

## PSYCHOSOCIAL REHABILITATION UNDER LONG-TERM STRESS: A RELEVANT APPROACH FOR EFFECTIVELY ACHIEVING RESULTS

<sup>a</sup>VICTORIA OVERCHUK, <sup>b</sup>OKSANA KONONENKO,  
<sup>c</sup>SOFIYA BEREZKA, <sup>d</sup>NINA LIESNICHENKO, <sup>e</sup>IRYNA  
OSTOPOLETS, <sup>f</sup>NATALIA LAPSHOVA

<sup>a,e,f</sup>Vasyl' Stus Donetsk National University, 21, 600<sup>th</sup>  
Anniversary Str., 21000, Vinnytsia, Ukraine

<sup>b</sup>Odessa I. I. Mechnikov National University, 2, Dvoryanskaya  
Str., 65082, Odessa, Ukraine

<sup>c</sup>Masaryk University, Žerotínovo nám. 617/9, 601 77 Brno,  
Czech Republic; Donbas State Pedagogical University, 19, G.  
Batiuk Street, 84116, Sloviansk, Ukraine

<sup>d</sup>Open International University of Human Development  
"Ukraine," 23-A, Khmelnytskyi highway, Vinnytsia, Ukraine  
email: <sup>a</sup>v.overchuk@donnu.edu.ua, <sup>b</sup>o.kononenko@onu.edu.ua,  
<sup>c</sup>berezka@kariera.muni.cz, <sup>d</sup>nakaznjuk@gmail.com,  
<sup>e</sup>irinaostopolets@gmail.com, <sup>f</sup>n.lapshova@donnu.edu.ua

**Abstract:** This article aims to declare effective, practical methods of psychosocial rehabilitation for patients under long-term stress conditions. Long nervous tension forces the body to be at the limit all the time. This can lead to the development of cardiovascular and other diseases. It has been established that the subject area under consideration has a significant research and organizational and methodological direction in psychology. It has become a considerable part of the population's psychiatric care content. The study revealed the signs of chronic stress and how to recover from it. The obtained result of the scientific analysis of the subject area can be used in the practical activities of medical specialists in organizing psychiatric care for the population for compiling educational programs to improve the professional qualifications of medical psychologists and psychiatrists. The review substantiates the relevance and novelty of research areas for further development of the problem of improving the organization and content of psychiatric care for patients with mental disorders after long-term stress.

**Keywords:** Chronic stress, Long-term stress, Nervous tension, Stress behavior, Psychological correction, Psychological rehabilitation, Psychosocial rehabilitation, Psychological well-being.

### 1 Introduction

The concept of mental health is an integral and essential component of human health [23]. Health is a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity." Important in this definition is that mental health is not only the absence of mental disorders and disabilities but is also a state of well-being in which a person realizes his abilities, can withstand the everyday stresses of life, work productively and contribute to society [34]. In this positive sense, mental health is the basis of human well-being and the effective functioning of the community because mental health and well-being are essential to our society, and the ability to think, emote, communicate with each other, earn a living, and enjoy life. Given this fact, promoting, protecting, and restoring mental health can be seen around the world as actions of vital importance value.

The problem of experiencing negative emotions and stress have always worried humanity [17], and the development of stress resistance is still relevant today. Psychological stress is a companion of modern man, leading him to social maladaptation and poor psychosomatic health. Stress becomes dangerous when exhaustion sets in. The psyche cannot cope with the emotional load, so diseases and conditions called psychosomatic arise. It is no longer the mood that suffers but the vital organs and systems [20].

How to recognize the signs of stress:

- The structure of sleep is disturbed: a person sleeps restlessly at night or wakes up tired, no matter how many hours he sleeps;
- Eating disorders may occur: both overeating and starvation;
- There is constant fatigue, loss of strength, a sense of anxiety and hopelessness;
- Apathy is observed – a person loses interest in life, becomes inhibited, formulates thoughts for a long time, and loses the thread of the conversation;

- Concerned about frequent headaches and dizziness, which may increase blood pressure [18].

The stronger and longer the stress, the more dangerous its consequences for the body [33]. Decreased attention, memory, and performance. Immunity deteriorates, which leads to frequent infections and inflammatory processes. Possible development of long-term (chronic) stress: (i) endocrine diseases – diabetes mellitus, metabolic syndrome; (ii) pathology of the digestive system – gastritis, gastric ulcer and 12 duodenal ulcers, dyspepsia; (iii) oncological diseases, while the localization of the tumor can be any.

Uncontrolled stress provokes diseases of the heart and blood vessels. The most famous are heart attack, stroke, and hypertensive crisis. A typical stress response is an increase in blood pressure. Its "jumps" create an additional load on the heart and blood vessels. With intense excitement, palpitations may occur, in some cases – failures of the heart rhythm. It is also possible to develop stress cardiomyopathy, or "broken heart syndrome," in which muscle tissue abruptly loses contractility. As a result, the blood circulation of the whole organism is disturbed, and there is a risk of heart rupture. With long-term stress, vasospasm occurs, which leads to oxygen starvation of vital organs – the brain and heart. This condition is challenging for people with already existing pathologies of the heart and blood vessels, with bad habits: the diseases are exacerbated, and the state of health is rapidly deteriorating. Some patients cannot cope with their condition and resort to the help of alcohol or psychotropic substances.

Even though a sufficient number of scientific works in medicine and psychology are devoted to this problem, most of society still needs to gain elementary knowledge of stress and the development of stress resistance. Also, it does not have effective methods of psychosocial rehabilitation.

### 2 Literature Review

In the scientific literature, "psychological stress" or "emotional stress" are distinguished, characterized by a state of pronounced psycho-emotional experience by a person in conflict life situations that acutely or for a long time limit the satisfaction of his social or biological needs [25]. Stress is contradictory, elusive, and nebulous [7]. It hardly fits into the narrow framework of definitions and standards. Its strength is in the breadth of coverage of life manifestations; its weakness is in the uncertainty and vagueness of its boundaries.

The development of the stress problem (emotional, mental, sports, industrial, space, military, etc.) from the standpoint of modern science is reflected in the works devoted to the biochemical, physiological, clinical, psychophysiological, and psychological aspects of its manifestations. According to researchers, stress is a long-term systemic (psychological and hormonal) reaction of the body to life situations that a person considers threatening his well-being and does not see the possibility of a quick resolution [22]. It should be noted that the factors causing stress are commonly called "stressors," and the totality of changes occurring in the body under the influence of stress is called the general adaptation syndrome.

In modern literature, there are various classifications of stress:

- Everyday stress is the body's reaction to trim and insignificant events that appear in everyday life but have a negative impact on the individual, for example, current health problems, lack of money for clothes, problems with cooking, etc.;
- Emotional stress is a response to an overstrain of the nervous system;

- Occupational stress is a diverse phenomenon expressed in mental and physical reactions to stressful situations in a person's work activity;
- Information stress is a condition that occurs due to information loads that a person cannot cope with and make decisions at a set pace [26].

There are three types of stress according to a person's ability to influence it: (i) stresses that do not depend on us; (ii) stresses that we can influence; (iii) stresses, which are the fruit of our imagination [3].

There are two types of stress to be distinguished: (i) eustress – everyday stress that serves the purpose of preserving and maintaining life ("stress" – pressure, voltage); (ii) 2) distress – pathological stress, manifested in painful symptoms ("distress" – grief, unhappiness, malaise, exhaustion, need).

If stress has become protracted and chronic, a person may need the help of a specialist to get out of a destructive state [1]. Psychosocial rehabilitation is a process that enables people who are debilitated or disabled as a result of mental disorders to achieve their optimal level of independent functioning in society. Let us add to this definition that this is a constant, continuous process that includes a complex of medical, psychological, pedagogical, socio-economic, and professional measures.

In the history of the rehabilitation of people with changes in the psyche due to many factors, including long-term stress, a number of important points can be distinguished that played a significant role in its development [9, 16].

*Introduction of labor (professional) rehabilitation.* This approach to treatment began to be introduced in the first third of the 19th century and is associated with the activities of progressive psychiatrists. For example, among the essential transformations are the arrangement of gardening and handicraft work. As a direction of modern domestic psychiatry, occupational therapy began to pay special attention, starting in the 50s of the last century. There was a network of medical and labor workshops and special workshops where people with mental disorders in inpatient and outpatient treatment could work. With the beginning of socio-economic reforms in the 90s of the last century, about 60% of institutions involved in labor rehabilitation (medical-industrial workshops, specialized workshops at industrial enterprises, etc.) were forced to stop their activities. However, employment and occupational therapy are the most critical components of psychosocial rehabilitation programs [32].

*Moral therapy* is the rehabilitation approach that developed in the late 18th and early 19th centuries. This method provided more humane help to people needing psychological help. The basic principles of this psychosocial impact remain relevant to this day.

*The development of community psychiatry.* Shifting the focus of mental health care to the out-of-hospital service and the realization that the patient could be treated close to family and work was of great importance for the recovery of a sick person. In the 30s of the last century, neuropsychiatric dispensaries began to open, and semi-stationary forms of assistance were created, which was of tremendous rehabilitation importance. In the 1950s and 1960s, psychiatric rooms were widely developed in polyclinics, central district hospitals, and other institutions of the general medical network, at industrial enterprises, educational institutions, day and night semi-hospital centers, as well as other forms of assistance aimed at meeting the needs of the mentally ill [27].

In foreign countries (Great Britain, Japan, Canada, etc.), consumer organizations and support groups began to be actively created during this period of social insufficiency [3, 15], etc.

*The emergence of centers for psychosocial rehabilitation.* The beginning of their discovery falls in the 80s of the twentieth century. The first centers (clubs) were created by the patients

themselves (for example, the Club House in the USA), and their activities are aimed at helping patients cope with the problems of everyday life and develop the ability to work even with a disability. Therefore, at first, in such centers, the emphasis was on activities that would help patients cope with life's difficulties, not succumb to them, as well as on health promotion and not on getting rid of the symptoms of mental illness. Psychosocial rehabilitation centers have played a massive role in developing such a field of knowledge as rehabilitating people with disabilities due to mental illness. Although this form of assistance is widely used in the USA, Sweden, and Canada, the number of rehabilitation programs varies significantly (from 18 to 148). In Ukraine, similar centers (institutions) began to be created in the mid-90s of the twentieth century, but they need more. As a rule, these are non-governmental institutions. Currently, rehabilitation centers operating in our country specialize in art therapy, corrective behavioral interventions, leisure, psychotherapy, etc.

Developing the skills necessary to overcome life's difficulties [19]. The emergence of this direction is because, to solve emerging problems effectively, people suffering from mental disorders in the light of long-term stress and other factors need specific knowledge, skills, and abilities. Developing skills and abilities are based on methods developed considering social learning principles. At the same time, methods of active-directive learning are used – behavioral exercises and role-playing games, the consistent formation of behavioral elements, mentoring, prompting, and the generalization of acquired skills are also carried out. It has been proven that developing skills and abilities in people with severe mental disorders leads to the ability to live independently.

### 3 Materials and Methods

Psychosocial rehabilitation interventions vary depending on the needs of the patients [2], the place where the rehabilitation interventions are carried out (hospital or community), and the cultural and socioeconomic conditions of the country where the mentally ill person lives. But the basis of these activities, as a rule, are:

- A. Labor rehabilitation;
- B. Employment;
- C. Professional training and retraining;
- D. Social support;
- E. Provision of decent living conditions;
- F. Education;
- G. Psychiatric education, including training on how to manage painful symptoms;
- H. Acquisition and restoration of communication skills;
- I. Acquisition of independent living skills;
- J. Realization of hobbies and leisure, spiritual needs.

*Methods for restoring the body after stress.* Recovery of the body begins with the elimination of the causes of stress. It is necessary to:

- Reduce the burden on the psyche – other measures are useless without this. If it is not yet possible to eliminate the cause of stress, you should contact a psychotherapist – choose a tactic that compensates for the pressure on the psyche;
- Establish a daily routine: 7–8 hours of sleep are required; otherwise, the body will not be able to restore the resource;
- Take off some of your routine worries – work, household, or family (this will free up time for rest and health care);
- To restore an even mood helps things that time passes unnoticed – absolutely anything, from replanting indoor plants to studying interest rates on deposits;
- Pick up gentle physical activity – they distract from unpleasant thoughts and train the body, including the heart muscle.
- To stop the flow of negative thoughts that exhausts, yoga, meditation, or other spiritual practices will help [33].

Thus, even from an incomplete list of the listed activities, it is clear that the psychosocial rehabilitation of the mentally ill is a comprehensive process aimed at restoring and developing various areas of human life [4].

Recently, the interest of scientists, practitioners, patients themselves, and their families in psychosocial rehabilitation has increased [5, 14]. Currently, there are a large number of models of psychosocial rehabilitation and views on the methods of its implementation [17, 18, 19, 20]. However, all scientists and practitioners agree that the result of rehabilitation measures should be the reintegration (return) of mentally ill people into society. At the same time, patients should feel no less full-fledged citizens than other population groups. Given the preceding, the goal of rehabilitation can also be defined as follows: it is to improve the quality of life and social functioning of people with mental disorders by overcoming their social exclusion and increasing their active life and civic position.

The "Statement on Psychosocial Rehabilitation," developed by the World Health Organization in collaboration with the World Association for Psychosocial Rehabilitation, lists the following goals for rehabilitation:

- A. Reducing the severity of psychopathological symptoms with the triad of drugs, psychotherapeutic treatments, and psychosocial interventions;
- B. Increasing the social competence of mentally ill people through the development of communication skills, the ability to overcome stress, as well as labor activity;
- C. Reduction of discrimination and stigma;
- D. Support for families with someone suffering from a mental illness;
- E. Creating and maintaining long-term social support, meeting at least the basic needs of mentally ill people, which include housing, employment, leisure activities, and the creation of a social network (circle of communication);
- F. Increasing the autonomy (independence) of people with psychological disorders, improving their self-sufficiency and self-defense.

Suppose we hope for the future of psychosocial rehabilitation. In that case, it should be psychiatric care at the patient's residence - affordable and complete, allowing people who need it to be treated and receive serious support. With such assistance, hospitals are not needed, and the medical approach should be used only to a small extent. In other words, the psychologist/psychiatrist/doctor should be a valuable advisor to this service rather than necessarily its owner or ruler.

#### 4 Results and Discussion

The accumulation of scientific data on psychosocial rehabilitation [7, 16], and practical experience has contributed to the fact that at present, along with complex treatment, including drug and occupational therapy, physiotherapy, and cultural, educational, and leisure activities, the following types of psychosocial interventions have been developed as part of psychosocial rehabilitation:

- Educational programs in psychiatry for patients;
- Educational programs in psychiatry for relatives of patients;
- Pieces of training on the development of daily independent living skills – training in cooking, shopping, family budgeting, housekeeping, transport use, etc.;
- Pieces of training to develop social skills – socially acceptable and confident behavior, communication, solving everyday problems, etc.;
- Pieces of training to develop mental health management skills;
- Self-help and mutual support groups of patients and their relatives, public organizations of consumers of psychiatric care;
- Cognitive-behavioral therapy aimed at improving memory, attention, speech, and behavior;

- Family therapy and other types of individual and group psychotherapy [28].

Comprehensive psychosocial rehabilitation programs are carried out in many regional psychiatric services based on psychiatric institutions and directly in the community.

Long-term (chronic) stress is caused by factors of long-term negative impact. For example: (i) life in the conditions of war; (ii) the threat of reduction; (iii) excessive employment; (iv) information overload; (v) prolonged conflict at home or work; (vi) catastrophic lack of time for current tasks and projects; (vii) loss of meaning in life.

Chronic stress is generated by civilization and is related only to human [6]. What loss of meaning can an animal have? Therefore, nature has not prepared anything for us to compensate for it. Adrenaline is not produced under such stress, but destruction occurs.

The most challenging thing to recover from stress is to recover alone – any person, without fail, needs communication. It affects the restoration of energy and peace of mind, brings an undeniable charge of positive emotions to life, takes care of the nervous system, restores memory and healthy sleep, helps to calm down and forget about problems, and returns the old mental strength and normal appetite. So, for example, have a good time at a meeting with friends or relatives. Even if a person does not want to go to noisy events, he should pull himself together and go to a company meeting to relax and unwind with pleasant people you know. This meeting can be some holiday, a joint trip to the cinema or a cafe, a romantic date, or an evening spent playing board games with your beloved family and children [27].

#### 4.1 What Families Can Do for Psychosocial Rehabilitation

At present, the family's vital role in a person's psychosocial rehabilitation has been proven [8]. This implies the performance of various functions. First of all, it should be said that patients' relatives must be considered allies in the treatment. They not only have to learn a lot, but they often have a lot of knowledge and experience – significantly contributing to the rehabilitation process. For a psychologist (doctor), relatives can be a valuable source of information about the patient's condition; sometimes, they are more aware than specialists about some aspects of his disease. Often the family is a link between the patient and the mental health care system. Relatives help other families whose lives have been invaded by mental illness with advice and share their problem-solving experiences. All this allows us to say that the relatives of patients are both teachers and educators for other families and even professionals.

Relatives' essential function is caring for those who need this person [27]. Relatives should consider that patients feel best if each family member has a particular order, rules, and regular duties. It is necessary to establish a mode corresponding to the patient's capabilities. Relatives can help patients with the correct use of medications and control of side effects of medications. Over time, you can entrust the patient with some work around the house (washing dishes, cleaning the apartment, caring for flowers, pets, etc.) and outside the home (shopping, visiting the laundry, dry cleaning, etc.).

The family's participation in psychiatric education programs is another of its essential contributions to the psychosocial rehabilitation of a sick relative. The importance of family psychiatric education has already been discussed in the scientific literature. Knowledge of the basics of psychiatry and psychopharmacology, the ability to understand the symptoms of the disease, and mastering the skills of communicating with a sick person in the family provide a real opportunity to reduce the frequency of exacerbations of stressful conditions and consequences in the form of mental disorders.

Family members can make a significant contribution to the fight against stigma and discrimination, as well as to the improvement of legislation regarding mentally ill people and their families.

However, relatives should collaborate in an organized manner: create support groups and organizations to assist consumers. In this case, they will not only gain the support of people facing similar problems. Still, they will also become a force to be reckoned with by professionals and government agencies responsible for providing high-quality psychiatric and social care [3]. In addition, working in a team, relatives of patients themselves can conduct psychosocial rehabilitation programs – leisure, holiday therapy, and educational for the population to reduce stigmatization and discrimination of patients, and, united with professionals, implement educational programs in the field of psychiatry, vocational training, development of social skills and many others.

There is a practice in which relatives of patients and professionals create support groups and public organizations that carry out active work on psychosocial rehabilitation directly in the community, relying on its resources outside the walls of hospitals or dispensaries.

#### 4.2 The Role of Professionals

We see the role of professionals in initiating relatives and patients themselves to create public organizations or support groups [9]. It is professionals who can play a crucial role in the formation of such organizations.

In the future, professionals should assist the organization in developing activities – constantly advise its leaders or support groups on education in psychiatry, including legal aspects. Professionals can also assist in the preparation of an organization's strategic plans. In addition, the publication of newspapers, booklets, and manuals for the families of people in need of psychological support and correction can be beneficial assistance from professionals to public organizations of consumers [26]. Thus, the development of the social movement of consumers of psychiatric care is becoming an essential link in the modern system of psychiatric care, able to meet the many needs of people with a mental health condition, their position in society, reduce the burden of the disease, improve the quality of life of patients and their families.

#### 4.3 Tips for Recovering from Long-Term Stress When Dealing with an Illness on Your Own

As noted above, long-term stress contributes to diseases, initially of a functional nature and then more serious. For this reason, quickly getting rid of severe stress will help save the body from health problems [11].

*Drink water.* This will help distract and calm down, dilute the blood, and compensate for its clotting caused by adrenaline. So you will avoid blood clots in the cardiovascular system and protect yourself from a stroke.

*Breathing exercises bring instant results.* It relieves muscle and emotional tension and normalizes blood pressure. One of the most straightforward exercises to recover from stress is spreading your legs shoulder-width apart, placing your hands on your belt, and taking a slow breath with your "belly." Next, exhale while throwing your hands forward. At the moment of exhalation, imagine you throwing out all the negativity. You can repeat the exercise several times, as needed.

*Take walks outdoors.* It is better if these walks are long, allowing you to enjoy the healing air and the beauties of nature. Also, the body needs a good, long sleep to recover from stress. After a stressful experience, it is essential to relax. This is where sleep is supposed to help. So it would help to sleep as much as possible to get tired of sleep [21].

When working in a personal post-stress state, it is necessary to mentally *understand the situation* and sort it out "on the shelves" – having built an image of the problem or the offender in this situation. Let go of the case, forgive ill-wishers – do not harbor resentment inside. Understand that, for example, the person who offended you does not even think about you – and you, in turn,

finish yourself off with your own experiences. Your experiences are your state, which brings no relief or retribution to anyone. To stop self-destruction from stress, replace negative emotions with forgiveness, calmness, and joy. Learn this trick and then use it whenever you feel disturbed.

*Smile.* Make it a habit to start your day with a smile. During the day, smile at acquaintances; if a smile is inappropriate, smile mentally. Before bed, smile sincerely at your reflection in the mirror in the evening.

#### 4.4 About Stress Tolerance

It is worth noting that "stress resistance" combines personal qualities that allow you to endure stressful situations without unpleasant consequences for your activities, personality, and others [10]. Stress resistance can and should be formed during an individual's life, especially when it comes to residents of large cities. Personality traits that cause increased stress resistance include:

- A. The level of self-esteem (the higher the self-esteem, the sense of the importance of one's existence, the more excellent the resistance to stress).
- B. The level of subjective control (a characteristic of a person's degree of independence, autonomy, and activity in achieving his goals, his personal responsibility for his actions and deeds). Internals believe they can influence the situation; they take the position "I am not a victim" and take responsibility for what is happening into their own hands. Thus, they are less susceptible to stressful influences than externals, who perceive the situation as a result of external circumstances and, accordingly, are more vulnerable.
- C. The level of personal anxiety (a stable tendency to perceive a wide range of situations as threatening and respond to them with a state of anxiety). Anxiety is not inherently a negative trait. A certain level of anxiety is a natural and obligatory feature of a dynamic personality that supports the instinct of self-preservation. At the same time, high personal anxiety is closely associated with neurotic conflict, emotional breakdowns, and psychosomatic diseases. Therefore, openness, interest in changes, and attitude towards them not as a threat but as an opportunity for development against the background of an adequate level of personal anxiety leads to an increase in stress resistance.
- D. The balance of achievement and avoidance motivation (people motivated to achieve something are easier to endure a stressful situation than people motivated to avoid failure) [29].

According to the Theory of Stress Resistance, all people are divided into four groups [12]. "Stress-resistant" people are characterized by the maximum possible rigidity concerning external events. They are not inclined to change their behavior and adapt to the outside world. Their attitudes and concepts are unshakable. Therefore, any adverse external event or even a hint of its possibility in the future is stressful for them.

"Stress-trained" people are ready for change, but not global and not instantaneous. Therefore, they try to transform their lives gradually, naturally, and painlessly, and when this is impossible for objective reasons, they become irritable or depressed. However, as the tense situations approximately similar in content are repeated, the "stress trainees" get used to and respond to stresses more calmly.

"Stress-inhibiting" people are distinguished by the rigidity of their life principles and ideological attitudes. However, they are quite calm about sudden external changes. They are fundamentally not ready to change gradually, but they can go for a quick and one-time change in one or another area of their life, for example, abruptly changing jobs. However, if stresses follow one after another, especially if they are sluggish, they gradually lose their presence of mind and control over their emotions.

"Non-stress-resistant" people generally cannot adequately withstand the stresses in their lives, which causes them severe psychosomatic illnesses [30].

Stress resistance of a person is characterized as the ability to respond relatively calmly to various changes. Therefore, stress resistance is the ability to function effectively in unstable and crises. The structure of stress resistance as a complex personal construct includes worldview and attitude factors, such as a positive attitude, cheerfulness, confidence, and constructive activity in difficult situations that require persistence, courage, and faith in their positive resolution [13]. A positive attitude and cheerfulness are essential to a person's psychosocial health. Also, the individual stress resistance of the body will depend on heredity, personal life experience, self-esteem, temperament, level of social adaptation, achievement motivation, and subjective attitude to what is happening.

Thus, the stress response depends on the individual characteristics of the individual. For example, in melancholics, stress reactions are most often associated with excitation of the constitution (anxiety or fear, phobia or neurotic anxiety). In choleric people, the typical stress reaction is anger. In phlegmatic people, under the influence of stress, the activity of the thyroid gland decreases, the metabolism slows down, and the blood sugar content may increase, which leads to a pre-diabetic state. Sanguine people with a robust nervous system are the easiest to endure stress.

Since stress plays its role in pre-nosological painful reactions and chronic diseases, medical and psychological rehabilitation, if we consider it as work with emphasis, finds its place at all stages of the treatment process, including the hospital one [31]. The ultimate goal of medical and psychological rehabilitation measures is to increase the likelihood of a favorable outcome in three situations:

- In the cognitive and emotional assessment of potential threats to significant needs – stress or lack of tension;
- In chronic stress – transition to distress or the formation of a specific adaptation, at this stage, it is possible to reduce pre-painful dysfunctions ultimately;
- In case of distress and a developed chronic disease, a response to stressful circumstances with an exacerbation of the disease or the formation of healthier coping strategies with a subsequent reduction in symptoms [24].

Possible steps of anti-stress therapy:

- Emergency stress relief ("resource" psychotherapy techniques, psychopharmacotherapy);
- The formation of specific adaptation to psycho-emotional stressors (psychotherapy aimed either at overcoming the situation or at adapting to it by reassessing the stressful signals of the environment);
- Increase in anti-stress physiological resources (pharmacotherapy, physiotherapy, lifestyle improvement) [5].

Thus, considering the essence of stress and its role in forming pre-morbid manifestations and chronic diseases, it is possible to propose a classification of the goals of anti-stress measures depending on the level of stress disorders:

1. The patient is healthy and assesses the potential threats of environmental changes; it is necessary to: increase anti-stress resources and expand coping strategies.
2. The patient experiences chronic stress, it is necessary: for stress relief, psychotherapy, and increased anti-stress resources.
3. The patient is in distress or already has a chronic disease, it is necessary: specific treatment, stress relief, psychotherapy, increase in anti-stress resources [33].

Understanding the essence of stress will make it possible to determine the necessary number of measures for psychosocial

rehabilitation and more clearly define the targets of influence, thereby increasing the effectiveness of therapeutic measures [22].

## 5 Conclusion

Modern man experiences colossal nervous overload caused by abundant negative information and critical situations. In addition, our time is marked by the emergence or intensification of many stressful factors that devastate mental and physical health. Long-term stresses negatively impact mental cognitive processes and the emotional-volitional sphere, mental states, and personality traits, leading a person to emotional and professional burnout, depression, and psychosomatic diseases. Chronic stress can disable almost all physiological systems of a person. The body cannot constantly be in a state of anxiety and tension. Stress is, first of all, the over-mobilization of all resources. It can not only exacerbate existing diseases but also provoke a new diseases. Stress influences the work of all body systems and changes a person's whole life.

In the fight against long-term stress and its consequences, the most successful are integrated approaches to preventing and relieving adverse manifestations of stress. A doctor, teacher, or coach's use of any one direction of stress correction is similar to the symptomatic treatment of a disease. Stress management should be consistent with the current understanding of stress. So, we believe that stress does not determine individual aspects and reactions but is a holistic, integral state of the personality. In that case, the personality acts as an integral multi-level system; then, stress correction should be carried out not by separate influences aimed at combating individual symptoms but by a system, a complex of influences aimed at optimizing the individual's state as a whole. Thus, it is necessary to solve the stress correction problem from an integrated approach standpoint.

An integrated approach should include not only the integrated use of drug and non-drug methods and means but also a system of professional selection, during which it would be possible to exclude people with low-stress tolerance, and thus, even at the stage preceding the impact of extreme factors, increase in the selected contingent, one of the components of the psycho-physiological support of stress resistance.

## Literature:

1. Bachrach, L. L.: *Psychosocial rehabilitation and psychiatry in the care of long-term patients*. American Journal of Psychiatry, 149, 1992. 1455–1455 pp.
2. Cardena, E., Koopman, C., Classen, C., Waelde, L. C. & Spiegel, D.: *Psychometric properties of the Stanford Acute Stress Reaction Questionnaire (SASRQ): A valid and reliable measure of acute stress*. J. Trauma Stress, 13(4), 2000. 719–734pp.
3. Cirineu, C. T., Fiorati, R. C., & Muñoz, C. M.: *Autonomy of people with psychological suffering from the perspective of work: Perceptions of users and their families*. Revista Colombiana de psiquiatria (English ed.), 51(4), 2022. 272–280 pp.
4. Crosswell, A. D., & Lockwood, K. G.: *Best practices for stress measurement: How to measure psychological stress in health research*. Health Psychology Open, 7(2), 2020. 2055102920933072.
5. Garfin, D. R., Thompson, R. R. & Holman, E. A.: *Acute stress and subsequent health outcomes: A systematic review*. J. Psychosom. Res. 112, 2018. 107–113 pp.
6. Gelkopf, M., Hasson-Ohayon, I., Bikman, M., & Kravetz, S.: *Nature adventure rehabilitation for combat-related posttraumatic chronic stress disorder: A randomized control trial*. Psychiatry research, 209(3), 2013. 485–493 pp.
7. Glynn, S. M., & Jansen, M. A.: *7 A Way Forward Enhancing Training in Psychosocial Interventions*. Recovering the US Mental Healthcare System: The Past, Present, and Future of Psychosocial Interventions for Psychosis, 159, 2022.
8. Hannibal, K. E., & Bishop, M. D.: *Chronic stress, cortisol dysfunction, and pain: a psychoneuroendocrine rationale for*

- stress management in pain rehabilitation. *Physical therapy*, 94(12), 2014. 1816–1825 pp.
9. Idores, A. R., Geraldo, A., & Martins, H.: *The Road to Digitally-Driven Mental Health Services: Remote Psychological Interventions*. Digital Therapies in Psychosocial Rehabilitation and Mental Health. IGI Global, 2022. 42–71 pp.
10. Johnson, J. D., Barnard, D. F., Kulp, A. C., & Mehta, D. M.: *Neuroendocrine regulation of brain cytokines after psychological stress*. *Journal of the Endocrine Society*, 3(7), 2019. 1302–1320 pp.
11. Landeo-Gutierrez, J., & Celedón, J. C.: *Chronic stress and asthma in adolescents*. *Annals of Allergy, Asthma & Immunology*, 125(4), 2020. 393–398 pp.
12. Longo, D. A., & Peterson, S. M.: *The role of spirituality in psychosocial rehabilitation*. *Psychiatric Rehabilitation Journal*, 25(4), 2002. 333 p.
13. Mandel, A. R., & Keller, S. M.: *Stress management in rehabilitation*. *Archives of physical medicine and rehabilitation*, 67(6), 1986. 375–379 pp.
14. Mercken, E. M., Hageman, G. J., Schols, A. M., Akkermans, M. A., Bast, A., & Wouters, E. F.: *Rehabilitation decreases exercise-induced oxidative stress in chronic obstructive pulmonary disease*. *American journal of respiratory and critical care medicine*, 172(8), 2005. 994–1001 pp.
15. Moench, K. M., Breach, M. R., & Wellman, C. L.: *Chronic stress produces enduring sex-and region-specific alterations in novel stress-induced c-Fos expression*. *Neurobiology of stress*, 10, 2019. 100147.
16. Noushad, S., Ahmed, S., Ansari, B., Mustafa, U. H., Saleem, Y., & Hazrat, H.: *Physiological biomarkers of chronic stress: A systematic review*. *International journal of health sciences*, 15(5), 2021. 46 p.
17. Overchuk, V., Kushnir, J., Shportun, O., Matokhniuk, L., Sydorenko, Zh., Vasyuk, K., Shevchuk, V., & Bloschchynskiy, I.: *Improving the Quality of Life of Persons with Disabilities by Promoting Their Professional Rehabilitation*. *Universal Journal of Public Health*, 9(3), 2021. 140 – 148 pp. doi: 10.13189/ujph.2021.090305.
18. Overchuk, V., Smulson, M., Liashch, O., Ihnatovych, O., Kovalova, O., & Smokova, L.: *Personal factors of psychological well-being in conditions of socioeconomic instability*. *AD ALTA: Journal of Interdisciplinary Research*, 12/02-XXXI, 2022. 167–172 pp. [https://www.magnanimitas.cz/ADALTA/120231/papers/A\\_29.pdf](https://www.magnanimitas.cz/ADALTA/120231/papers/A_29.pdf).
19. Overchuk, V., Yaroshchuk, M., Danylchenko, T., Litvinova, A., & Absalyamova, L.: *Metodologia de aconselhamento psicológico para superar uma crise de vida*. *Laplage Em Revista*, 7(Extra-E), 2021. 359–368 pp.
20. Overchuk, V., Zahnitko, A., Afanasieva, N., Maliar, O., Lapshova, N., & Shevchenko, I.: *The ways to improve of the medical-social examination in the context of vocational rehabilitation of the persons with disabilities in Ukraine*. *AD ALTA: journal of interdisciplinary research*, 11/02/XXIV, 2021. 165–171 pp. [https://www.magnanimitas.cz/ADALTA/110224/papers/A\\_29.pdf](https://www.magnanimitas.cz/ADALTA/110224/papers/A_29.pdf).
21. Penk, W., & Flannery Jr, R. B.: *Psychosocial rehabilitation*, 2000.
22. Reineke, L. C., & Neilson, J. R.: *Differences between acute and chronic stress granules, and how these differences may impact function in human disease*. *Biochemical pharmacology*, 162, 2019. 123–131 pp.
23. Rohleder, N.: *Stress and inflammation—The need to address the gap in the transition between acute and chronic stress effects*. *Psychoneuroendocrinology*, 105, 2019. 164–171 pp.
24. Sher, L. D., Geddie, H., Olivier, L., Cairns, M., Truter, N., Beselaar, L., & Essop, M. F.: *Chronic stress and endothelial dysfunction: mechanisms, experimental challenges, and the way ahead*. *American Journal of Physiology-Heart and Circulatory Physiology*, 319(2), 2020. 488–506 pp.
25. Taylor, R. R., Jason, L. A., Shiraishi, Y., Schoeny, M. E., & Keller, J.: *Conservation of resources theory, perceived stress, and chronic fatigue syndrome: Outcomes of a consumer-driven rehabilitation program*. *Rehabilitation Psychology*, 51(2), 2006. 157 p.
26. Tian, P., O'Riordan, K. J., Lee, Y. K., Wang, G., Zhao, J., Zhang, H., et al.: *Towards a psychobiotic therapy for depression: Bifidobacterium breve CCFM1025 reverses chronic stress-induced depressive symptoms and gut microbial abnormalities in mice*. *Neurobiology of stress*, 12, 2020. 100216.
27. Turner, A. I., Smyth, N., Hall, S. J., Torres, S. J., Hussein, M., Jayasinghe, S. U., et al.: *Psychological stress reactivity and future health and disease outcomes: A systematic review of prospective evidence*. *Psychoneuroendocrinology*, 114, 2020. 104599.
28. Vella, M. A., Warshauer, A., Tortorello, G., Fernandez-Moure, J., Giacalone, J., Chen, B. et al.: *Long-term functional, psychological, emotional, and social outcomes in survivors of firearm injuries*. *JAMA surgery*, 155(1), 2020. 51–59 pp.
29. Wallensten, J., Åsberg, M., Wiklander, M., & Nager, A.: *Role of rehabilitation in chronic stress-induced exhaustion disorder: A narrative review*. *J. Rehabil. Med.*, 51(5), 2019. 331–342 pp.
30. Wang, J., Mann, F., Lloyd-Evans, B., Ma, R., & Johnson, S.: *Associations between loneliness and perceived social support and outcomes of mental health problems: A systematic review*. *BMC Psychiatry* 18(1), 2018. 156 p.
31. Westfall, S., Caracci, F., Estill, M., Frolinger, T., Shen, L., & Pasinetti, G. M.: *Chronic stress-induced depression and anxiety priming modulated by gut-brain-axis immunity*. *Frontiers in Immunology*, 12, 2021. 670500.
32. World Health Organization: *Psychosocial rehabilitation: a consensus statement*. *International Journal of Mental Health*, 26(2), 1997. 77–85 pp.
33. Wu, M., Wang, W., Zhang, X., & Li, J.: *The prevalence of acute stress disorder after acute myocardial infarction and its psychosocial risk factors among young and middle-aged patients*. *Scientific Reports*, 12(1), 2022. 7675.
34. Xiao, S. Y.: *Theoretical basis and research application of "Social Support Rating Scale"*. *J. Clin. Psychiatry*, 4(2), 1994. 98–100 pp.

#### Primary Paper Section: A

#### Secondary Paper Section: AN