CONTEMPORARY TYPOLOGY OF STRESS-ASSOCIATED DISORDERS IN VOLUNTEERS RESIDING IN THE FRONTLINE REGIONS

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https://doi.org/10.35339/ic.10.1.zel

ABSTRACT

Background. A volunteer is a person who voluntarily joins socially oriented non-profit activities, carried out by providing free assistance in various areas of the population's life. Volunteering is usually associated with the specifics of contact with human losses and suffering, and in the event of an armed conflict, it can be accompanied by additional psychological, physical and emotional stress. During armed conflicts, volunteers are faced with a significant change in the rhythm of life for a large number of the country's population, and in some cases, a risk to the life of the volunteer himself. In general, volunteering is characterized as highly stressful.

Aim of the study wis to analyze of the clinical picture of stress-related disorders in volunteers living in the front-line regions.

Materials & Methods. In the course of work, a comprehensive clinical-psychopathological and pathopsychological examination of 76 patients suffering from stress-related disorders and living in the front-line regions was conducted.

Results & Conclusions. The study involved the patients of both genders (40 women and 36 men), aged 25–65. The clinical structure of stress-related disorders in the examined patients was represented by post-traumatic stress disorder; adjustment disorders, anxiety disorders. The nosological structure of anxiety disorders is represented by episodic paroxysmal anxiety and generalized anxiety disorder. According to the results of the psychodiagnostic study based on the traumatic stress expressiveness scale, 63.1% of the examined men and 66.8% of the women have a partial manifestation, 36.9% and 33.2% of the examined, respectively, a full manifestation of stress disorder. In 55.6% of the examined men and 57.1% of the women, the presence of an extremely high level was noted, in 33.4% and 41.1% of the examined, respectively, an increased level of social frustration, which is due to the specificity of the psychotraumatic situation. Based on the data obtained during the research, a comprehensive personalized system was developed for the correction of stress-related disorders in the examined volunteers.

Conclusions. It can be concluded that the clinical structure of stress-related disorders in the examined volunteers is represented by post-traumatic stress disorder, adjustment disorders, anxiety disorders.

Keywords: anxiety, depression, stress disorders, stress.

INTRODUCTION

As a result of the full-scale invasion, the population of Ukraine is in a multifactorial stressful state, the extreme forms of which are stress-related disorders. As on August 2022, the Ministry of Health of Ukraine provided information that

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Zelenska Kateryna – M.D., Ph.D., Associate Professor of the Department of Psychiatry, Narcology, Medical Psychology and Social Work, Kharkiv National Medical University. Address: Ukraine, 61022, Kharkiv, Nauki Ave., 4. E-mail: zelenskaya135@gmail.com more than 15 million people in Ukraine will need psychiatric or psychological help. Unfortunately, at the moment, according to the number of appeals from Ukrainians, this indicator may increase. For example, a study of mental health in Sumatra showed an increase in psychiatric illnesses after the tsunami compared to the pre-tsunami situation. However, the provision of aid was continuous and all those who needed it could receive it, especially since with a certain frequency these natural disasters occur in this region [1].

One of the most important social and medical issues of our society is the study of specificity, typology, and clinical structure of post-stress disorders in persons who have survived combat operations, also development of a pathogenetically based and personalized program for its correction and rehabilitation of patients [2–4].

Today, the volunteer movement in Ukraine is talked about with admiration in many countries of the world, calling this phenomenon unique. After all, in an extremely difficult period, it is this movement that unites society, is included in the processes of providing for the army and immigrants, creates an effective structure of groups of people ready to take on the solution of the most urgent and painful problems of the state [5–8].

A volunteer is a person who voluntarily, based on his own convictions, joins socially oriented non-profit activities, which is carried out by providing free assistance. Volunteering is associated with the specifics of contact with human suffering and loss, in the case of an armed conflict, it is accompanied by additional physical, psychological and emotional stress, a significant change in the rhythm of life, and in some cases – a risk to life. All this generally characterizes volunteer activity as stressful, which is a risk factor for the development of stress-related disorders [8–10].

Undoubtedly, one of the most significant social and medical issues of today is the study of specifics of clinical structure, development of the latest directions for diagnosis, therapy of stress-related disorders, and rehabilitation of persons affected by a full-scale invasion [11; 12].

The foregoing determined relevance of our study. The **aim of the study** was to analyze of the clinical picture of stress-related disorders in volunteers living in the front-line regions.

Materials & Methods

In the course of our work, in compliance with the principles of bioethics and deontology all persons who participated in the study signed an informed consent. A comprehensive clinical-psychopathological and pathopsychological examination was conducted in 76 subjects with stress-related disorders of both sexes (40 women and 36 men), aged 25–65 years, who were engaged in volunteer activities, living in the front-line regions. Mathematical and statistical processing of the study results was performed using specialized software packages (Statistica 6.0, MS Excel, USA).

Results & Discussion

In relation to the data obtained during the work, the clinical structure of stress-related disorders in the examined patients was presented: post-traumatic stress disorder -21.1% of men and 19.6% of women; adjustment disorders -43.2% and 42.8% of the examined, respectively, anxiety disorders -33.7% of men and 35.6% of women.

With post-traumatic stress disorder, the following were observed: a depressed background of mood, an affect of longing (51.1% of men and 59.8% of women), obsessive memories of lifethreatening situations (39.3% and 28.6% of the examined, respectively), sleep disorders in the form of nightmares (41.8% of men and 44.8% of women), flashback effects (44.9% and 40.9%, respectively), intemperance of affect, dysphoria (43.7% of men and 38.7% of women), a feeling of internal tension with the inability to relax (66.5% of men and 70.1% of women), efforts to avoid memories and conversations related to combat mental trauma (41.1% and 40.9%, respectively), a feeling of alienation and distance from other people (68.8% of men and 56.9% of women). At the same time, according to the Clinical administered Posttraumatic Stress Disorder (PTSD) Scale [13], the condition of the patients corresponded to the condition of clinically expressed manifestations of PTSD.

The clinical structure of PTSD was represented by anxious (33.8% of men and 51.4% of women), dysphoric (46.3% and 19.5%, respectively) and somatoform (19.9% of men and 9.1% of women) variants of psychopathologic symptoms.

For adjustment disorders, the following were typical: depressive symptoms (48.6% of men and 66.4% of women), groundless anxiety, feelings of internal tension (71.1% and 75.2%, respectively), various fears and apprehensions (33.5 % and 36.5%, respectively), anhedonia (39.8% of men and 40.3% of women), apathy (36.6% and 33.9%, respectively), sleep disorders (44.1% and 46.3% in accordance).

The nosological structure of adjustment disorders was mainly represented by a prolonged anxious depressive reaction (96.8% of men and 97.1% of women).

Anxiety disorders were manifested by unmotivated, persistent, constant anxiety (43.2% of men and 51.1% of women) or unpredictable attacks of severe anxiety (47.8% and 49.9%, respectively), unmotivated bad premonitions (51.6% of men and 55.3% of women), unjustified anxiety (69.2% and 70.3%, respectively), insomnia (43.2% of men and 44.8% of women), psychogenic suffocation (69.2% and 73.1%, respectively), tachycardia (81.1% of men and 85.1% of women).

The nosological structure of anxiety disorders is represented by episodic paroxysmal anxiety

(56.5% of men and 49.8% of women) and generalized anxiety disorder (43.5% and 50.0% of the examined, respectively).

As evidenced by the results of a psychodiagnostic study based on the Expressiveness Scale of Traumatic Stress (by Kotenev O.I., 1996) [14], 63.1% of the examined men and 66.8% of the women have a partial manifestation, 36.9% and 33.2% of the examined, respectively, have a full manifestation of stress disorder.

In 55.6% of the examined men and 57.1% of the women, the presence of an extremely high level of social frustration was noted, and in 33.4% and 41.1% of the examined, was noticed an increased level of social frustration, which is due to the specificity of the psychotraumatic situation. Social frustration is most often manifested by the following signs: disorganization of consciousness and activity in a state of hopelessness, loss of future prospects. All of this is a factor that significantly affects the social adaptation of patients with stress-related disorders.

According to Kukihara H. et al., Matsumoto K. et al. [15; 16], after the earthquake and tsunami in Japan with the subsequent radiation threat, the number of PTSD and depression of various degrees increased. In our opinion, a disaster of this scale can be compared to the impact of war on mental health. But in our study, there was not only an increase in PTSD, but also an increase in adjustment disorders and anxiety disorders. Persons who permanently live in the Kharkiv region participated in our study. Since most of the region's patients seek help from state institutions, it can be said that the obtained results demonstrate the real state of the problem. Not many of those who sought help with this problem agreed to participate in our study.

Based on the data obtained during the research, a comprehensive personalized system was developed for the correction of stress-related disorders in the examined volunteers.

Conclusions

It can be concluded that the clinical structure of stress-related disorders in the examined volunteers living in the front-line regions is represented by: post-traumatic stress disorder, adjustment disorders, anxiety disorders.

DECLARATIONS

Disclosure statement

The authors have no potential conflicts of interest to disclosure, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included.

Data Transparency

The data can be requested from the authors. **Statement of Ethics**

The authors have no ethical conflicts to disclosure.

Funding Sources

There are no external sources of funding. **Consent for publication** All authors give their consent to publication.

> Received: 26 Feb 2023 Accepted: 23 Jun 2023

References

1. Frankenberg E, Friedman J, Gillespie T, Ingwersen N, Pynoos R, Rifai IU, at al. Mental health in Sumatra after the tsunami. Am J Public Health. 2008;98(9):1671-7. DOI: 10.2105/AJPH.2007.120915. PMID: 18633091.

2. Kilpatrick DG, Resnick HS, Milanak ME, Miller MW. National estimates of exposure to traumatic events and PTSD prevalence using DSM-4 and DSM-5 criteria. Journal of Traumatic Stress. 2013;26(5):537-47. DOI: 10.1002/jts.21848. PMID: 24151000.

3. Khaustova OO. Anxiety-depressive disorders in the conditions of war distress in Ukraine. Health of Ukraine 2022;4:22-4. Available at: http://surl.li/lpfjo [in Ukrainian].

4. Markova MV. Poststresova psihologichna dezadaptaciya: zakonomirnosti rozvitku i specifika klinichnih proyaviv dezadaptivnih staniv u okremih specifichnih grup naselennya, vrazlivih do diyi makrosocialnogo stresu [Post-stress psy-chological maladaptation: patterns of development and specificity of clinical manifestations of maladaptive states in certain specific population groups vulnerable to macrosocial stress]. Kharkiv: Printing House "Madrid"; 2019. 492 p. [In Ukrainian].

5. Chaban OS, Khaustova OO. Medical and psychological consequences of war distress in Ukraine: what do we expect and what should be taken into account when providing medical aid? Ukrainian medical journal. 2022;4(150):11p. DOI: 10.32471/umj.1680-3051.150.232297. [In Ukrainian].

6. Law of Ukraine No.2849-IX on 13 Dec 2011 "On Volunteering", valid on 20 Jun 2023. Verkhovna Rada (Parliament) of Ukraine. Legislation of Ukraine. Available at: https://zakon.rada.gov.ua/laws/show/3236-17#Text [In Ukrainian].

7. Markova MV, Glagolych SYu. State of the psycho-emotional sphere of volunteers whose activity is connected with assistance to the military in the area of armed actions. Psychiatry, Neurology and Medical Psychology. 2018;1(9):93-100. Available at: http://surl.li/lpgga [In Ukrainian].

8. Korniyevskij OA, Goryelov DM. Ukrayinskij volonterskij ruh u konteksti svitovogo dosvidu [Ukrainian volunteer movement in the context of world experience]. Strategichni prioriteti [Strategic priorities]. 2015;1:95-100. Available at: http://nbuv.gov.ua/UJRN/spa_2015_1_16 [in Ukrainian].

9. Lazos GP. Osoblivosti emocijnih staniv volonteriv – psihologiv/psihoterapevtiv u stosunkah z postrazhdalimi [Peculiarities of emotional states of volunteer psychologists/psychotherapists in relationships with victims]. Osoblivosti stosunkiv "psihoterapevt – kliyent" u suchasnomu sociokulturnomu seredovishi: monografiya. [Peculiarities of the "psychotherapist-client" relationship in the modern socio-cultural environment: monograph] Ed. Kisarchuk ZG. K. Kyiv: Publishing House "Slovo"; 2017. 225 p. [In Ukrainian].

10. Glagolych SY. Clinical and social features of maladaptive states among volunteers, whose work is related to the support of military men in ATO zone. Psychiatry, neurology and medical psychology. 2016;3(2(6)):69-76. Available at: http://nbuv.gov.ua/UJRN/psyneur_2016_3_2_12 [in Ukrainian].

11. Semyhina T, Pavlenko I, Ovsiannikova Y, Teslenko O. Protection of mental health in conditions of war. Translation from English: Combat And Operational Behavioral Health Office of The Surgeon General United States Army Falls Church, Virginia Borden Institute Fort Detrick, Maryland; 2011. In two volumes, volume 1. Kyiv: "Nash format"; 2017. 568 p. [in Ukrainian].

12. Voloshin PV, Maruta NO. Socialno-stresovi rozladi (klinika, diagnostika, profilaktika) [Social stress disorders (clinic, diagnosis, prevention)]. Kharkiv: IE "Strokov DV"; 2016. 335 p. Available at: http://surl.li/lpgni [In Ukrainian].

13. Blake DD, Weathers FW, Nagy LM, Kaloupek DG, Gusman FD, Charney DS, Keane TM. The Development of a Clinician-Administered PTSD Scale. Journal of Traumatic Stress. 1995;8(1):75-90. DOI: 10.1007/bf02105408. PMID: 7712061.

14. Ahaiev NA, Kokun OM, Pishko IO, Lozinska NS, Ostapchuk VV, Tkachenko VV. Collection of methods for diagnosing negative mental states of military personnel: Methodical manual. Kyiv.: NDTs HP ZSU; 2016. 234 p. [In Ukrainian].

15. Kukihara H, Yamawaki N, Uchiyama K, Arai S, Horikawa E. Trauma, depression, and resilience of earthquake/tsunami/nuclear disaster survivors of Hirono, Fukushima, Japan. Psychiatry Clin Neurosci. 2014;68(7):524-33. DOI: 10.1111/pcn.12159. PMID: 24444298.

16. Matsumoto K, Sakuma A, Ueda I, Nagao A, Takahashi Y. Psychological trauma after the Great East Japan Earthquake. Psychiatry Clin Neurosci. 2016;70(8):318-31. DOI: 10.1111/pcn.12403. PMID: 27192947.

Cite in Vancouver style as: Zelenska K.O. Contemporary typology of stress-associated disorders in volunteers residing in the frontline regions. Inter Collegas. 2023;10(1):48-51. https://doi.org/10.35339/ic.10.1.zel

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