrease in their quality of life, especially due to frequent panic attacks, a severe form of anxiety with many physical complaints. These panic attacks can result in frequent visits to the emergency department and create significant personal and socio-economic burdens (Tsai et al., 2022).

Overall, war and its consequences pose a threat to the mental health of individuals and their families. Research indicates that individuals impacted by conflict, like war, are at a higher risk of developing mental disorders due to repeated exposure to traumatic events and the breakdown of supportive social networks (Rzońca et al., 2024). Although the impact of war can be devastating for individuals of all ages, research suggests that children of veterans and martyrs' families are particularly susceptible to mental health disorders such as anxiety disorders, post-traumatic stress disorder (PTSD), and depression (Ghovati et al., 2022). Depression is a leading cause of disability globally, affecting approximately 121 million people worldwide. The prevalence of depression and other mental health issues varies among populations affected by war, with rates ranging from 2.3% to 80% (Gebreyesus et al., 2024). A study found that levels of depression and anxiety differ between civilian and military groups and their families (Lim et al., 2022). Another study focusing on families of veterans revealed higher rates of depression and post-traumatic stress disorder among Iran and Iraq veterans compared to other groups (Mansouri, 2019).

The impact of war on individuals and families is broad, with exposure to trauma having significant repercussions on the mental well-being of veterans. These effects can be extended to their families, leading to stress, depression, and anxiety (Sherman & Larsen, 2018). Caregivers of military members and veterans often experience high levels of financial strain, psychological distress, depression, anxiety, insomnia, pain, social isolation, and suicidal ideations (Maguire & Woodbury, 2024). A study found that adult children of veterans may also suffer from anxiety, depression, and suicidal ideations, affecting their mental health (Forrest et al., 2018). Research has shown that the mental health consequences of war can strain family relationships and contribute to depression and anxiety disorders among partners (Franz et al., 2020). The family members of martyrs and veterans often face high levels of pressure, leading to psychological damage such as perceived stress or psychological pressure (Alivandi Vafa et al., 2022). This response is the body's natural reaction to changes that impact physical, emotional, and intellectual well-being. Traumatic events, particularly related to war, can result in anxiety, stress, and depression. Children in military families often experience stress when their parents are deployed to war (Gewirtz et al., 2018). The impact of war on children is extensive, resulting in immediate stress responses and increased risk of mental disorders (Bürgin et al., 2022). War has devastating effects on individuals and their families, leading to severe psychological impacts on victims and their loved ones (Alivandi Vafa et al., 2022).

Despite the significant number of veterans and martyrs in the country, the challenges faced by their families have not received adequate attention from researchers. While previous studies have explored mental health challenges among veterans and their families, limited research has specifically addressed the psychological issues faced by the families of martyrs and veterans. There is a critical need to examine the psychological impact on family members, particularly those experiencing panic attacks. This study aims to fill this gap by identifying key psychological variables, including depression, anxiety, and stress, and exploring their relationship with mental health disorders in these families. The primary research question is: What is the relationship between depression, anxiety, and stress levels and the mental health of family members of war veterans and martyrs, particularly those experiencing panic attacks? The study hypothesizes that higher levels of depression, anxiety, and stress are significantly associated with increased mental health disorders in these families. Tehran was selected as the study location due to its significant population of veterans and families of martyrs, as well as its accessibility for data collection. As the capital city, findings from Tehran may provide insights applicable to similar populations across the country.

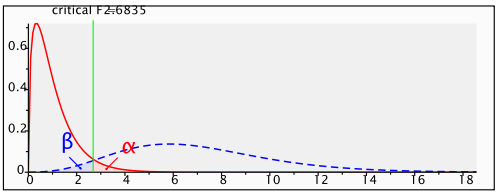
Methods and Materials

Study Design and Participants

This study was a part of descriptive-correlational research, with a cross-sectional research method concerning time. The statistical population for this study consisted of all family members of war veterans in Tehran from April to November 2023 who had experienced a panic attack. The sample for the study included 111 men and women, comprising the immediate family members (parents, spouses, and children) of the veterans living in Tehran. The sample size was purposefully selected. The research sample size was determined using G-Power software, with a significance level of a=0.05, effect size=0.15, and power test=0.95 (Fidell & Tabachnick, 2003). The reason for selecting the research samples based on the purposive method was that the sample size was family members of martyrs and veterans suffering from panic attacks, and due to the specific conditions of these members, individuals had to be selected in a completely purposeful manner and based on predetermined criteria.

Figure 1

G-Power Sample size calculation



The researcher initially stated the sample size as 119 people, but due to potential fluctuations, decided on a sample size of 130 individuals. The study's eligibility requirements consisted of having experienced a panic attack as a veteran or family member, living with a veteran, being at least 15 years old, and having an official record in the Martyrs and Veterans Affairs Foundation. Participants need to have informed consent and comprehension skills to answer questions. Exclusion criteria involved any physical or mental health condition that impeded participation, not responding to more than eight questions on the questionnaire, or resulting in withdrawal. The research process began with obtaining necessary approvals from the researcher's university and consulting the Martyrs and Veterans Affairs Foundation.

Following consultation with the management of the veterans' organization, the researcher referred to the veteran's mental health treatment center. These were affiliated with the Martyrs and Veterans Affairs Foundation and offered tailored medical and counseling services for veterans or martyrs. The researcher visited these centers, liaised with their management, and obtained approval to conduct the study. After that, families of veterans who were having panic attacks received virtual notifications. Participants who fit the study requirements were then chosen specifically from these families.

The researcher chose 36 individuals (veterans or martyrs individuals who had experienced panic) to participate in the study. During the initial telephone interview, the researchers discussed the study's objectives and ethical standards and addressed any concerns raised by the participants. Screening took place at this point, leading to the exclusion of individuals who did not meet the criteria for the study (such as not being located in Tehran or lacking willingness to participate). Some individuals also opted out of the study at this stage. The next step involved offline measurement of the variables, with research tools made available online for the participants' families. Most respondents were the wives of veterans or martyrs' individuals. Every member of the family was required to answer the questions separately. The study excluded nineteen family members who either did not complete more than eight questions on the surveys or withdrew, resulting in data analysis from 111 individuals. The research focused on relatives of military veterans who suffered from panic episodes and were requested to complete questionnaires on three areas: depression, anxiety, and stress.

Before distributing the surveys, the study participants were briefed on the ethical principles and requested to express their readiness to participate. Participants were told they could choose whether or not to take part in the research and were free to leave at any time. They were assured that their participation was optional and that the surveys did not request personal information.

Instruments

Perceived Stress Questionnaire (PSQ): This self-report questionnaire was developed by Cohen et al. in 1983 for assessing stress and has been validated (Cohen et al., 1983). It consists of 16 items measured on a 5-point Likert scale ranging from always to never. The total score ranges from 16 to 80. The questionnaire includes questions about experiences of stress, unease, and lack of productivity within the last month, as well as the frequency of feeling overwhelmed by problems. The questionnaire also addresses distress caused by uncontrollable problems. The creators of the questionnaire reported a Cronbach's alpha of 0.87. In Iran, the Cronbach's alpha method was applied to assess the questionnaire's reliability, yielding a coefficient of 0.72 (Khalili et al., 2017). In this study, the researcher calculated a Cronbach's alpha coefficient of 0.74 for the scale.

Beck Anxiety Inventory (BAI): Beck, Steer, and Brown (2001) created an inventory to evaluate anxiety symptoms in people and confirmed the tool's reliability using the internal consistency approach (Beck et al., 2001). The Beck's Anxiety Inventory (BAI) consists of 21 items. Respondents select one of four options to indicate the intensity of their anxiety and the extent to which they have experienced the symptoms over the past week. Each item is scored on a four-point Likert scale ranging from not at all to severe, with scores ranging from 0 to 3. These scores are then totaled to provide a final score between 0 and 63, representing the level of stress and anxiety experienced by the individual. This numerical value helps determine the severity of anxiety symptoms and provides insight into the individual's emotional well-being. The lowest level of anxiety: between 0 and 7; Mild anxiety: between 8 and 15; Moderate anxiety: between 16 and 25; Severe anxiety: between 26 and 63. An individual with a higher score on this scale would signify increased anxiety, while a lower score suggests lower anxiety levels. In a study conducted in Iran, the Cronbach's alpha coefficient was recorded as 0.92 (Hamidi et al., 2015). The researcher in this study discovered that the Cronbach's alpha coefficient for this scale was 0.79.

Symptom Checklist-90-R (SCL-90-R): Drogatis developed a self-report questionnaire in 1994 to assess psychological problems, which has been validated and measures an individual's distress level across various aspects (Derogatis, 1994). The SCL 90 test is utilized to determine mental health status in the general population, screen patients with psychological issues, assess treatment outcomes pre- and post-psychological interventions and explore the relationship between symptoms and other psychosocial factors. This questionnaire consists of 90 items measured on a 5-point Likert scale. It encompasses nine main dimensions: physical complaints or somatization (12 items), obsessive-compulsive disorder (OCD) (9 items), interpersonal sensitivity (9 items), depression (13 items), anxiety (10 items), hostility or aggression (6 items), morbid fear or phobia (7 items), paranoid ideations (6 items), and psychosis (10 items). The options of this questionnaire include: Never: This issue has never been a concern for me and has not caused me any distress; Slightly: Indicates that this problem has only been a minor inconvenience for me and has caused me slight discomfort; Moderately: This suggests that this issue has affected me to a certain degree and has caused me some distress. For example, I have encountered this problem a few times recently; Significantly: This means that this problem has occurred frequently for me (e.g. once every few days) and has caused me a significant amount of discomfort; Excessively: This indicates that this problem has been constantly present in my life with great intensity, causing me immense distress. Regarding the questionnaire's reliability, Drogatis reported internal consistency ranging from 0.77 to 0.90 through retesting. In Iran, the reliability of the same questionnaire was determined to be 0.86 using Cronbach's alpha method (Mosavian & Nejati, 2016). In this study, the researcher found the Cronbach's alpha coefficient for this scale to be 0.84.

Beck Depression Inventory-II (BDI-II): Beck created this inventory in 1996 to assess depression and symptoms of depression in individuals (Beck et al., 1996). BDI-II consists of 21 questions, each worth 0 and 3 points. The total score ranges from 0 to 63. Beck found

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that it has a concurrent validity of 0.79 and a test-retest validity of 0.67. In Iran, a study reported a Cronbach's alpha coefficient of 0.80 (Modanloo & Najafi, 2024). The researcher in this study calculated the Cronbach's alpha coefficient of the questionnaire to be 0.71.

Data Analysis

Spearman 's correlation and multiple regression analysis were conducted using SPSS version 27 and SmartPLS version 4 software. The Shapiro-Wilk test was employed to assess the normality of the distribution of the study variables. The research variables did not demonstrate statistical significance ($p<0.05$), indicating a lack of normality. A significance level of 0.05 was utilized in this study. Research data were obtained using self-report questionnaires.

Findings and Results

The research involved 111 participants from families of martyrs and war veterans who were grouped based on educational background: high school (41.4%), diploma (40.5%), and associate degree (18.0%). They were also categorized according to age: 15 to 20 years old (40.5%), 20 to 30 years old (10.8%), 31 to 50 years old (22.5%), and 51 years old and above (26.1%). Additionally, participants were categorized based on their relationship with the veteran, including mother, father, wife, daughter, and son (Table 1).

Table 1

Descriptive statistics

Variables	Groups	Frequency	%	Total	Median
Level of Education	High school	46	41.4	111	2
	Diploma	45	40.5		
	Associate Degree	20	18.0		
Age	15 - 20	45	40.5	111	2
	20 - 30	12	10.8		
	31 - 50	25	22.5		
	51 and up	29	26.1		
Family relationship with the veteran	Husband	35	31.5	111	3
	Mother	14	12.6		
	Father	13	11.7		
	Girl	29	26.1		
	Boy	20	18.0		

Table 2 shows the mean and standard deviation of the research variables.

Table 2

Description of the research variable

Variables	Mean	SD	Skewness	Kurtosis	Shapiro-Wilk	P-value	Min	Max
Stress	51.550	4.696	-0.497	-0.002	0.950	< .001	41	62
Anxiety	41.000	4.890	0.150	-1.063	0.956	0.001	33	50
Depression	23.838	5.709	0.396	-0.496	0.957	0.001	14	36
Physical complaints or somatization	0.775	0.225	2.029	3.946	0.677	< .001	0.51	1.6
Obsessive-compulsive disorder	0.869	0.283	1.160	0.034	0.806	< .001	0.59	1.64
Interpersonal sensitivity	0.864	0.304	1.520	0.973	0.721	< .001	0.61	1.66
Depressive disorder	0.821	0.259	1.718	2.146	0.742	< .001	0.61	1.80
Anxiety disorder	0.780	0.223	2.536	5.760	0.583	< .001	0.61	1.72
Hostility or aggression	0.793	0.234	2.322	4.225	0.594	< .001	0.61	1.66
Morbid fear or phobia	0.813	0.274	1.664	1.453	0.692	< .001	0.61	1.69
Paranoid ideations	0.755	0.198	3.382	11.441	0.509	< .001	0.61	1.71
Psychosis	0.860	0.303	1.428	0.566	0.690	< .001	0.61	1.77

Table 3 used correlation coefficient to examine the relationship between research variables.

Table 3

Correlation Matrix

Var.	1	2	3	4	5	6	7	8	9	10	11
1	—										
2	0.507	—									
3	0.654	0.577	—								
4	0.566	0.623	0.629	—							
5	0.527	0.607	0.722	0.751	—						
6	0.559	0.668	0.592	0.798	0.760	—					
7	0.505	0.473	0.573	0.809	0.722	0.682	—				
8	0.480	0.632	0.581	0.953	0.728	0.784	0.791	—			
9	0.497	0.619	0.544	0.928	0.712	0.777	0.755	0.947	—		
10	0.554	0.641	0.724	0.811	0.694	0.758	0.679	0.808	0.818	—	
11	0.359	0.502	0.576	0.795	0.590	0.570	0.697	0.798	0.719	0.673	—
12	0.497	0.488	0.626	0.739	0.575	0.622	0.580	0.745	0.753	0.756	0.587

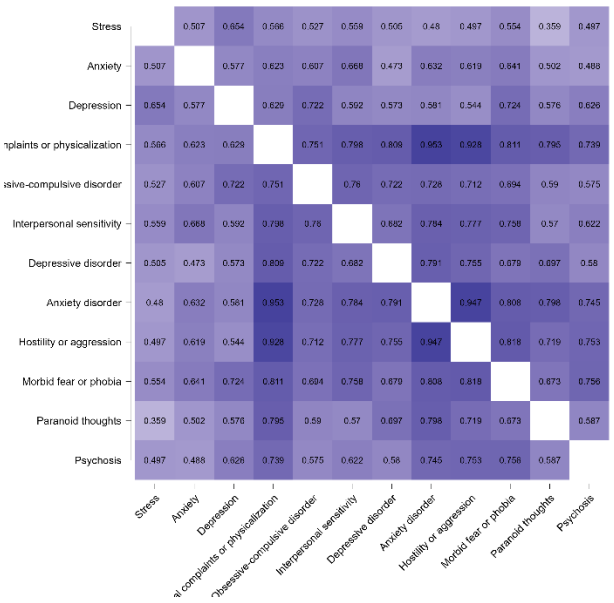
1. Stress; 2. Anxiety; 3. Depression; 4. Physical complaints or Somatization; 5. Obsessive-compulsive disorder; 6. Interpersonal sensitivity; 7. Depressive disorder; 8. Anxiety disorder; 9. Hostility or aggression; 10. Morbid fear or phobia; 11. Paranoid ideations; 12. Psychosis.

All $p<0.001$

The results in Table 3 indicated that there is a significant positive correlation between Stress, Anxiety, and Depression variables and different aspects of mental disorders like Physical complaints or somatization, Obsessive-compulsive disorder, Interpersonal sensitivity, Depression, Anxiety, Hostility or aggression, Morbid fear or phobia, Paranoid ideations, and Psychosis ($P<0.01$). In Table 4, the author investigated the regression connections between the independent variables and physical activity.

Figure 2

Heatmap



The researcher examined the test assumptions. The Shapiro-Wilk test was used to examine the normality of the distribution of the research variables, and since this test was significant for the research variables (P<0.001), the research variables did not have a normal distribution. To solve the problem of non-normality of the variables, PLS software was used with the partial least squares method, which has little sensitivity to non-normality of the data. Since the researcher's sampling method was random, this assumption was met. Following this, a regression model was constructed using SmartPLS software. As shown in Figure 3, it is evident that the model holds significance.

Table 4

Multiple regression analysis for Physical activity

		Not Standardized coefficients		Standardized coefficients			Confidence Interval		Model Summary		ANOVA	
Dependent Variable	Model	B	SE	Beta	t	p	Lower Bound	Upper Bound	R	R^2	F	p
Physical complaints or somatization	Constant	-0.646	0.194	-	-3.333	0.001	-1.030	-.262	0.719	0.517	38.211	<0.001
	Stress	0.009	0.004	0.190	2.092	0.039	.000	.018				
	Anxiety	0.016	0.004	0.353	4.194	0.000	.009	.024				
	Depression	0.012	0.004	0.302	3.148	0.002	.004	.019				
Obsessive-compulsive disorder	Constant	-0.528	0.228	-	-2.320	0.022	-.979	-.077	0.759	0.576	48.463	<0.001
	Stress	0.002	0.005	0.032	0.375	0.709	-.008	.012				
	Anxiety	0.016	0.005	0.279	3.540	0.001	.007	.025				
	Depression	0.027	0.004	0.540	6.015	0.000	.018	.036				
Interpersonal sensitivity	Constant	-1.207	0.258	-	-4.686	0.000	-1.717	-.696	0.729	0.532	40.546	<0.001
	Stress	0.013	0.006	0.198	2.219	0.029	.001	.024				
	Anxiety	0.028	0.005	0.451	5.446	0.000	.018	.038				
	Depression	0.011	0.005	0.202	2.144	0.034	.001	.021				
Depressive disorder	Constant	-0.476	0.253	-	-1.880	0.063	-.978	.026	0.615	0.378	21.651	<0.001
	Stress	0.010	0.006	0.187	1.817	0.072	-.001	.022				
	Anxiety	0.009	0.005	0.178	1.865	0.065	-.001	.019				
	Depression	0.016	0.005	0.347	3.192	0.002	.006	.026				
Anxiety disorder	Constant	-0.477	0.201	-	-2.376	0.019	-.875	-.079	0.688	0.473	32.032	<0.001
	Stress	0.004	0.005	0.076	0.802	0.424	-.005	.013				
	Anxiety	0.020	0.004	0.430	4.896	0.000	.012	.028				
	Depression	0.011	0.004	0.283	2.831	0.006	.003	.019				
Hostility or aggression	Constant	-0.627	0.215	-	-2.910	0.004	-1.054	-.200	0.669	0.448	28.912	<0.001
	Stress	0.007	0.005	0.149	1.534	0.128	-.002	.017				
	Anxiety	0.020	0.004	0.428	4.756	0.000	.012	.029				
	Depression	0.008	0.004	0.200	1.952	0.054	.000	.017				
Morbid fear or phobia	Constant	-0.696	0.217	-	-3.247	0.002	-1.120	-.271	0.776	0.602	53.869	<0.001
	Stress	0.004	0.005	0.067	0.813	0.418	-.006	.013				
	Anxiety	0.018	0.004	0.322	4.214	0.000	.010	.027				
	Depression	0.024	0.004	0.495	5.681	0.000	.015	.032				
Paranoid ideations	Constant	0.109	0.193	-	0.563	0.574	-.274	.491	0.616	0.380	21.833	<0.001
	Stress	-0.004	0.004	-0.093	-0.900	0.370	-.013	.005				
	Anxiety	0.011	0.004	0.272	2.851	0.005	.003	.019				
	Depression	0.017	0.004	0.480	4.419	0.000	.009	.024				
Psychosis	Constant	-0.524	0.285	-	-1.840	0.069	-1.089	.041	0.651	0.423	26.194	<0.001

Stress	0.007	0.006	0.115	1.158	0.249	-.005	.020
Anxiety	0.010	0.006	0.168	1.828	0.070	-.001	.022
Depression	0.024	0.006	0.454	4.335	0.000	.013	.035

Figure 3

Regression Model of Physical Activity Variable

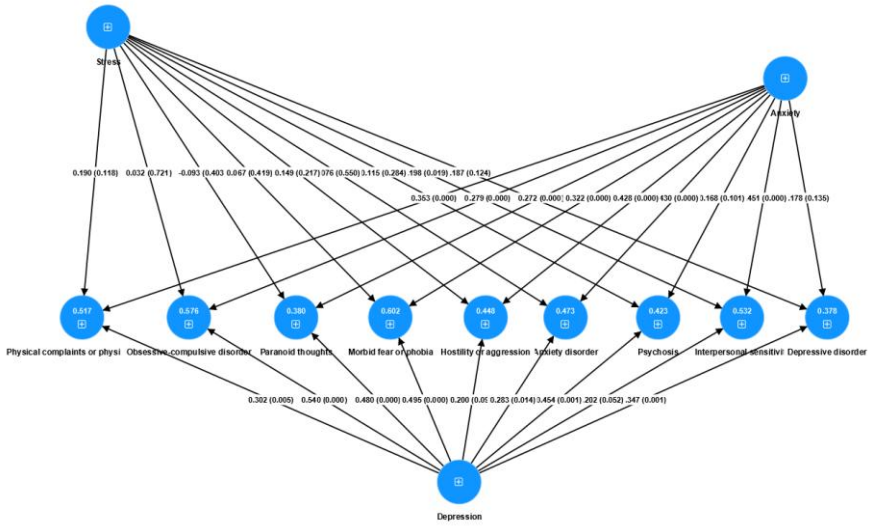


Table 4 displays the outcomes of the regression analysis concerning the variables Physical complaints or somatization, Obsessive-compulsive disorder, Interpersonal sensitivity, Depressive disorder, Anxiety disorder, Hostility or aggression, Morbid fear or phobia, Paranoid ideation, and Psychosis. From these findings, it is evident that Stress (P=0.039), Anxiety (P=0.000), and Depression (P=0.002) had a significant and positive impact on the Physical complaints or somatization component. The F value from the regression model evaluation was 38.211, indicating significance at an alpha level below 0.001. This result suggests that stress, anxiety, and depression play a crucial role in understanding changes in physical complaints or somatization, confirming the validity of the regression model. The R square value of 0.517 demonstrates that stress, anxiety, and depression can explain 51.7% of the variance in Physical complaints or somatization.

Additionally, Anxiety (P=0.001) and Depression (P=0.002) had a significant and positive influence on the obsessive-compulsive disorder component. The F value for the regression model was 48.463, showing significance at an alpha level below 0.001. This indicates that anxiety and depression effectively account for changes in obsessive-compulsive disorder, supporting the relevance of the regression model. The R square value of 0.5760 illustrates that anxiety and depression explain 57.6% of the variance in obsessive-compulsive disorder. Notably, Stress did not impact this component.

The Interpersonal sensitivity factor was significantly influenced by Stress (P=0.029), Anxiety (P=0.000), and Depression (P=0.034). As per the data in Table 4, the F value calculated for assessing the regression model was 40.546, indicating that the regression model was statistically significant at a p-value below 0.001. This finding suggests that stress, anxiety, and depression are effective in elucidating the variations in Interpersonal sensitivity and validates the accuracy of the regression model. The R square value, which stood at 0.532, signifies that stress, anxiety, and depression account for 53.2% of the changes in Interpersonal sensitivity.

Nevertheless, solely the depression factor (P=0.002) showed a favorable and noteworthy impact on the depressive disorder component. The computed F value for evaluating the regression model was 21.651, and the model proved to be significant at a p-value of less than 0.001. In contrast, both Anxiety (P=0.000) and Depression (P=0.006) factors exhibited a positive and significant influence on the anxiety disorder component. The F value obtained for assessing the regression model

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was 32.032, and the model was remarkable at a p-value of less than 0.001. Notably, Stress did not have an impact on the anxiety disorder component. However, only the Anxiety factor (P=0.000) displayed a favorable and significant effect on the Hostility or aggression component. The calculated F value for evaluating the regression model was 28.912, and the model was significant at a significance level of less than 0.001. Additionally, both Anxiety (P=0.000) and Depression (P=0.000) factors had a positive and significant impact on the Morbid fear or phobia component. The F value obtained for assessing the regression model was 53.869, and the model was significant at a p-value of less than 0.001. Once again, Stress did not show any influence on the Morbid fear or phobia component. Furthermore, Anxiety (P=0.005) and Depression (P=0.000) factors had a positive and significant impact on the Paranoid ideations' component. The F value obtained for evaluating the regression model was 21.833, and the model was significant at a p-value of less than 0.001. Stress was found to be ineffective on the Paranoid ideations' component. Nevertheless, solely the depression factor (P=0.000) exhibited a positive and significant influence on the psychosis component. The calculated F value for evaluating the regression model was 26.194, and the model proved to be significant at a level of less than 0.001.

Discussion and Conclusion

The purpose of the present study was to investigate the levels of depression, anxiety, and stress in family members of martyrs and veterans suffering from panic attacks, and to determine the relationship between these mental health issues and the prevalence of mental disorders in their families. According to the findings of the study, anxiety, and depression were found to elevate physical complaints, interpersonal sensitivity, obsessive-compulsive disorder, anxiety disorder, phobia, and paranoid ideations. Furthermore, the research findings indicated that stress led to an increase in physical complaints and interpersonal sensitivity. Additionally, depression had a significant effect on depression and psychosis, while anxiety was connected to increased aggression.

The results of this study demonstrate that anxiety and depression contribute to physical complaints, interpersonal sensitivity, obsessive-compulsive disorder, anxiety disorders, phobias, and paranoid ideations. Additionally, stress is also connected to physical complaints and interpersonal sensitivity. These findings are in line with previous research (Khalifat & Monirpour, 2020; Sood & Newman-Taylor, 2020; Sun et al., 2020; Torabi Zonouz et al., 2020; Xu et al., 2023). Interpersonal sensitivity was discovered to be associated with depression, with anxiety partially serving as a mediator in this relationship (Xu et al., 2023). Sun et al. (2020) found a bidirectional relationship between interpersonal sensitivity and anxiety or stress (Sun et al., 2020). Another study suggested that anxiety, particularly negative affect, contributes significantly to paranoia (Sood & Newman-Taylor, 2020). Torabi et al. (2020) discovered a strong correlation between general psychological vulnerability and anxiety, with a structural pattern indicating relationships with somatization, anxiety, depression, phobia, and obsession (Torabi Zonouz et al., 2020). Additionally, a study demonstrated both direct and indirect effects of depression on obsessive symptoms (Khalifat & Monirpour, 2020).

The negative consequences of war include complications and psychological effects on the families of combatants. Depression, anxiety, and stress are important indicators of mental health that can have a detrimental impact on these individuals. Families of veterans and martyrs may worry about the future and dwell on the past, leading to increased anxiety, depression, and stress, as well as various mental disorders (Ghovati et al., 2022). These individuals often focus excessively on their relationships and fear rejection or criticism in social interactions. They are highly sensitive to other people's feelings and may experience discomfort during interpersonal interactions**.** The findings of this study can also be understood within the broader stress-response framework, where exposure to chronic stressors, such as war-induced trauma, can trigger mental health issues like depression, anxiety, and stress in family members (Xu et al., 2022). Due to their inherent need for social connection, when families of veterans and martyrs are unable to fulfill this need, their behavior, cognition, and physical and mental health may suffer. They may also experience physical complaints in addition to interpersonal sensitivity. Mental health disorders, particularly emotional issues, can manifest as physical

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complaints among family members of veterans. In younger individuals, these physical complaints may indicate psychological stress (Hansen et al., 2023).

When faced with stressful events in their lives, families of veterans and martyrs may undergo acute stress reactions and exhibit anxiety and panic symptoms, which could lead to mental health issues like extreme worries, fears, and eventually phobias (Torabi Zonouz et al., 2020). The existence of negative feelings, particularly anxiety within the families of martyrs, is crucial in perpetuating paranoia since paranoid ideations are often connected to anxiety, and intense anxiety raises the chances of perceiving threats (Sood & Newman-Taylor, 2020). Moreover, due to being in stressful environments, such as caring for veterans with various physical and mental challenges and juggling multiple responsibilities, the families of veterans encounter various life pressures like financial, social, and medical stressors, impacting their personalities. As a result of these circumstances, they may experience higher levels of physical and emotional stress, depression, psychosomatic symptoms, extreme fatigue, anger, tension, and obsession compared to others (Chung et al., 2019).

The current study also found that anxiety leads to increased aggression and depression leads to an increase in depressive and psychotic symptoms, which aligns with previous research (Chen et al., 2021; Chung et al., 2019). Previous studies have also shown a connection between higher levels of anxiety and increased aggression (Chung et al., 2019). Additionally, research indicates that depression and psychosis are risk factors for depressive disorders (Chen et al., 2021).

The stress stemming from war and its negative impact on mental health not only affects the individuals directly involved, but also has repercussions on their families. Taking care of disabled or ill individuals, such as veterans, often leads to heightened physical injuries, depression, stress, and anxiety for their families (Talebi & Zarnaghash, 2020). The families of martyrs and veterans, due to their unique circumstances, experience higher levels of anxiety compared to others, which results in lower feelings of adequacy and intimacy, as well as increased aggression. These individuals become anxious as they worry about the future and the roles they will have to take on. Additionally, their inability to change their perceptions of situations and their tendency towards pessimistic interpretations contribute to their anxiety. This anxiety can escalate into extreme emotional reactions, leading to physical and verbal outbursts of aggression (Ebrahimi Moghadam et al., 2018).

When a family member suffers from a chronic physical or mental health condition, various aspects of family life are impacted, leading to financial strain, emotional distress, and other challenges (Maguire & Woodbury, 2024). Veterans often face psychological traumas such as post-traumatic stress disorder, which can have long-lasting effects on both the veterans and their families, potentially causing depression and increased psychological distress (Forrest et al., 2018).

One limitation of this study was the lower literacy level of some participants, which may have affected the validity of self-reported data due to potential misunderstandings. To address this, clear explanations were provided, and sufficient time was allocated for responses. Another limitation was the restricted access to families of veterans, as many declined to participate, introducing potential selection bias and possibly underestimating the prevalence of mental health issues. Additionally, the study could not fully control for intervening variables, such as social, economic, and cultural factors, which may have influenced the findings' reliability and generalizability. The focus on Iranian families, particularly in Tehran, limits the generalizability of the results to other cultural contexts. Differences in family structure, religious beliefs, and societal attitudes toward mental health may lead to varying trauma responses across populations. Furthermore, excluding socio-demographic factors, lifestyle habits, and emotional variables to prevent an overly lengthy questionnaire may have omitted key influences on mental health outcomes. Future studies should consider longitudinal designs to assess the long-term effects of mental health challenges and explore mediators such as coping mechanisms and social support, which could mitigate the impact of anxiety and depression. Additionally, evaluating the effectiveness of targeted interventions, such as cognitive-behavioral therapy (CBT) or family-focused therapy, could provide valuable insights into improving the psychological well-being of families of veterans and martyrs.

The findings of this research indicate that feelings of anxiety, depression, and stress among the families of veterans and martyrs are connected to a range of mental health issues and contribute to an increase in physical

complaints, interpersonal sensitivity, obsessive-compulsive disorder, anxiety disorders, phobias, paranoid ideations, aggression, and psychosis. Therefore, it is essential to focus more on the well-being of this particular group. Experts in psychology and counseling who work with veterans and their families are encouraged to incorporate couples' therapy and family therapy into their practice, tailored specifically for veterans and their families. It is advised to consider different elements of veterans' family lives to reduce their stress, such as arranging cultural and leisure activities and providing assistance and support from experts. Additionally, it is advised for organizations such as the Martyr and Veterans Affairs Foundation, as well as health system administrators, to develop and implement more robust mental health initiatives for veterans and their families.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Ethical considerations in this study were that participation was entirely optional.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors equally contribute to this study.

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