ORIGINAL ARTICLE

Dynamics of stress symptoms manifestation in law enforcement officers in the process of performing their service and combat missions during the war

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ABSTRACT

Aim: To study the dynamics of stress symptoms manifestation in police officers of different ages before and after performing their service and combat missions of varying duration.

Materials and Methods: The research, conducted in 2024-2025, involved 71 Master's-level student officers (officers) (male, up to 25 years old) from Odesa State University of Internal Affairs (OSUIA) and 103 serving officers of various ages (male, up to 30 and older) who are on staff at OSUIA in multiple positions. Research methods: theoretical analysis of literature sources, psycho-diagnostic methods, statistical methods.

Results: The most pronounced manifestation of all stress symptoms was found in serving officers, regardless of age, after returning from their rotations lasting 3-4 months. After performing service and combat missions, the stress level (14.8-15.4 points) among serving officers of all age groups was significantly ($p \leq 0.001$) higher than among student officers (10.1 points). No significant differences were found between the stress levels of serving officers across different age groups ($p > 0.05$), indicating that the level of stress does not depend on the age of law enforcement officers, but rather on the duration of their exposure to stressful conditions.

Conclusions: The research indicates the need to develop stress resilience in law enforcement officers to ensure the effectiveness of their service and combat activities in conditions of martial law, as well as to develop skills in the use of available means for stress prevention in the process of prolonged service and combat activities to restore mental health indicators.

KEY WORDS: stress, stress symptoms, mental health, police officers, law enforcement officers, war

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INTRODUCTION

The service activities of law enforcement officers often occur in extreme conditions, particularly during the current legal regime of martial law in the country [1, 2]. The professional environment of operational and service activities requires exceptional mental resilience from police officers. Police officers are constantly under psychological stress, undertake risky actions while performing their professional duties, and are subjected to high levels of emotional and physiological tension. Law enforcement officers frequently encounter individuals who engage in negative actions, either directly or indirectly [3, 4]. Police officers interact not with the best representatives of society, who are often characterized by heightened emotionality, rudeness, aggressiveness, and inadequacy. Negative emotions distort the personality traits of police officers and, in the most severe cases, cause psychosomatic illnesses [5, 6].

Scientists [7-10] argue that constant professional stress can lead to deformation of professional personality, increase the proneness to conflict within the team, reduce work efficiency, and negatively impact the health of staff and their loved ones. The lack of adequate psychological training and adaptive stress management skills among police officers can often lead to negative consequences for their mental and physical health.

AIM

The aim is to study the dynamics of stress symptoms manifestation in police officers of different ages before

and after performing their service and combat missions of varying duration.

MATERIALS AND METHODS

PARTICIPANTS

The research involved 71 Master's-level student officers (officers) (male, up to 25) from Odesa State University of Internal Affairs (Ukraine, Odesa, OSUIA) majoring in "Law" specialty and 103 serving officers under the age of 30 (n = 35), under the age of 40 (n = 41), and over the age of 40 (n = 27), who are on staff at OSUIA in various positions. The student officers were assessed for stress symptoms before and after their internship in practical (combat) police units (duration: 4-6 weeks), while the serving officers were assessed before and after their utilization tours (rotation) to the combat zone (duration: 3-4 months). The research was conducted in 2024-2025, and all respondents were male. The criteria for inclusion in the experiment were as follows: for student officers, age up to 25 years, male gender, and participation in an internship in practical police units lasting at least 4 weeks; for serving officers, male gender, and participation in a rotation to a combat zone lasting at least 3 months. Medical condition, marital status, and positions held (for serving officers) were not inclusion criteria and were not taken into account. The exclusion criterion was the participant's voluntary desire to withdraw from the research at any time.

RESEARCH METHODS

theoretical analysis and generalization of literature sources, psycho-diagnostic methods (test of Yu. V. Shcherbatykh), statistical methods. The method of theoretical analysis and generalization of literary sources was used to conduct an analytical review of scientific sources on the outlined range of issues (21 sources (2010-2025) from MedLine, Scopus, Web of Science databases were analyzed).

To study the peculiarities of stress symptoms manifestation in law enforcement officers during the performance of their service and combat tasks under martial law, we used a test of Yu. V. Shcherbatykh, which allows the study of various signs of stress – intellectual, behavioral, emotional and physiological according to the answers to the questionnaire consisting of four groups of questions of 12 symptoms each [11]. For the presence of one of the intellectual and behavioral symptoms, the respondents rated it at 1 point; emotional – 1.5 points, and physiological – 2 points. The total maximum score for the entire list can theoretically reach 66. A score of 0 to 5 points is considered good, meaning there is no significant stress at this point in life. A score of 6 to 12 points means that a person is experiencing moderate stress, which can be compensated for by rational use of time, periodic rest, and finding the best way out of the situation. A score of 13 to 24 points indicates a fairly pronounced tension of the emotional and physiological systems of the body, which arose in response to severe stress that could not be compensated for. In this case, unique methods of coping with stress are required. A score of 25 to 40 points indicates a state of severe stress, which requires the help of a psychologist or psychotherapist to overcome it successfully. This stress level suggests that the body is already close to the limit of its ability to resist stress. A score of more than 40 points indicates that the body is moving to the third, most dangerous stage of stress – the depletion of adaptive energy reserves.

STATISTICAL METHODS

The methods of mathematical statistics were used to process the data obtained. The compliance of the sample data distribution with the Gauss' law was assessed using the Shapiro-Wilk W test. The reliability of the difference between the indicators was determined using the Student's t-test. The reliability of the difference was set at $p<0.05$. All statistical analyses were performed using SPSS software, version 10.0, adapted for medical and biological research.

ETHICS

The procedure for organizing the study and the topic of the article were previously agreed with the Committee on compliance with Academic Integrity and Ethics of the OSUIA. Also, this study followed the regulations of the World Medical Association Declaration of Helsinki. Informed consent was received from all participants who took part in this study.

FRAMEWORK

This scientific article was carried out according to the plan of the research work of the National Academy of Internal Affairs for 2020-2026 "Psychological, pedagogical and sociological support of law enforcement officers» (state registration number 0113U008196).

RESULTS

Analysis of the dynamics of intellectual stress symptoms in student officers during their 4-6 week internship in

Table 1. Dynamics of intellectual stress symptoms in student officers (n = 71) and serving officers (n = 103) during their service and combat activities in a state of martial law (in student officers – before and after their internship, in serving officers – before and after their rotation), %

Intellectual symptoms	Student officers (n = 71)		Serving officers under the age of 30 (n = 35)		Serving officers under the age of 40 (n = 41)		Serving officers over the age of 40 (n = 27)	
	Before	After	Before	After	Before	After	Before	After
Prevalence of negative thoughts	23.9	45.1	17.1	45.7	14.6	46.3	14.8	44.4
Difficulty concentrating	11.3	21.1	8.6	25.7	9.8	24.4	11.1	25.9
Deterioration of memory performance	12.6	19.7	5.7	17.1	7.3	19.5	7.4	18.5
Constant, fruitless revolving of thoughts around the problem	25.3	45.1	8.6	54.3	9.8	53.6	7.4	51.8
Increased distraction	14.1	35.2	11.4	48.6	12.2	48.8	11.1	48.1
Difficulties in decision-making	19.7	33.8	5.7	51.4	4.9	46.3	3.7	44.4
Bad dreams, nightmares	18.3	32.4	14.3	57.1	12.2	56.1	18.5	59.3
Frequent errors in calculations	7.1	18.3	2.9	25.7	4.9	24.3	3.7	25.9
Passivity, desire to shift responsibility	11.3	39.4	5.7	28.6	7.3	29.3	7.4	33.3
Violation of logic, confused thinking	5.6	8.5	2.9	14.3	4.9	9.8	3.7	11.1
Impulsiveness, unreasonable decisions	19.7	32.4	11.4	42.9	12.2	46.3	11.1	44.4
Narrowing the "field of view", possible options for action	7.1	12.7	5.7	31.4	4.9	29.3	3.7	29.6

Source: compiled by the authors of this study

practical police units and in serving officers during their 3-4 month utilization tours to perform special and combat missions in a combat zone (rotations lasting 3-4 months) indicates a significant deterioration in the level of intellectual stress symptoms manifestation, especially in serving officers (Table 1). It was found that the most pronounced intellectual symptoms of stress in student officers and serving officers are: bad dreams – in student officers, the level of manifestation of this symptom worsened from 18.3 % to 32.4 %, in serving officers – from 14.3-18.5 % to 57.1-59.3 % depending on age; constant, fruitless rumination on a problem – among student officers from 25.3 % to 45.1 %, among serving officers – from 7.4-9.8 % to 51.8-54.3 %; increased distraction – among student officers from 14.1 % to 35.2 %, among serving officers – from 11.1-12.2 % to 48.1-48.8 %; difficulties in decision-making – among student officers from 19.7 % to 33.8 %, among serving officers – from 3.7-5.7 % to 44.4-51.4 %, and others.

Symptoms that characterize cognitive functions (memory, concentration, logical thinking) also tend to worsen during service and combat activities under martial law. Still, the magnitude of changes in their levels of manifestation is somewhat smaller compared to the intellectual symptoms listed above. It should be emphasized that no significant differences in the levels of intellectual stress symptoms were found among serving officers of different age groups, which indicates an equally negative impact of stress on law enforcement officers of various ages; the leading indicator of the adverse effect of stress factors is the duration of exposure to stressful conditions. In addition, based on the conclusions of many scientists, it should be added that the degree of influence of stress factors on the body of law enforcement officers is also determined by the strength of the factors, the level of stress resilience of the individual, their individual psychological characteristics, as well as their abilities and skills to apply available means and methods of coping with stress in the conditions of a specific activity.

The assessment of behavioral symptoms of stress in student officers and serving officers shows that, like intellectual symptoms, they tend to worsen in the course of their service and combat activities (Table 2). At the same time, all symptoms are more pronounced in serving officers than in student officers, which is due to the duration of their exposure to constant stress factors and the complexity of the missions they perform. Among the behavioral symptoms of stress in student officers and serving officers, the most pronounced are: sleep disturbances, insomnia – in student officers, the level of manifestation of this symptom worsened from 4.2 % to 9.9 %, in serving officers – from 11.4-14.8 % to 48.6-51.9 %, depending on age; loss of appetite or overeating – among student officers from 5.6 % to 12.7 %, among serving officers – from 3.7-7.3 % to 45.7-48.1 %; low productivity – among student officers from 7.0 % to 35.2 %, among serving officers – from 8.6-11.1 % to 34.3-

Table 2. Dynamics of behavioral stress symptoms in student officers (n = 71) and serving officers (n = 103) during their service and combat activities in a state of martial law (in student officers – before and after their internship, in serving officers – before and after their rotation), %

Behavioral symptoms	Student officers (n = 71)		Serving officers under the age of 30 (n = 35)		Serving officers under the age of 40 (n = 41)		Serving officers over the age of 40 (n = 27)	
	Before	After	Before	After	Before	After	Before	After
Loss of appetite or overeating	5.6	12.7	5.7	45.7	7.3	46.3	3.7	48.1
Increase in errors when performing common actions	7.0	18.3	2.9	20.0	4.9	19.5	7.4	18.5
Faster or slower speech	0	2.8	0	5.7	0	7.3	0	7.4
Voice trembling	0	0	0	8.6	0	4.9	0	3.7
Increase in conflict situations	5.6	19.7	5.7	28.5	4.9	29.3	7.4	29.6
Chronic lack of time	12.7	21.1	17.1	31.4	17.1	31.7	14.8	37.1
Less time to spend with friends	2.8	9.9	14.3	22.9	19.5	26.8	22.2	29.6
Loss of attention to one's appearance, untidiness	0	2.8	0	5.7	4.9	9.8	7.4	11.1
Antisocial, conflict behavior	2.8	12.7	5.7	37.1	7.3	39.0	7.4	37.0
Low productivity of activities	7.0	35.2	8.6	34.3	9.8	40.0	11.1	40.7
Sleep disturbances, insomnia	4.2	9.9	11.4	48.6	12.2	51.2	14.8	51.9
More intensive smoking, alcohol consumption	8.5	11.3	8.6	25.7	9.8	26.8	11.1	29.6

Source: compiled by the authors of this study

40.7 %; antisocial, conflict behavior – among student officers from 2.8 % to 12.7 %, among serving officers – from 5.7-7.3 % to 37.0-39.0 %; chronic lack of time – among student officers from 12.7 % to 21.1 %, among serving officers – from 14.8-17.1 % to 31.4-37.1 %; more intense smoking and alcohol consumption – among student officers from 8.5 % to 11.3 %, among serving officers – from 8.6-11.1 % to 25.7-29.6 %; an increase in errors when performing routine actions – among student officers from 7.0 % to 18.3 %, among serving officers – from 2.9-7.4 % to 18.5-20.0 %.

In addition, the severity of particular behavioral symptoms' manifestation, primarily among serving officers, before their utilization tours, indicates that they experience a certain level of stress while performing their daily duties under martial law. During long rotations, with the constant influence of stress factors from service and combat activities, the severity of symptoms enhanced significantly, indicating an increase in stress levels during special and combat missions. As with intellectual symptoms, the level of behavioral stress symptoms manifestation in serving officers of different age groups is practically the same, which confirms our previous conclusions.

The analysis of emotional stress symptoms in student officers and serving officers during service and combat activities under martial law confirmed the negative dynamics of most emotional symptoms' manifestation during their internship and utilization tours (Table 3). The most pronounced emotional symptoms of stress were: gloomy mood – among student officers, the level of manifestation of this symptom worsened from 14.1 % to 30.9 %, among serving officers – from 21.9-22.9 % to 54.3-59.3 %, depending on age; irritability, anger attacks – among student officers from 12.7 % to 28.2 %, among serving officers – from 17.1-22.2 % to 51.4-55.5 %; feelings of constant longing, depression – among student officers from 8.5 % to 11.3 %, among serving officers – from 12.2-14.8 % to 37.1-40.7 %; anxiety, restlessness – among student officers from 19.7 % to 29.6 %, among serving officers – from 20.0-25.9 % to 41.5-44.4 %; decreased life satisfaction – among student officers from 4.2 % to 8.5 %, among serving officers – from 9.8-14.8 % to 37.0-39.0 %; decrease in self-esteem, dissatisfaction with oneself – among student officers from 2.4 % to 8.5 %, among serving officers – from 8.6-11.1 % to 20.0-25.9 %. At the same time, it was found that the level of emotional symptoms in serving officers after returning from their rotations is significantly more pronounced than in student officers.

The study of the dynamics of physiological stress symptoms manifestation in student officers during their military internship and in serving officers during their rotations shows that, after returning from the combat zone, the number of serving officers with physiological stress symptoms increased significantly (Table 4). The number of student officers exhibiting signs of stress after their internship also increased,

Table 3. Dynamics of emotional stress symptoms in student officers (n = 71) and serving officers (n = 103) during their service and combat activities in a state of martial law (in student officers – before and after their internship, in serving officers – before and after their rotation), %

Emotional symptoms	Student officers (n = 71)		Serving officers under the age of 30 (n = 35)		Serving officers under the age of 40 (n = 41)		Serving officers over the age of 40 (n = 27)	
	Before	After	Before	After	Before	After	Before	After
Worry, anxiety	19.7	29.6	20.0	42.9	21.9	41.5	25.9	44.4
Suspicion	2.8	4.2	8.6	17.1	7.3	19.5	7.4	18.5
Gloomy mood	14.1	30.9	22.9	54.3	21.9	56.1	22.2	59.3
Feeling of constant longing, depression	8.5	11.3	14.3	37.1	12.2	39.0	14.8	40.7
Irritability, bouts of anger	12.7	28.2	17.1	51.4	19.5	53.7	22.2	55.5
Emotional "stupidity", indifference	4.2	5.6	5.7	14.3	4.9	12.2	7.4	14.8
Cynical, inappropriate humor	5.6	9.9	8.6	17.1	9.8	19.5	7.4	22.2
Decreased sense of self-confidence	2.8	7.1	2.9	11.4	7.3	12.2	11.1	14.8
Decreased life satisfaction	4.2	8.5	11.4	37.1	9.8	39.0	14.8	37.0
Feelings of alienation, loneliness	11.3	14.1	14.2	28.6	12.2	29.3	14.8	33.3
Loss of interest in life	0	0	0	5.7	4.9	9.8	7.4	11.1
Decreased self-esteem, dissatisfaction with oneself	2.4	8.5	8.6	20.0	9.8	24.3	11.1	25.9

Source: compiled by the authors of this study

but the increase is considerably smaller compared to serving officers. The most pronounced physiological symptoms of stress in student officers and serving officers, the manifestation of which has a negative dynamic in the process of service and combat activities, are: weight gain or loss – in student officers, the level of manifestation of this symptom worsened from 5.6 % to 12.7 %, among serving officers – from 11.4-14.8 % to 45.7-59.3 % depending on age; decreased immunity, frequent malaise – among student officers from 9.9 % to 12.7 %, among serving officers – from 8.6-14.8 % to 54.3-59.3 %; increased fatigue – among student officers from 12.7 % to 28.2 %, among serving officers – from 14.3-22.2 % to 45.7-48.1 %; digestive disorders – among student officers from 4.2 % to 14.1 %, among serving officers – from 14.3-18.5 % to 42.9-44.4 %; pain of undetermined nature, headaches – among student officers from 5.6 % to 9.9 %, among serving officers – from 8.6-18.5 % to 40.0-51.9 %; feeling of muscle tension – among student officers from 9.9 % to 16.9 %, among serving officers – from 8.6-14.8 % to 34.1-37.0 %.

Based on the study of stress symptoms in student officers and serving officers during their service and combat activities under martial law, it was found that serving officers have a significantly higher level of manifestation of all stress symptoms compared to student officers. It has also been found that there were no significant differences in the levels of stress symptoms manifestation among serving officers of different age groups. This allows us to conclude that the leading indicator of the negative impact of stress factors is the duration of the subjects' stay in stressful conditions. It has also been confirmed that the degree of influence of stress factors on the bodies of law enforcement officers is determined by their level of stress resilience, their individual psychological characteristics, as well as their abilities and skills to apply available means and methods of coping with stress in the conditions of service and combat activities.

The study of stress levels among student officers and serving officers using Yu. V. Shcherbatykh's test shows that all groups studied exhibited moderate stress levels (ranging from 6 to 12 points) before performing their service and combat missions under martial law (Table 5).

After performing service and combat missions, a statistically significant decrease in stress levels ($p \leq 0.05$-0.001) was observed in all groups of subjects. However, while the difference between stress levels before and after their internship was 3.4 points for student officers, it was 6.8 to 7.1 points for serving officers.

It is essential to note that, before the commencement of the missions under martial law conditions, no statistically significant differences were found among all subject groups ($p > 0.05$). After that, the stress level of serving officers of all age groups was higher than that of student officers, with a statistically significant probability ($p \leq 0.001$). A dependence of the stress level on the duration of law enforcement

Table 4. Dynamics of physiological stress symptoms in student officers (n = 71) and serving officers (n = 103) during their service and combat activities in a state of martial law (in student officers – before and after their internship, in serving officers – before and after their rotation), %

Physiological symptoms	Student officers (n = 71)		Serving officers under the age of 30 (n = 35)		Serving officers under the age of 40 (n = 41)		Serving officers over the age of 40 (n = 27)	
	Before	After	Before	After	Before	After	Before	After
Pain of an uncertain nature, headache	5.6	9.9	8.6	40.0	17.1	41.5	18.5	51.9
Increase or decrease in blood pressure	2.8	7.0	8.6	28.6	12.2	34.3	14.8	33.3
Rapid or irregular pulse	1.4	5.6	11.4	37.1	12.2	39.0	18.5	40.7
Disorders of digestive processes	4.2	14.1	14.3	42.9	14.6	43.9	18.5	44.4
Impaired breathing	0	0	0	5.7	0	7.3	3.7	11.1
Feeling of tension in the muscles	9.9	16.9	8.6	34.3	14.6	34.1	14.8	37.0
Increased fatigue	12.7	28.2	14.3	45.7	17.1	46.3	22.2	48.1
Hand tremors, cramps	0	2.8	0	8.6	4.9	9.8	11.1	18.5
Appearance of allergies, other skin rashes	0	0	0	5.7	4.9	7.3	7.4	11.1
Increased sweating	2.8	4.2	0	8.6	4.9	9.8	7.4	11.1
Increase or loss of body weight	5.6	12.7	11.4	45.7	14.6	48.8	14.8	59.3
Decreased immunity, frequent ailments	9.9	12.7	8.6	54.3	12.2	58.5	14.8	59.3

Source: compiled by the authors of this study

officers' stay in stressful conditions was revealed. After an internship in practical (combat) units, the stress level of student officers was lower than that of serving officers of different ages. The highest stress level was found among serving officers after they returned from rotations lasting 3-4 months. At the same time, while the stress level of student officers after their internship was within 12 points and corresponded to a moderate level, serving officers who had performed their service and combat missions showed a pronounced stress level (13-24 points).

DISCUSSION

As experts point out [2, 3, 9, 12], the accumulation of negative stress factors in law enforcement officers can lead to mental illnesses, such as depressive disorder, which can vary in severity. It is wrong to say that it is easy to get out of depression, that it is enough to go through a difficult period in life simply, and then everything will be fine. It is also wrong to think that you can get out of depression simply by talking to your family or friends over a glass of wine, or by taking antidepressants, the effect of which is incorrectly imagined to be similar to the impact of energy drinks, stimulants, alcohol, or drugs on our body, which supposedly make it possible to quickly get rid of insomnia, feelings of fear, anxiety, panic attacks, negative mood, apathy, unfounded pessimism, and pain that is inadequate to a person's physical condition [8, 13].

The development of stress in law enforcement officers is influenced by: 1) personal anxiety, personal adaptive potential, nervous and mental stability, communication skills, moral normativity; 2) intellectual, behavioral, emotional, physiological signs of stress and a comprehensive assessment of the manifestation of stress; 3) general erudition, breadth of interests, stability and consistency of behavior, attention to others, and productivity of behavior; 4) self-analysis of personality [14]. This is also supported by the data we have obtained, as the symptoms of stress in law enforcement officers during their service and combat activities in conditions of martial law can manifest in various ways, including intellectual, behavioral, emotional, and physiological signs, and can be observed at different levels.

According to scientists [15], the action of stressors (stress factors) on the body causes an increase in the production of adrenal hormones – catecholamines, which largely determine the manifestations and consequences of stress. The manifestations of stress are highly polymorphic, and the very occurrence of a stressful situation causes negative consequences: stomach pain, frequent urination, severe headaches, and inability to breathe deeply because something is interfering. Signs of stress include: increased anxiety, a feeling of crisis or major obstacle; inability to concentrate; too many mistakes at work; memory impairment; frequent feelings of fatigue; high-speed speech; feeling of loss of control; frequent changes of mind; frequent pain (head, back, stomach); increased excitability, irritability; work no lon-

Table 5. Dynamics of stress level in student officers (n = 71) and serving officers (n = 103) before and after performing tasks of their academic training and service activities under martial law, points

Cadets' training years	Stress level		Δ	t / p
	Before	After		
Student officers (n=71)	6.7±0.64	10.1±0.82	3.4	3.27/≤0.01
Serving officers under the age of 30 (n = 35)	7.9±0.91	14.8±1.06	6.9	4.94/≤0.001
Serving officers under the age of 40 (n = 41)	8.5±0.85	15.4±1.01	6.8	5.15/≤0.001
Serving officers over the age of 40 (n = 27)	8.3±0.98	15.1±1.19	7.1	4.61/≤0.001
t / p 1-2	1.08/>0.05	3.51//≤0.001		
t / p 1-3	1.69/>0.05	4.07//≤0.001		
t / p 1-4	1.37/>0.05	3.46//≤0.001		

Notes: Δ – difference between the studied indicators; t – value of Student's t-test; p – level of statistical significance of differences; t / p 1-2, 1-3, 1-4 – value of Student's t-test and level of significance between the indicators of student officers and serving officers of different age groups
Source: compiled by the authors of this study

ger brings the same joy; loss of sense of humor; sharp increase in the number of cigarettes smoked; alcohol addiction; constant feeling of hunger; loss of appetite; inability to finish work on time. Our research confirms the conclusions of many scientists [4, 6, 9, 11, 16] regarding the manifestation of various stress symptoms in law enforcement officers while performing service and combat missions during wartime. The most significant indicators of these symptoms are objective conditions, including the duration of law enforcement officers' exposure to stressful situations and the intensity of the stress factor. Therefore, subjective indicators (such as age, gender, temperament, and sphere of activity) are of secondary importance.

Scientists [17, 18] indicate that stress is currently the cause of almost 90 % of human diseases. Chronic psycho-emotional tension and post-traumatic stress disorder (PTSD) are the causes of neurocirculatory dystonia, hyperventilation syndrome, functional stomach disorders, biliary tract dyskinesia, preclinical forms of ischemic heart disease, arterial hypertension, hypertensive disease, chronic gastroduodenitis, non-ulcer dyspepsia, etc. According to the WHO, the number of diseases caused by the adverse effects of stress has increased 25-fold over the past 60 years [19]. Stress can undermine the immune system, making us more vulnerable to infections. The main pathologies caused by stress include depression, anxiety, heart attack, stroke, weakening of the immune system, and, as a result, vulnerability to various infections, ranging from common colds and herpes to such dangerous diseases as AIDS, certain forms of cancer, and autoimmune diseases such as rheumatoid arthritis or multiple sclerosis. Stress often causes skin reactions (rashes, itching, various dermatitis, etc.), gastrointestinal disorders, insomnia, neurological disorders, and disturbances in human sexual and reproductive function. Stress is increasingly recognized as a factor in the etiopathogenesis of various modern diseases such as allergies [20, 21]. The results of our research complement the above information on the negative impact of stress factors in service activities on the manifestation of various stress symptoms and, accordingly, on the mental health of law enforcement officers. Moreover, the longer law enforcement officers remain in stressful conditions, the more pronounced the symptoms of stress become. This necessitates the search for effective means and methods of stress prevention during service and combat activities in wartime conditions, as well as guidance on the early development of stress resilience in law enforcement officers throughout their daily service activities.

CONCLUSIONS

The dynamics of the manifestation of intellectual, behavioral, emotional, and physiological symptoms of stress in law enforcement officers (including student officers and serving officers across different age groups) during their service and combat activities under martial law conditions were studied. The most pronounced manifestation of all stress symptoms was found in serving officers, regardless of age. Among the most pronounced symptoms of stress in law enforcement officers after performing their service and combat missions, the following were identified: intellectual: bad dreams – up to 59.3 %, fruitless rumination on a problem – up to 54.3 %, difficulty making decisions – up to 51.4 %; behavioral: sleep disturbances, insomnia

– up to 51.9 %, loss of appetite or overeating – up to 48.1 %, antisocial, conflictual behavior – up to 39.0 %, more intense smoking, alcohol consumption – up to 29.6 %; emotional: gloomy mood – up to 59.3 %, irritability, anger attacks – up to 55.5 %, anxiety – up to 44.4 %; physiological: weight gain or loss – up to 59.3 %, decreased immunity, frequent malaise – up to 59.3 %, increased fatigue – up to 48.1 %, pain of an unspecified nature, headaches – up to 51.9 %.

It was found that after performing service and combat missions, all groups of subjects showed a statistically significant increase in stress levels ($p \leq 0.05$-0.001). At the same time, while the difference in stress levels between student officers before and after their internship was 3.4 points, for serving officers it was 6.8 to 7.1 points. In addition, after performing service and combat missions, the stress level (14.8-15.4 points) among serving officers of all age groups was significantly ($p \leq 0.001$) higher than among student officers (10.1 points). The stress level of student officers after their internship corresponds to a moderate level, whereas serving officers who have performed service and combat missions exhibit a pronounced level of stress. No significant differences were found between the stress levels of serving officers from different age groups ($p > 0.05$), indicating that the stress level does not depend on the age of law enforcement officers, but on the duration of their exposure to stressful conditions.

The research highlights the need to develop stress resilience in law enforcement officers to ensure the effectiveness of their service and combat activities in times of war, as well as to cultivate skills in utilizing available means to prevent stress during service and combat activities.

PROSPECTS FOR FURTHER RESEARCH

It is planned to investigate the dynamics of stress symptoms manifestation in female law enforcement officers before and after performing their service and combat missions during the war.

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CONFLICT OF INTEREST

The Authors declare no conflict of interest

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