UDC 616-009+616.89/613.8:614.1 https://doi.org/10.31612/2616-4868.8.2023.03

PSYCHOSOMATIC MANIFESTATIONS OF MILITARY PSYCHOTRAUMA

Nina V. Koliadenko^{1,2}, Nadiia O. Bachurina¹, Khrystyna S. Zhyvaho², Mykola M. Shopsha¹, Olena L. Shopsha¹

- 1 Interregional Academy of Personnel Management, Kyiv, Ukraine
- 2 Sigmund Freud University Ukraine, Kyiv, Ukraine

Summary

Introduction. War is a super-powerful extreme event that causes adaptive capacity to decline. The need for a clearer understanding of the specifics of war psychotrauma and its clinical consequences for all components of human health determines the relevance of the topic of this study.

The aim of the work is to study the peculiarities of psychosomatic relationships in persons with the consequences of war psychotrauma.

Materials and methods. The experimental study group consisted of 32 patients from the number of temporarily displaced persons, the control group – 34 patients who did not change their place of residence during the entire period of the full-scale war. The diagnosis was aimed at identifying neurotic, stress-related and somatoform disorders, according to the rubric (F40-F48) of the ICD-10. Assessment of the somatic condition was carried out on the basis of analysis of anamnestic data, clinical examination of the patient and indicators of laboratory tests. Psychodiagnostic methods were used to assess the mental states of patients (Clinical Questionnaire for the Detection and Assessment of Neurotic States; Methodology for the express diagnosis of neurosis by K. Heck and H. Hess; Questionnaire SAN (Mood, Activity, Mood); Methodology for the diagnosis of Taylor's anxiety level; Self-assessment of mental states according to Eysenck; Ch. Spibleger's Reactive and Personal Anxiety Assessment Scale in the modification of Y. Hanin. Statistical processing of the research results was carried out in the Microsoft Excel program and with the help of the Social Science Statistics online calculator.

Results. As a result of the analysis of anamnestic data, clinical examination and analysis of laboratory tests, psychosomatic disorders were found in patients of both research groups: in 29 (90.63 %) patients of the experimental group and in 26 (74.47 %) patients of the control group.

Conclusions. It has been confirmed that a prolonged stressful extreme situation of a full-scale war causes the formation of negative mental states accompanied by psychosomatic manifestations, the formation of a closed vicious circle of a pathological psychosomatic process. A high close direct correlation was found between the level of reactive anxiety, autonomic disorders, well-being, activity, mood of patients and psychosomatic symptoms. The absence of a statistically significant difference in the risk of developing psychosomatic disorders as a result of war psychotrauma in temporarily displaced persons and those who did not change their place of residence was revealed.

Key words: psychosomatic disorders, war psychotrauma, temporarily displaced persons, negative mental states, vegetative disorders, anxiety

INTRODUCTION

A psychosomatic disorder is defined by researchers [16] as a disease arising from the action of psychoemotional factors and involving both the mind and the body. The prevalence of psychosomatic disorders among visitors to primary network medical centers, according to some

authors, ranges from 6% to 20% [21], while others cite figures from 30% to 57%, while in psychosomatic disorders occur in 11%-52% of the general population [15].

Clinical concepts connect psychosomatic diseases with environmental stress, psychological and physical pressure of the environment [7; 13], with the influence

of psycho-traumatic psychosocial factors that cause adaptation disorders [13], affect the physical condition and behavior of the patient [8; 21]. From the point of view of the systemic approach, psychosomatic disorders are multifactorial formations, the development of which is influenced by the characteristics of the psychotraumatic situation, the patient's personal characteristics, hereditary factors, etc. [15].

Psychosomatic disorders arise as a result of the maladaptive use of defense mechanisms, a deficit of emotional awareness and a violation of self-control, which is manifested in the inability to control the excitement and dissipation of emotions [22]. Functional psychosomatic diseases, such as gastrointestinal disorders, cardiac symptoms and recurring nightmares, are associated with a decrease in rational attitude to the situation, the appearance of fear of the disease with its simultaneous denial and emotional maladjustment, which requires appropriate psychotherapeutic interventions [22].

Psychosomatic medicine examines the relationship between mind and body. Negative psycho-emotional states of the individual, such as anxiety, fear or anger, can cause a number of physiological changes in the human body, manifested by crying, increased heart rate, gastrointestinal disorders and other somatic phenomena. On the other hand, intoxication due to somatic diseases or the use of psychoactive substances can negatively affect cognitive processes, a person's mood and cause somatopsychic health disorders [18; 23]. It should be noted that purely psychosomatic disorders mainly mean the first variant, that is, functional physical manifestations of psychological problems [23], which are studied in our study.

Violation of the quality and health of sleep as a result of stressogenic influences and the resulting negative emotions causes dysfunction of neuropsychological processes, which affects the development of psychosomatic disorders [6; 14]. Experiencing micro- and macro-traumatic events contributes to an increase in the level of situational anxiety and affects functional disorders that arise on the basis of an organic and mental syndrome within the framework of the «Locus minoris resistentii», forming a vicious closed circle of the pathological process [4].

Experiencing an extreme event leads to an overload of psychological defense mechanisms [12]. The war is a powerful extreme event that causes a decrease in social adaptation capabilities, depletion of social and psychological resources, development of mental and psychosomatic disorders in a significant number of psychotraumatized population, which as a result of the war changed their usual way of life [19].

The situation of a full-scale war caused a social crisis, which negatively affects the psychological health of the population and is manifested by states of emotional instability, anxiety, fear, depression, helplessness,

aggression, apathy. These negative mental states are usually accompanied by psychophysiological disorders, which, according to the sources of scientific literature, are manifested by psychosomatic symptoms and anxiety-hypochondriac states, sleep and eating disorders, communication disorders, loss of motivation for creative self-realization of the individual, pessimistic moods, mental exhaustion [4; 20].

Post-traumatic disorders and the consequences of war trauma are considered through the prism of psychopathological, neurobiological and sociological concepts [21]. The need for a clearer understanding of the specifics of war psychotrauma and its clinical consequences for all components of human health [21] determines the relevance of the topic of this study.

The scientific novelty of the study consists in the theoretical substantiation of the features of the psychosomatic manifestations of war trauma.

The practical significance of the research results lies in the possibility of using them to improve the effectiveness of care for patients with the consequences of war psychotrauma based on taking into account the psychosomatic component of painful symptoms.

THE AIM

The purpose of the study is to study the peculiarities of psychosomatic relationships in persons with the consequences of war psychotrauma.

MATERIALS AND METHODS

The longitudinal study was conducted on the basis of the clinic «The First Private Office of Psychiatry and Psychotherapy» (Kyiv, Ukraine). 32 patients from the number of temporarily displaced persons (9 men, 23 women, average age 46.4 years) were selected for the experimental study group by simple randomization. The control group also included 34 patients selected by simple randomization — residents of Kyiv who did not change their place of residence during the entire period of the full-scale war (12 men, 22 women, average age 45.9 years).

The research methodology was based on a holistic understanding of a person as a biopsychosocial being and a systemic approach to studying the mechanisms of causal interaction between the physical, mental and social [3].

The following methods were used in the study: analytical, clinical, anamnestic, laboratory, psychodiagnostic. The diagnosis was aimed at identifying neurotic, stress-related and somatoform disorders, according to the rubric (F40-F48) of the ICD-10.

Assessment of the somatic condition was carried out on the basis of analysis of anamnestic data, clinical examination of the patient and indicators of laboratory tests.

The following psychodiagnostic techniques were used to assess patients' mental states:

- Clinical questionnaire for detection and assessment of neurotic states, consisting of 68 questions and aimed at establishing the level of neuroticism. Answers to the questions are evaluated on a 5-point Likert scale (1 constantly or always; 2 often; 3 sometimes; 4 rarely; 5 never). The questionnaire contains 6 scales: Anxiety scale, Neurotic depression scale, Asthenia scale, Hysterical response type scale, Obsessive-phobic disorder scale; Scale of vegetative disorders. Using special keys, the diagnostic coefficient is calculated for each of the scales of the questionnaire. If the coefficient is less than –1.28, this indicates the painful nature of the existing disorders. A ratio greater than +1.28 is an indicator of health.
- The method of express diagnosis of neurosis by K. Heck and H. Hess, which consists of 40 questions and allows you to quickly determine the presence of neurotic personality. For the answer «Yes» to each of the questions, 1 point is given, for the answer «No» 0 points. The range from .0 to 23 points corresponds to a low level of neuroticism, 24 and more points indicate a high probability of neurosis in the form of neurasthenia, hysteria, or obsessive-compulsive neurosis.
- The WAM questionnaire (Well-being, Activity, Mood), which consists of 30 pairs of words with opposite meanings, reflecting Well-being (strength, health, fatigue), Activity (mobility, speed, rate of flow of functions), Mood (emotional state of the individual). Between the pairs of words there are indices (3; 2; 1; 0; 1; 2; 3), among which one must choose the one that most closely corresponds to the current state of the respondent. When processing the research results using this technique, the indices are recoded to values from 1 to 7, where 1 corresponds to the worst state and 7 to the best state. The range of indicators from 5 to 5.5 corresponds to the average statistical norm.
- Taylor's method of diagnosing the level of anxiety, which consists of 50 statements and allows you to assess the general level of anxiety of an individual. Each answer matching the key is valued at 1 point, an uncertain answer at 0.5 points. The indicator in the range from 0 to 6 points indicates a low level of anxiety, from 6 to 20 points medium anxiety, more than 20 points high anxiety.
- Self-assessment of mental states according to Eysenck, consisting of 4 groups of questions, 10 questions in each group, which allow to determine the presence of anxiety, frustration, aggressiveness and rigidity. The answer «Yes» to each of the questions is marked with 1 point, the answer «No» 0 points. Indicators from 0 to 7 indicate a low level of the symptom, 8-14 points an average level, 15-20 points a pronounced symptom.
- Ch. Spielberger's reactive and personal anxiety assessment scale in the modification of Y. Hanin, which

consists of 40 questions, 20 of which characterize personal anxiety, and the other 20 – situational (reactive) anxiety. Answers are evaluated on a 4-point scale (1 – No; 2 – Probably yes; 3 – Yes, 4 – Really yes). Indicators up to 30 points correspond to a low level of anxiety, 31-45 – moderate anxiety, 46 and more points – high anxiety.

Statistical processing of the research results was carried out in the Microsoft Excel program, where accumulation, sorting, analysis and visualization of the obtained data took place. The Social Science Statistics online calculator was used to perform the calculations. The statistical significance and reliability of the research results were determined using the Student's t-test and ANOVA variance analysis. To assess the relationship between the measured parameters, the Pearson correlation coefficient rxy was used, the calculated parameters of which were compared with the data of the Chaddock table. To determine the risk of developing psychosomatic disorders in the studied groups of patients, the χ^2 criterion was used, which was calculated using 4-field tables.

Ethical issues in the research process were resolved in accordance with international and domestic norms of bioethics and medical law, protection of patients' rights. The consent of the ethics committee of the Interregional Academy of Personnel Management was obtained for the study. All respondents provided written informed consent to participate in the study. Anonymity of survey results was achieved by encryption of questionnaires. The confidentiality of the personal data of the study participants and medical confidentiality were ensured. The principle of academic integrity was followed.

The limitations of the study were related to its conduct on the basis of only one clinic, which led to a relatively small sample of respondents. However, the randomization procedure allows minimizing the systematic error and extrapolating the obtained results to the general cohort of patients with the consequences of war psychotrauma. On the other hand, the experience of a war situation by certain categories of the population may differ depending on age, gender, occupation, etc., which requires a larger sample and targeted research of different contingents of patients. Therefore, this research should be considered a pilot, and its results should be such that they give an idea of the general picture and allow determining the actual directions of future research.

RESULTS

As a result of the analysis of anamnestic data, clinical examination and analysis of laboratory test indicators, existing psychosomatic disorders were found in patients of both studied groups. Psychosomatic disorders were observed in 29 (90.63 %) patients in the experimental group, and in 26 (74.47 %) patients in the control group. The frequency of psychosomatic disorders in the experimental group was statistically

significantly and significantly higher than in the control group (f-ratio=2611456.00897, p<0.05). However, no statistically significant difference was found in the severity of psychosomatic symptoms (tab. 1). Assessment of

severity psychosomatic symptoms were assessed according to a 5-point Likert scale (1 - no symptoms, 2 - minor symptoms, 3 - symptoms present, 4 - pronounced symptoms, 5 - significant symptoms).

Expression of psychosomatic disorders in respondents of the experimental (A) and control (B) studied groups

David account a (compto form) discarders	G	PA	Student's		ANOVA	p
Psychosomatic (somatoform) disorders	A	В	t-test	p	(f-ratio)	
Manifestations of cardiac neurosis	3.5±0.3	3.2±0.6	0.77460	0.240909	1.91489	0.203802
Psychogenic dyspepsia	3.6±1.2	3.4 ± 0.8	0.15385	0.44259	0.19048	0.674060
Eating disorders	2.8±0.6	2.2 ± 0.4	1.44115	0.111491	6.66667	0.032516
Psychogenic flatulence	3.2±0.8	3.0 ± 0.6	0.34641	0.373245	0.39216	0.548615
Psychogenic irritable bowel syndrome	4.4±0.2	4.0 ± 0.8	0.84017	0.22405	2.28571	0.16902
Psychogenic pylorospasm	2.9±0.3	2.2±0.6	1.80739	0.072493	10.42553	0.012078
Psychogenic dysphagia	4.1±0.5	3.5±0.8	1.10158	0.166236	3.95604	0.081902
Psychogenic urination disorders	2.6±0.9	1.7±0.5	1.51409	0.102284	7.50000	0.025504
Psychogenic hyperventilation of the lungs	2.5±1.3	2.1±1.7	0.32373	0.38118	0.34783	0.571623
Psychogenic disorders of the sexual sphere	4.0±0.2	3.6 ± 0.5	1.28654	0.133834	5.16129	0.052738
Psychogenic itching	3.2±0.4	2.8±0.6	0.96077	0.195538	2.96296	0.123497
Psychogenic pain syndrome	4.2±0.4	3.8 ± 0.2	1.54919	0.098131	7.27273	0.027209
Other	3.6±0.8	3.4±0.3	0.40544	0.352951	0.20417	0.663377
ANOVA (f-ratio)	2.6	9291		-		0.112837

As can be seen from this table, such psychosomatic abnormalities as irritable bowel syndrome, psychogenic pain syndrome and disorders of the sexual sphere were most often detected in the respondents of both groups. The results of the variance analysis ANOVA showed that the patients of the experimental group who were evacuated from the zone of active hostilities had statistically significantly more pronounced (p<0.05) eating disorders than in the control group (2.8 \pm 0.6 points versus 2.2 \pm 0.4 points), psychogenic pylorospasm (2.9 \pm 0.3 points versus 2.2 \pm 0.6 points),

psychogenic urination disorders (2.6 \pm 0.9 points versus 1.7 \pm 0.5 points), psychogenic disorders of the sexual sphere (4.0 \pm 0.2 points versus 3.6 \pm 0.5 points) and psychogenic pain syndrome (4.2 \pm 0.4 points vs. 3.8 \pm 0.2 points), although in general the severity of psychosomatic disorders in respondents of the experimental and control groups did not differ significantly (f-ratio=2.69291, p>0.05).

In tab. 2 are presented the results of identifying and assessing the neurotic states of respondents according to Taylor's Clinical Questionnaire.

Table 2

The results of the study of the respondents of the experimental (A) and control (B) groups according to the Clinical Questionnaire for the detection and assessment of Taylor's neurotic states

Scale		Gl	PA	Student's t-test		
		A	В	Student's t-test	Р	
I	Anxiety	-1.27±0.06	-0.96±0.09	-4.96397	0.003842	
II	Neurotic Depression	-1.35±0.04	-0.97±0.06	-9.12731	0.000400	
III	Asthenia	-1.31±0.07	-0.91±0.33	-2.05376	0.546120	
IV	Hysterical type of response	-1.32±0.05	-0.92 ± 0.18	-3.70858	0.010340	
V	Obsessive-phobic disorders	-1.09±0.01	-0.79 ± 0.02	-10.10415	0.000270	
VI	Vegetative disorders	-1.31±0.03	-1.10±0.11	-3.190130	0.016606	
ANOVA (f-ratio)		35.0	7541		0.000147	

As can be seen from this table, the indicators of neuroticism of persons of experimental and control groups have statistically reliable and significant differences, which is confirmed by the results of variance analysis of ANOVA (f-ratio=35.07541, p<0.05). At the same time, in the experimental group, the anxiety index is at the borderline level (-1.27 ± 0.06), and the indicators of neurotic depression (-1.35 ± 0.04), asthenia (-1.31 ± 0.07), hysterical manifestations of neurosis (-1.32 ± 0.05) and vegetative disorders are significantly differ from the normal

level (-1.31 ± 0.03) , which indicates the severity of the existing deviations. In the control group, indicators on all scales are reduced, but they do not reach the level of illness, except for the indicator of asthenia, which has a significant variation discrepancy (-0.91 ± 0.33) and in some respondents of the control group it almost reaches the pathological level. Visually, the differences between the indicators of neuroticism of the respondents of the experimental and control research groups are shown in Fig. 1.

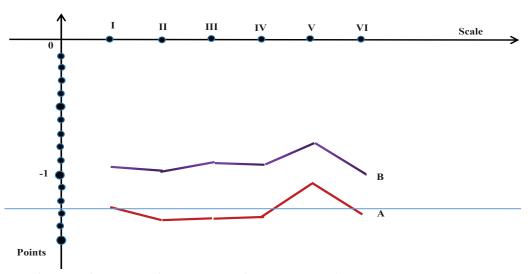


Fig. 1. Comparison of the level of neuroticism of the respondents of the experimental (A) and control (B) groups

As can be seen from the given graph, in both groups the indicators of neuroticism are significantly different from the norm. At the same time, the indicators of neuroticism in the control group are at the borderline level, while in the experimental group, the manifestations of neurotic disorders on most scales of the methodology reach the clinical level.

There is a high direct correlation between the level of vegetative disorders determined by the Clinical Questionnaire for the Detection and Assessment of Neurotic Conditions and clinical manifestations of psychosomatic disorders (Pearson's correlation coefficient rxy=0.8603).

The following tab. 3 presents the results of express diagnosis of neurosis according to the method of K. Heck and H. Hess.

As can be seen from this table, a high level of neuroticism is observed in both studied groups $(34.4\pm3.6$ points in the experimental group and 29.8 ± 7.2 points in the control group), and the statistical difference between them is not significant, which is confirmed both by the calculation of the Student's t-test and and the results of ANOVA variance analysis (f-ratio=3.26443, p>0.05).

In tab. 4 presents the results of the research on well-being, activity and mood of the respondents of the experimental and control groups.

Table 3
The results of the study of the level of neuroticism of the respondents of the experimental (A) and control (B) groups

Indicator	GI	PA	Chu danka k kask		
Indicator	A	В	Student's t-test	Р	
The level of neuroticism	34.4±3.6	29.8±7.2	0.98976	0.189159	
ANOVA (f-ratio)	3.26443			0.108425	

Table 4
The results of the study of the respondents of the experimental (A) and control (B) groups according to the WAM method (Well-being, Activity, Mood)

	Scale	GP	GPA Student's t-test		**	ANOVA (f-ratio)	n
	A	В		Student's t-test	Р	ANOVA (1-ratio)	P
I	Well-being	3.6±0.4	4.2±0.3	-2.07846	0.53104	13.33333	0.00648
II	Activity	3.2±0.6	3.5±0.5	-0.78969	0.236942	1.42857	0.266224
III	Mood	2.8±0.5	3.1±0.6	-0.6653	0.271129	1.42857	0.266224
ANOV	A (f-ratio)	2.22	841	-	-	-	0.154949

It can be seen from this table that the respondents of both groups have a significant decrease in activity and mood, and according to these scales of the technique, the difference between the indicators of the experimental and control groups is not statistically significant (p>0.05). Instead, the mood indicator in the experimental group has a more significant decrease than in the control group,

which is confirmed by the ANOVA analysis of variance (f-ratio=13.33333, p<0.05), although this difference is also statistically insignificant according to the Student's t-test (p>0.05).

In tab. 5 presents the results of the study of the level of anxiety of the respondents according to the Taylor method.

In tab. 5 presents the results of the study of the level of anxiety of the respondents according to the Taylor method.

As can be seen from this table, the level of anxiety is significantly increased in both studied groups, and the difference between them is not statistically significant (f-ratio=1.1304, p<0.05).

To find out the relationship between the level of anxiety and indicators of well-being, activity and mood, the Pearson correlation coefficient was calculated (tab. 6).

The results of the calculation of the correlation coefficient indicate the presence of a direct correlation between the level of anxiety of the studied patients and indicators of their well-being, activity and mood. At the same time, the closest and strongest is the relationship between anxiety and mood (rxy=0.7895, which indicates a high level of correlation), while the relationship between anxiety and activity is noticeable (rxy=0.445), and between anxiety and well-being – moderate (rxy=0.445).

To compare the level of personal and reactive anxiety of the respondents of the experimental and control

groups, a psychodiagnostic study was conducted using the Spielberger-Hanin method, the results of which are presented in tab. 7.

While the indicators of personal anxiety of the studied patients of the experimental and control groups correspond to the lower limit of the moderate level with a tendency to low, in the absence of historical statistically significant differences (f-ratio=0.73099, p>0.05), the indicators of reactive anxiety of the respondents of both groups are high. The average level of reactive anxiety of respondents in the experimental group (72.6 \pm 1.8 points) is higher than in the control group (68.4 \pm 1.6), and this difference is statistically reliable and significant (f-ratio=27.93028, p<0.05). and personal anxiety, there is a moderate direct correlation (rxy=0.3467). In addition, a direct close high level of correlation between reactive anxiety and the development of psychosomatic disorders was revealed (rxy=0.8344).

The results of self-assessment of the mental states of the studied patients of the experimental and control groups according to the Eysenck method are presented in tab. 8.

Table
The results of measuring the level of anxiety of the respondents of the experimental (A) and control (B)
groups according to the Taylor method

Indicator	GPA		Student's t-test		ANOVA (f. matica)		
indicator	A	В	Student's t-test	Р	ANOVA (f-ratio)	Р	
Anxiety	37.4±12.6	31.6±9.8	0.62935	0.281639	1.1304	0.145528	

 ${\it Table~6}$ Characteristics of the correlation between the level of anxiety and indicators of well-being, activity and mood

Saala	rxy				
Scale	Well-being	Activity	Mood		
Anxiety	0.445	0.6422	0.7895		

Table 7

The results of the study of personal and reactive anxiety of the respondents of the experimental (A) and control (B) groups

Americator	G	PA	Chu damWa L Laat	p	
Anxiety	A	В	Student's t-test		
Personal	32.1±1.4	32.6±1.2	-0.46967	0.331526	
ANOVA (f-ratio)	0.73099		-	0.417429	
Reactive	72.6±1.8	68.4±1.6	2.88138	0.022475	
ANOVA (f-ratio)	27.93028		-	0.000742	
rxv	0.3467				

Table 8

Results of self-assessment of respondents of the experimental (A) and control (B) groups according to the Eysenck method

C1 -	GPA		Student's		ANOVA		
Scale	A	В	t-test	р	(f-ratio)	p	
Anxiety	18.4±1.2	16.6±1.8	1.44115	0.111491	6.89362	0.030386	
Frustration	18.2±1.6	16.1±1.5	1.65847	0.086281	9.13044	0.016518	
Aggressiveness	18.0±1.4	16.4±1.2	1.50294	0.10364	7.48538	0.025609	
Rigidity	17.6±1.8	15.9±1.3	1.33789	0.125965	5.83838	0.042094	
rxy		0.9496					
ANOVA (f-ratio)	11.3	11.38658 -			0.002733		

Despite the fact that the calculation of Student's t-test did not show the presence of significant differences between the indicators of self-esteem of the studied patients of the experimental and control groups (p>0.05), the results of the variance analysis indicate that these differences are statistically reliable and significant, as a whole (f-ratio=11.38658, p<0.05), as well as on each of the scales of the Eysenck method, in the presence of

a high direct positive correlation between the indicators obtained on these scales (rxy=0.9496).

Calculation of the χ^2 criterion made it possible to find out that the risk of developing psychosomatic disorders as a result of experiencing a war psychotraumatic situation is the same for both temporarily displaced persons and those who did not change their place of residence (table 9).

Table 9

An example of calculating the χ^2 criterion using a 4-field table

 Category 1
 Category 2
 Marginal Row Totals

 Group 1
 29 (26.67) [0.2]
 3 (5.33) [1.02]
 32

 Group 2
 26 (28.33) [0.19]
 8 (5.67) [0.96]
 34

 Marginal Column Totals
 55
 11
 66 (Grand Total)

The chi-square statistic is 2.3779. The p-value is 0.12306. Not significant at p < 0.05. The chi-square statistic with Yates correction is 1.468. The p-value is .225659. Not significant at p< 0.05.

DISCUSSION

War is an extreme situation that causes constant psycho-emotional stress, leading to a violation of psychosocial adaptation and a change in the physical and mental state [5]. Moreover, the power of psycho-traumatic influence is subjective, and reactions to psycho-trauma have individual differences, are polymorphic and are not limited to PTSD, manifested by mood disorders, anxiety, sleep disorders and various psychosomatic symptoms [9; 11; 17]. Psychosomatic consequences of psychotrauma differ in various clinical manifestations, from anxiety-depressive to somatic symptoms [10]. At the same time, depressive disorders can be masked by somatic symptoms, which constitutes a significant suicidal risk [18], determining the importance of studying the features of psychosomatic relationships in patients with the consequences of war psychotrauma.

The results of our research confirmed that the prolonged stressful extreme situation of a full-scale war negatively affects both the psychological and psychophysical health of the population of Ukraine. The formation of negative mental states is manifested not only by emotional-behavioral, but also by psychosomatic phenomena, which are statistically more likely to occur and are more pronounced in persons temporarily displaced from the zone of active military actions.

The situation of war is accompanied by uncertainty, conflict and unpredictability, causing long-lasting, persistent negative mental states of oppression, anxiety, fear, depression, anger and aggressiveness, which is associated with the presence of a threat and a low probability of satisfying the need for security during military operations [9; 11; 17]. The results of our study of the mental states of patients with psychological

consequences of war trauma confirmed that they have significantly increased levels of anxiety, frustration, aggression and rigidity, and for most indicators there is no significant difference between temporarily displaced persons and those who did not change their place of residence during the war. Long-term stress has a negative effect on general well-being, leads to a decrease in activity and mood, which contributes to the formation of a closed vicious circle of pathological psychosomatic process.

According to the sources of scientific literature, the level of situational (reactive) anxiety of a person depends on the level of his personal anxiety, high indicators of which increase the perception of the threat of the situation and cause the appearance of such negative mental states as tension, nervousness, restlessness [4; 20]. Anxious experiences are also accompanied by disturbances on the part of the autonomic nervous system, which are manifested by unpleasant somatic symptoms and psychophysiological phenomena [4; 20]. The results of our research state an increase in the level of situational anxiety to a high level, especially among temporarily displaced persons. Between the level of reactive anxiety, vegetative disorders, well-being, activity. There is also a high close direct correlation between patients' mood and psychosomatic symptoms.

CONCLUSIONS

It has been confirmed that the prolonged stressful extreme situation of a full-scale war negatively affects both the psychological and psychophysical health of the population of Ukraine. The formation of negative mental states is manifested not only by emotional-behavioral, but also by psychosomatic phenomena, which are statistically more likely to occur and are more pronounced in persons temporarily displaced from the zone of active hostilities.

It has been established that long-term stress due to experiencing a war situation has a negative effect on general well-being, leads to a decrease in activity and mood, which contributes to the formation of a closed vicious circle of a pathological psychosomatic process.

It is shown that psychosomatic abnormalities such as irritable bowel syndrome, psychogenic pain syndrome, and disorders of the sexual sphere occur most often as a result of war psychotrauma. Eating disorders, psychogenic pylorospasm, psychogenic urination disorders, psychogenic disorders of the sexual sphere, psychogenic pain syndrome are statistically more common in patients who were evacuated from the zone of active hostilities.

An increase in the level of situational anxiety to a high level was revealed, especially among temporarily displaced persons. There is a high close direct correlation between the level of reactive anxiety, autonomic disorders, well-being, activity, mood of patients and psychosomatic symptoms. It was found that there is no statistically significant difference in the risk of developing psychosomatic disorders as a result of war psychotrauma in temporarily displaced persons and in those who did not change their place of residence.

Further research is planned to be directed to the study of the impact of war psychotrauma on the physical and psychological health of certain vulnerable categories of the population (children, the elderly, persons with disabilities).

FUNDING AND CONFLICT OF INTEREST

There was no conflict of interest in the course of the work. No special funding was provided for the study.

REFERENCES

- 1. Auxéméry, Y. (2018). Post-traumatic psychiatric disorders: PTSD is not the only diagnosis. La Presse Médicale, 47(5), 423-430.
- Auxéméry, Y. (2021). A new approach to diagnose psychological trauma starting from a pilot study: Description of the post-traumatic psycholinguistic syndrome. European Journal of Trauma & Dissociation, 5(4), 100167.
- 3. Bolton, D., & Gillett, G. (2019). The biopsychosocial model of health and disease: New philosophical and scientific developments (p. 149). Springer Nature.
- Dimitrova, L., (2020). CONFLICTS—A KEY TRIGGER FOR THE EMERGENCE OF PSYCHOSOMATIC DISORDERS. KNOWLEDGE-International Journal, 43(4), 843-848.
- Druz, O., Chernenko, I., & Rodchenko, L. (2022). PSYCHOSOCIAL APPROACH TO THE OCCURRENCE OF POST-TRAUMATIC DISORDER IN MILITARY PERSONNEL. Moderní věda, № 5, pp.88-93.
- 6. Efremov, A. (2020). Some aspects of the use of Hypnotherapy and Dehypnosis for the remission of psychosomatic diseases. Journal of Advanced Pharmacy Education & Research Oct-Dec, 10(4), 159.
- El-Sayed, M. M., Saadia, M. A., Mostafa, H. R., & Kadry, M. H. (2022). THE PSYCHOSOMATIC DISORDERS AMONG THOSE EXPOSED TO INTERRELATED ENVIRONMENTAL STRESSES (AN ECOLOGICAL FIELD). Journal of Environmental Science, 51(2), 135-172.
- 8. Fava, G. A. (1992). The concept of psychosomatic disorder. Psychotherapy and Psychosomatics, 58(1), 1-12.
- 9. Gindt, M., Fernandez, A., Zeghari, R., et al. (2022). A 3-year retrospective study of 866 children and adolescent outpatients followed in the Nice Pediatric

- Psychotrauma Center created after the 2016 mass terror attack. Frontiers in psychiatry, 13, 1010957.
- 10. Ioana, T. A., Ilinca, V., & Miruna, D. A. (2019). THE PERSPECTIVE OF CUMULATIVE TRAUMA IN PSYCHOSOMATIC PATHOLOGY. International Journal of Recent Scientific Research, Vol. 10, Issue 07(1), pp. 33880-33883
- 11. Jongedijk, R. A., Boelen, P. A., Knipscheer, J. W., & Kleber, R. J. (2023). Unity or Anarchy? A Historical Search for the Psychological Consequences of Psychotrauma. Review of General Psychology, 10892680231153096.
- 12. Langer, P. C., Dymczyk, A., Brehm, A., & Ronel, J. (2023). The Clinical Concept of Trauma. In Trauma concepts in research and practice: An Overview (pp. 7-14). Wiesbaden: Springer Fachmedien Wiesbaden.
- 13. Levytska, O., Mulska, O., Ivaniuk, U., et al. (2020) Modelling the conditions affecting population migration activity in the eastern european region: The case of Ukraine. TEM Journal, 9(2), pp. 507-514.
- 14.Mehta, R., Giri, S., & Mallick, B. N. (2020). REM sleep loss—induced elevated noradrenaline could predispose an individual to psychosomatic disorders: a review focused on proposal for prediction, prevention, and personalized treatment. EPMA Journal, 11, 529-549.
- 15. Mosiichuk, V., Tkach, B., & Lunov, V. (2022). Ethno-Cultural Features of Mental Health and Psychosomatic Risks of Ukrainians in the Conditions of a Full-scale Russian Invasion. Available at SSRN 4269203.
- 16. Nisar, H., & Srivastava, R. (2018). Fundamental concept of psychosomatic disorders: a review. International Journal of contemporary Medicine surgery and radiology, 3(1), 12-18.
- 17.Oe, M., Kobayashi, Y., Ishida, T., et al. (2020). Screening for psychotrauma related symptoms:

- Japanese translation and pilot testing of the Global Psychotrauma Screen. European journal of psychotraumatology, 11(1), 1810893.
- 18. Romasenko, L. V., Makhov, V. M., & Chichkova, N. V. (2019). Functional (psychosomatic) disorders in general medical practice. Neurology, neuropsychiatry, psychosomatics, 11(3), 69-73.
- 19. Rybinska, Y., Antonivska, M., Serbova, O., et al. (2023). War Psychological Skills for Coping with Traumatic Events: Helping Ukraine. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 14(1), 88-104.
- 20. Sayyar Khesmakhi, S., Goli, F., Omidi, A., et al. (2019). Effectiveness of acceptance and commitment therapy on psychosomatic symptoms and mindfulness in patients with psychosomatic disorders. Practice in Clinical Psychology, 7(2), 79-86.
- 21. Settineri, S., Frisone, F., Alibrandi, A., & Merlo, E. M. (2019). Emotional suppression and oneiric expression in psychosomatic disorders: early manifestations in emerging adulthood and young patients. Frontiers in psychology, 10, 1897.
- 22. Wolman, B. B. (2012). Psychosomatic disorders. Springer Science & Business Media.

Резюме

ПСИХОСОМАТИЧНІ ПРОЯВИ ВІЙСЬКОВОЇ ПСИХОТРАВМИ Ніна В. Коляденко^{1,2}, Надія О. Бачуріна¹, Христина С. Живаго², Микола М. Шопша¹, Олена Л. Шопша¹

- 1 Міжрегіональна Академія управління персоналом, м. Київ, Україна
- 2 Зигмунд Фрейд Університет Україна, м. Київ, Україна

Вступ. Війна – це надпотужна екстремальна подія, що спричиняє зниження здатності до адаптації. Необхідність більш чіткого розуміння специфіки воєнної психотравми та її клінічних наслідків для всіх складових здоров'я людини визначає *актуальність* теми даного дослідження.

Мета роботи – вивчити особливості психосоматичних співвідношень у осіб із наслідками воєнної психотравми.

Матеріали та методи. Експериментальну досліджувану групу склали 32 пацієнти з числа тимчасово переміщених осіб, контрольну групу – 34 пацієнти, які не змінювали місця проживання протягом усього періоду повномасштабної війни. Діагностика була спрямована на виявлення невротичних, стресових та соматоформних розладів, відповідно до рубрики (F40-F48) МКХ-10. Оцінку соматичного стану проводили на підставі аналізу анамнестичних даних, клінічного огляду хворого та показників лабораторних досліджень. Для оцінки психічних станів пацієнтів використовували психодіагностичні методики (Клінічний опитувальник для виявлення та оцінки невротичних станів; Методика експрес-діагностики неврозів К. Хека та Х. Гесса; Опитувальник САН (Самопочуття, Активність, Настрій); Методика діагностики рівня тривожності Тейлора; Самооцінка психічних станів за Айзенком; Шкала оцінки реактивної та особистісної тривожності Ч. Спіблегера в модифікації Ю. Ханіна). Статистичну обробку результатів дослідження проводили в програмі Microsoft Excel та за допомогою онлайн-калькулятора Social Science Statistics.

Результати. В результаті аналізу анамнестичних даних, клінічного обстеження та аналізу лабораторних досліджень психосоматичні розлади виявлені у пацієнтів обох досліджуваних груп: у 29 (90,63 %) пацієнтів експериментальної групи та у 26 (74,47 %) пацієнтів контрольної групи.

Висновки. Підтверджено, що тривала стресова екстремальна ситуація повномасштабної війни спричиняє виникнення негативних психічних станів, які супроводжуються психосоматичними проявами із формуванням замкненого порочного кола патологічного психосоматичного процесу. Встановлено високий тісний прямий кореляційний зв'язок між рівнем реактивної тривожності, вегетативними розладами, самопочуттям, активністю, настроєм пацієнтів і психосоматичною симптоматикою. Виявлено відсутність статистично значущої різниці у ризику розвитку психосоматичних розладів внаслідок воєнної психотравми у тимчасово переміщених осіб та тих, хто не змінював місце проживання.

Ключові слова: психосоматичні розлади, воєнна психотравма, тимчасово переміщені особи, негативні психічні стани, вегетативні розлади, тривожність