

STRESS ADAPTATION OF TRAINING PARTICIPANTS IN THE SPECIALTY OF "ANESTHESIOLOGY" UNDER THE CONDITIONS OF THE PANDEMIC AND MARTIAL LAW

Yekhalov Vasily

candidate of medical sciences, associate professor
Research Institute of Medical and
Biological Problems, Dnipro State Medical University, Dnipro, Ukraine
ORCID:0000-0001-5373-3820

Kravets Olga

doctor of medical sciences, professor
Research Institute of Medical and
Biological Problems,
Dnipro State Medical University, Dnipro, Ukraine
ORCID: 0000-0003-1340-3290

Gorbuntsov Viacheslav

doctor of medical sciences, professor
Research Institute of Medical and Biological Problems,
Dnipro State Medical University, Dnipro, Ukraine
ORCID 0000-0001-7752-0993

The catastrophic events that shook Ukraine in recent years had a significant damaging effect on the psychological stability of the population, including medical workers. Negative and sometimes destructive influences are caused by depletion of the body's resources, reduced work capacity, and the emergence of interpersonal conflicts, violations of discipline, alcohol abuse, etc. Long-term discharge of one's duties in stressful circumstances leads to maladaptation and a decrease in the body's resistance [1].

The data of the conducted scientific and theoretical analysis of the state of mental health of employees of medical institutions during the COVID-19 pandemic indicate a significant prevalence of anxiety-depressive and sleep disorders in them, which is a risk factor for an increase in the level of psychosomatic diseases and post-traumatic stress disorder [2].

Military action is one of the factors that exerts the greatest negative social impact and exemplifies the widespread and pervasive violence that inevitably affects public relations, the economy, the health care system, and the social stability of the country [3]. Medical personnel in the conditions of war are under the influence not only of a significant risk of stress states, mental maladaptation, neuropsychiatric disorders, threats to health and life.

The specialty "Anesthesiology" is one of the professions representatives of which are most often faced with stressful situations in day-to-day activity, and most often – in wartime. Therefore, stress resistance is a matter of selection and adaptation of already selected employees [4].

For psychological protection in extreme circumstances, an individual chooses a coping strategy (strategies), that is, a system of purposeful behavior for conscious take-over of the situation to reduce the destructive impact of stress [5].

The study of the stress resistance of anesthesiologists was conducted in the period March 2022 – March 2023 among the participants of trainings in the specialty "Anesthesiology" of the postgraduate advanced training courses held at the Research Institute of Medical and Biological Problems of the Dnipro State Medical University.

For the dynamic study of the stress resistance of training participants in the specialty "Anesthesiology", we used the modified Strategy for Overcoming Stressful Situations (SACS) proposed by S. Hofboll [6]. Based on the results of an anonymous survey of 164 anesthesiologists (training participants), we investigated the dynamics of coping strategies before and after the full-scale enemy invasion of Ukraine.

The strategy of getting in social contacts was initially characterized by high intensity (20.95 ± 0.83), and in wartime this indicator increased by another 7.5 %; the same trend has been observed in the strategy of seeking social support, which from the average ($16,32 \pm 0.91$) increased by 19.65 % to a high level.

The strategy of cautious actions had a high activity (20.14 ± 0.9) and practically did not change in the second stage of the study, and impulsive actions from the average level increased by 10.11%.

Avoidance and passive actions were at a low level of involvement (12.51 ± 0.65 %), with almost no dynamics.

The activity of manipulative actions was at an average level of activity (15.52 ± 0.34), as well as antisocial manifestations (14.12 ± 0.45), practically without dynamics.

In the conditions of deployed military operations, anesthesiologists (participants in trainings) significantly increased the activity of an aggressive coping strategy – from a medium level (14.13 ± 0.65 %) to a high level (20.75 ± 0.34), which can be explained by a significant increase in working load, the prevalence of traumatic conditions in the total mass of the patients, increased responsibility, etc. This indicator was 7.8 % higher than the result of intern doctors of the same specialty [7]. By the way, the aggressiveness of ordinary citizens increased many times during full-scale aggression, but the activity of this coping strategy among medical workers of other specialties was lower by 9.7 % [8].

The general index of constructiveness of anesthesiologists in 2019-2021 was at a high level (1.41), but with the beginning of a full-scale war, despite some increase in the activity of assertive coping strategies, this characteristic significantly decreased due to the increase in aggression (1.31).

Thus, thanks to professional motivation [9] due to exposure to extreme situations, doctors in the specialty "Anesthesiology" demonstrated the ability to maintain their general index of constructiveness in the difficult conditions of wartime,

which most clearly emphasizes the stress resistance of doctors in this specialty. In today's dangerous conditions, the need of anesthesiologists to communicate and cooperate is quite natural, and the growth of aggression is natural and is characterized by a much lower level than in other segments of the population.

References:

1. Pereligina, L.A., Sitnik, M.U. (2013) Profesiyniy stres podgedgnikh i medichnikh pratsivnikov v ekstremalnikh umovakh dijalnosti [Professional stress of firefighters and medical workers in extreme operating conditions]. *Problemy ekstremalnoi ta krizovoi psikhologii*, 13. 206 – 215.
2. Jurjeva, L.M. (2020) Okhorona psikhichnogo zdorovja medichnikh praysivnikov v umovakh psndemiji COVID-19 [Protection of the mental health of medical workers in the conditions of a pandemic COVID-19]. *Medichni perspetivy*. 25. 4. 12-21.
3. Likholetov, Y.O. (2021) Quality of life of civilian persons with adaptation disorders who have experienced psycho-social stress under the conditions of military conflict. *Journal of Education, Health and Sport*, 11(2). 156-170
4. Kogut, O.O. (2020) Stresostiykist osobistosti v ekstremalnikh umovakh pratsi [Stress resistance of the individual in extreme working conditions]. *Psychological Journal*. 6. 3. 65-73.
5. Chekanska, O.A., Danchuk, U.P. (2019) Osoblivosty koping-povedinki osobistosti u stresovikh situatsiyakh [Peculiarities of individual coping behavior in stressful situations]. *Teorija i praktika suchasnoji psikhologii*. 1. 4. 63-67.
6. Hobfoll, S. E. (2002) Social and psychological resources and adaptation. *Review of General Psychology*. 6(4). 307-324.
7. Yekhalov, V. V., Gorbuntsov, V.V. (2021) Psychological features of a modern intern dynamic observation. *Bioenergetics in Medicine and Biology*. 1(6). 1-20.
8. Kravets, O.V., Stanin, D.M. & Yekhalov, V.V. (2022) Stres-adaptatsija medochnikh pratsivnikov za umov vojnogo chasu [Stress-adaptation of medical workers under wartime conditions]. *The 9 th International scientific and practical conference "Science, innovations and education: problems and prospects" (April 6-8, 2022)*. CPN Publishing Group, Tokyo, Japan. 74-80.
9. Yekhalov, V.V., Kravets, O.V., Barannik, S.I. & Pilipenko, O.V. (2022) Motivatsija uspikhu abo navdachy u likariv-interniv za fakhom "anesteziologija ta intensivna terapija [Motivation for success or failure of intern doctors in the specialty "Anesthesiology and intensive care"]. *Novini meditsini ta farmatsiji u sviti*. 1 (778). 16-17.