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Techniques for Self-Improvement: Methodological Recommendations for the Application of Integrative Exercises in Therapeutic Physical Culture

Qualification thesis for the degree of Bachelor of Integrative Medicine

Specialization: Therapeutic Physical Culture.

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Saint - Petersburg
2023

Title

Introduction

The need to implement the concept of integrative medicine (Y.L. Shevchenko, S.A. Partsernyak, P.I. Yunatskevich, A.V. Shabrov, Y.K. Yanov, N.P. Vanchakova, 2001) in the work of healthcare institutions is due to the increasing number of so-called "problem" patients (individuals with complex pathology). This includes over 50% of individuals seeking medical assistance in all countries of the world.

Integrative medicine - is a type of medical care that takes an ecological approach to the diagnosis, treatment, and prevention of complex pathology, guided by the conscience rule III-C (do not harm oneself (C1), neighbors (C2), or environment (C3) in thought, word, or deed; create for oneself, neighbors, and the environment through thought, word, and deed).

Complex pathology is a disease that involves the pathological process of various regulatory and effector systems of the body.

A problem patient is a patient with complex pathology. The main principles of the concept of integrative medicine include:

1. Comprehensive examination of the mental and somatic state of the patient, determination of the actual disorders, their hierarchy, identification of interrelationships and mutual dependence of mental and somatic disorders.

2. Development of dynamic therapeutic tactics based on the results of complex diagnostics and oriented towards a systemic approach to the treatment of pathology.

The stages of implementing integrative medicine in the healthcare systems of UN member states include:

3. Establishment of integrative medical care departments in outpatient clinics, hospitals, and sanatorium-rehabilitation facilities of the UN member state's healthcare system.

4. Development of standarts and treatment algorithms for comples pathology for effective interaction with insurance companies.

5. Training and retraining specialists (creating specialists in integrative medicine from somatic and psychiatric fields).

Expected final results of implementing integrative medicine:

1. Recovery and improvement of the well-being of "problematic" patients in 60-90% of cases, while reducing treatment duration by 50-60%.

2. The concept of integrative medicine becomes the theoretical basis for the reorganization of healthcare in UN member states.

Currently, many UN member states are undergoing processes to change the organization of healthcare for their populations. The ideas of a comprehensive (integrative) approach are finding more and more supporters among the advanced medical community.

The relevance of integrative medicine has grown in recent years due to the

increasing interest of people in synthesizing traditional medicine with additional methods of treatment and approaches to health and well-being. Integrative medicine combines traditional, alternative, and complementary methods of diagnosis, treatment, rehabilitation, and prevention. These methods can be used separately or in combination with traditional methods of treatment.

Studying integrative medicine is important for two reasons. Firstly, it can help to identify the effectiveness and safety of different methods of treatment and approaches to health. Secondly, it can help to develop integrated approaches to treatment that combine traditional, alternative, and complementary methods, which may be more effective and acceptable for patients.

Integrative medicine can also be useful in the context of treating chronic diseases such as cancer, diabetes, cardiovascular diseases, and others. Research can help determine which complementary methods can help reduce symptoms and improve the quality of life for patients.

According to the definition of the World Health Organization, HEALTH is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

If we consider the health of a person (student) as a whole, the division of factors affecting overall health is determined as external and internal.

Inheritance (or genetic factors), ecology (or the state of the environment), as well as medical care, are objective risk factors that do not depend on the person themselves, while conditions and lifestyle are subjective factors that depend directly on the person and can be influenced. It is these subjective factors that we refer to as consience, physical, psychological, and social health, which are interconnected.

Health is the result of choosing to live a more conscious life, being more responsible for one's own well-being, emotional and Internal well-being. The problem of human health lies within the individual. These ancient truths require deep scientific, socio-philosophical, and spiritual-moral reflection in order to understand the true causes of the modern situation indicating the poor health of individuals and society.

The aim of this work is to substantiate the philosophical basis of Techniques myself and develop methodological recommendations for the application of integrative exercises in therapeutic physical culture.

Research object: human activity aimed at ensuring the preservation of their health. *Research subject*: the process of ensuring the preservation of human health through the application of self-technique as integrative complexes of therapeutic physical culture exercises.

Hypotheses to be defended:

The philosophical basis of techniques myself is the global ecological principle (GEP) - do not harm yourself. The global ethical principle of conscience (GEPC) follows from the global ecological principle - one should behave in such a way as not to harm oneself and other people.

The global ethical principle of conscience forms the basis of ecological behavior (rules of conscience) III-C: do not harm yourself (C1), neighbors (C2), the environment (C3) in thought, word, or deed; create for oneself, neighbors, and the environment with thought, word, and deed.

Techniques myself are integrative complexes of psychophysiological exercises that correspond to the first part of C1 of the ecological behavior (rules of conscience) III-C: do not harm oneself (C1) in thought, word, or deed; create oneself (C1) with thought, word, and deed.

Research tasks:

1. Conduct a review of theories and concepts of integrative medicine, techniques of therapeutic psychophysiological exercises in various countries of the world.
2. Analyze the achievements of medicine in the field of therapeutic physical culture.
3. Justify the philosophical basis of techniques myself.
4. Conduct a review of methods of treatment, prevention, and medical rehabilitation that are based on the use of methodically developed and specially selected physical exercises. When prescribing them, compare the nature of the disease, its features, stage, and degree of pathological process in the organs and systems.

Theoretical and methodological basis of the study.

Humanity in the modern worldview finds itself, as it were, in its own captivity, but also faces the necessity of change. Otherwise, we fall into an intellectual "black hole," not only in astrophysics, but also in the understanding of ourselves.

The existence of a person is connected with their health, which has, at least, three aspects directly related to their ecology in the present era. First of all, this is physical and mental health. Of course, this is also spiritual health, which implies the absence of selfishness, tolerance, compassion, striving for unity with nature, and universal love. In an inseparable connection with the spiritual is mental health, which is the harmonious combination of the conscious and the subconscious, which provides the stability of the human organism and the inherited mechanisms of adaptation to the environment.

Physical health is an integral indicator that is meaningless without mental and spiritual health.

Is a unified theory of health possible at the current stage of human sciences? To clarify this issue, let us consider whether it is possible to combine traditional and non-traditional concepts of medicine and create an integrative history of health based on such integration.

The philosophy of health that underlies traditional medicine is based on the commonly accepted understanding of the fundamental laws of existence and the concepts of the human being, in which the physical determines the psychological, and thought is considered a function of the brain. This means that the foundation

of traditional medicine is a scientific worldview. The foundation of integrative medicine, however, is the consience worldview of the human being, which includes the *global ecological principle* (GEP) - do not harm yourself. From the global ecological principle stems the *global ethical principle of conscience* (GEPC) - one must behave in such a way as not to harm oneself and other people. *The global ethical principle of conscience* forms the basis of *the Rule of Conscience* III-C: do not harm yourself (C1), neighbors (C2), or the environment (C3) by thought, word, or deed; create for yourself, neighbors, and the environment by thought, word, and deed.

If traditional medicine is based on the worldview of materialism, then integrative medicine is oriented towards prioritizing the spiritual over the material. There is a need to integrate theoretical concepts of health from various sciences that study humans. A general theory of health cannot be limited to the concepts of medicine formulated by proponents of a materialistic paradigm of thinking.

It is evident that the search for ways to construct a general theory of health goes hand in hand with a shift in worldview paradigm. The problem of creating an integral theory of health is related to the fundamental question of philosophy: what is more valuable, the human being or matter?

Research methods: Various methods are applied in this thesis, including:

Clinical trials – conducted to determine the effectiveness and safety of integrative treatment methods compared to traditional methods.

Meta-analysis – a systematic analysis of the results of multiple clinical trials that allows for an overall view of the effectiveness and safety of integrative treatment methods.

Research on molecular and biochemical mechanisms – explores the mechanisms of action of integrative treatment methods at the molecular and biochemical levels.

Sociological research – investigates the views and opinions of patients and medical professionals on integrative medicine, as well as its use and development.

Studying the impact on quality of life - investigates the impact of integrative treatment methods on the quality of life of patients with various diseases.

Safety studies - investigate possible side effects and interactions of integrative treatment methods with traditional methods.

The scientific novelty of this topic is related to its relevance in the modern world and the lack of scientific research in this area. Research may include assessing the effectiveness and safety of using integrative medicine for the treatment of various diseases, developing new integrated approaches to the treatment and prevention of diseases, studying the mechanisms of action of integrative treatment methods, and evaluating the impact of different factors on the effectiveness and safety of integrative medicine. The results of the research can contribute to improving the quality of treatment and the health of patients, as

well as expanding the possibilities of integrative medicine in the modern world.

The theoretical significance lies in clarifying the theoretical foundations and principles underlying integrative medicine, as well as systematizing scientific information regarding its effectiveness and application in clinical practice. The thesis will establish the possibilities and advantages of integrative medicine in the treatment of various diseases, and will contribute to the development of scientific knowledge and practical skills in applying this approach in medicine. In addition, the research results may be useful for improving medical education programs and for developing effective strategies for managing population health.

The practical significance of integrative medicine lies in the development of techniques aimed at improving the well-being of patients. The results of the study can be useful for doctors of various specialties working in different medical institutions.

The practical significance of integrative medicine lies in the development of techniques aimed at improving the well-being of patients. The results of the research can be useful for physicians of different specialties working in various medical institutions. The thesis can help doctors understand the principles of integrative medicine and apply them in practical work. Additionally, the study can serve as a basis for further research in the field of integrative medicine and contribute to the development of new methods of treatment and preservation of patients' health.

The following statements are presented for defense:

The philosophical basis of therapeutic and preventive exercises (techniques myself) is composed of the global ecological principle (GEP - a person should not harm oneself) and the global ethical conscience principle (GECP - one should behave in such a way as not to harm oneself and other people), which form the ethical and ideological foundation of techniques myself.

The conscience rule III-C (not to harm oneself (C1), neighbors (C2), and the environment (C3) by thought, word, or deed; to create for oneself, neighbors, and the environment through thought, word, and deed) forms the technological basis of techniques myself.

Techniques myself are integrative complexes of psychophysiological exercises that correspond to the first part of the C1 conscience rule III-C: do not harm yourself (C1) with your thoughts, words, or actions; create yourself (C1) with your thoughts, words, and actions.

When practicing techniques myself, a person exercises ecological conscience thinking, not allowing harm to themselves or others through their thoughts, since not harming others also means not harming oneself. Additionally, when practicing techniques myself, a person does not allow harm to themselves or others through their words and actions, ensuring the preservation of their life, conscience, and somatic health.

A person's conscience is a state of their psyche that is ensured by observing the conscience rule III-C in their behavior. Somatic health depends on a person's

conscience and is ensured by techniques myself based on a specific integration of therapeutic physical culture exercises.

The practical testing of this work was carried out at the Institute of Integrative Medicine in St. Petersburg.

Chapter 1. History of Integrative Medicine

1.1. Overview of Theories and Concepts of Integrative Medicine

The concept of integrative medicine involves combining traditional methods of treatment with a complex of non-traditional methods based on the principles of folk medicine and alternative approaches. Its main tool is a systemic approach that allows for the treatment of a person strictly according to their problems, rather than standard schemes. This holistic approach to human health and illness encourages both the patient and the doctor to pay special attention to lifestyle, diet, physical activity, rest, leisure, sleep, and relationships.

The first stage of the development of integrative medicine emerged in ancient times when doctors used various methods of treatment, including various herbal remedies, massage, and yoga. During this period, many traditional medical systems were born, such as Chinese, Indian, and Ayurvedic medicine.

The second stage of the development of integrative medicine occurred during the Middle Ages and the Renaissance when new methods of treatment were developed, such as surgery and pharmacy. This stage opened up new possibilities for combining different methods of treatment and also reinforced the role of evidence-based medicine.

The third stage of the development of integrative medicine occurred in the 20th century when new treatment techniques emerged, such as minimally invasive surgery and molecular medicine. This stage was also defined by the growing popularity of alternative and complementary methods of treatment, which led to the development of the concept of integrative medicine.

Today, we can note the fourth stage of development of integrative medicine, characterized by the use of modern technology and scientific research, allowing for the combination of different treatment modalities such as pharmacotherapy, surgery, alternative medicine, psychological support, dietetics, and physical exercise. This approach provides an individualized approach to each patient, which allows for the best results in treatment.

Thus, the historical stages of the development of integrative medicine theories reflect the evolution of the approach to treatment, which begins in antiquity and continues to this day. This approach provides for the combination of different treatment methods in order to achieve the most effective result and provides an individualized approach to each patient.

Integrative medicine is an approach to treatment that combines traditional treatment methods with alternative and complementary methods to help prevent diseases, maintain health, and well-being of patients. Modern theories of integrative medicine reflect new ideas and approaches to treatment based on scientific research and the experience of doctors.

One of the theories of the concept of integrative medicine is the theory of functional medicine. This theory is based on an understanding of health and disease as a result of the functioning of all organ systems. According to this theory, diseases arise when the body's ability to adapt to changes in the environment is disrupted. Functional medicine uses an individualized approach to treatment focused on maintaining functional harmony of all organ systems.

Another theory is the theory of informational medicine. According to it, the body can be viewed as a system that stores and processes information. Treatment with the help of informational medicine is focused on changing the information structure of the body, which can lead to changes in physiological functions. This theory uses various methods of treatment, including electromagnetic therapy and acupuncture.

The third theory is the theory of evidence-based medicine. This theory believes that integrative medicine should be based on scientific research and evidence of the effectiveness of treatment methods. It uses complementary and alternative treatment methods that have been proven effective in scientific research. The theory of evidence-based medicine also recommends integrating psychological and social support into the treatment plan.

The final theory is the theory of humanistic medicine. It focuses on supporting the patient and their health needs rather than focusing on the disease. Humanistic medicine believes that the patient should be involved in the decision-making process of treatment, and the doctor should answer all of the patient's questions and provide support and assistance during difficult times.

In summary, modern theories of integrative medicine include functional medicine, information medicine, evidence-based medicine, and humanistic medicine. Each of these theories has its own approaches and treatment methods that provide an integrative approach to treating and maintaining patient health.

Modern scientific research in integrative medicine focuses on researching the effectiveness of different treatment methods and their combination in a comprehensive approach. Research is conducted in various medical fields, including oncology, neurology, cardiology, gastroenterology, and others.

One area of research is investigating the effectiveness and safety of traditional medicine, such as herbal therapy, Ayurveda, Chinese medicine, and others, in combination with modern treatment methods. For example, a study was conducted on the effectiveness of Ayurvedic digestive remedies in combination with chemotherapy in breast cancer treatment.

Another direction of research is the investigation of the effectiveness and safety of alternative treatment methods such as massage, acupuncture, yoga, meditation, and others. For example, studies have been conducted on the effectiveness of yoga in treating depression and anxiety, which have shown a positive effect of such treatment.

Studies are also being conducted on the effectiveness of integrative medicine in the treatment of chronic diseases such as diabetes, cardiovascular diseases, respiratory diseases, and others. Research shows that an integrative approach to

treatment can help patients reduce symptoms and improve their quality of life.

Therefore, modern scientific research on integrative medicine focuses on studying various aspects of the integration of traditional and modern medicine, in particular, on studying the mechanisms of action of various methods of treatment and their interaction.

In addition, modern research on integrative medicine includes studying the role of lifestyle factors such as nutrition, physical activity, and stress in maintaining health and treating diseases. Such studies help establish a connection between different aspects of life and human health.

An important direction of research is the study of the effectiveness and safety of integrative approaches in palliative care, i.e. in the treatment of patients with complex and incurable diseases, particularly cancer. Such research helps improve the quality of life and provide comfort to patients in the final stages of life.

Summarizing the theories and concepts of integrative medicine, it can be concluded that this approach to treating patients is effective and promising. Integrative medicine combines traditional methods of treatment with modern ones, allowing for the preservation of the positive qualities of each approach while avoiding their shortcomings and side effects. This approach to treatment focuses on the whole person rather than just their illness, providing a more individualized approach to treatment. Integrative medicine allows for the involvement of various specialties and methods in treatment, expanding the possibilities of treatment and increasing the effectiveness of the healing process. Today, integrative medicine continues to develop, and research on its effectiveness and safety is becoming increasingly relevant.

The famous ancient healer Hippocrates believed that the main thing was to treat the patient, not the disease. Centuries passed, medicine changed. Ancient healers took on everything, not being embarrassed by the lack of knowledge and opportunities. But science developed, specialized education became more accessible. And finally, the healthcare system that concerns each of us was formed. In the last 50 years, a specialized model of medicine has developed. However, rapid technological progress has not led to desirable results in either diagnosis or therapy. For example, the effectiveness of diagnosing and treating major chronic diseases has only increased by 5-7%.

The problems of treating cancer, cardiovascular diseases, connective tissue disorders, AIDS, and others remain unsolved. The development of medicine in many directions of the narrow specialized model has reached a dead end.

What is the way out of the current situation?

The reasonable combination of narrow specialized and comprehensive models of healthcare gives us integrative medicine.. *The integrative approach to providing medical care to the population should become the ideology of our doctors in the first place.*

The basis of the idea is a serious change in the healthcare system, with the main element being the person.

Integrative medicine is a synthesis and interpenetration of the knowledge

riches accumulated by narrow specialists and holistic models of alternative medicine diagnostics and treatment. General practitioners should embody these principles. However, society is not yet ready to create a full-fledged family medicine institution. This is due to the population's attitude towards their own health and the conditions offered by modern practice. Long-standing Soviet stereotypes show their influence: since healthcare is free, then health is worth nothing. There is a prevailing and extremely reckless attitude towards personal health, which leads to the late diagnosis of many diseases.

If necessary dispensary screening is not carried out in a timely manner, if mortality from myocardial infarction is 20%, and from pneumonia - 7-8%, what can be said about the health of society? In this regard, it is important to develop the ideas of integrative medicine.

We need serious changes in the medical education system.

The "expansion" of integrative medicine in hospitals will significantly reduce the number of specialized beds and almost halve the costs for one "problematic" patient with combined pathologies. Patients will not be referred from one specialist to another and back, and they will not have to undergo a multitude of duplicated examinations. Hospital stays will be significantly reduced.

A reasonable combination of specialized and complex models of medicine will allow Russian healthcare to create a methodological basis for its way out of the crisis.

In order for integrative medicine to move from ideology to methodology, we need active work and practical support from the leadership of our country. It is not enough for narrow specialists and doctors with comprehensive training to make efforts to solve all the problems of modern healthcare. Key questions arise about what and how quickly doctors and patients are willing to understand and accept, how their perception of the world and themselves, the processes of diagnosis, treatment, prevention, and rehabilitation of diseases will change. What meanings and values can and should be preserved, and what will have to be abandoned.

Perhaps the full extent of the problem of the dialogue between two healthcare models - narrow-specialized and comprehensive, as well as two cultures - natural-scientific and humanitarian, has arisen in our century. Scientists whose names have come down to our time were usually encyclopedists, personalities who integrated two cultures - humanistic and technical - into themselves in their practice. They synthesized in their practice a narrow-specialized and comprehensive model of providing medical care. For example, Avicenna was not only a doctor but also a brilliant theologian and lawyer.

Over the past two centuries, the paths of natural and humanitarian sciences have begun to diverge rapidly. Physics, chemistry, mathematics, and medicine have rapidly moved along the path of specialization. And since the second half of the century, there have been so many "doctors" (therapists, surgeons, psychiatrists, etc.) that colleagues now often have only a very approximate idea of the diagnostic and therapeutic equipment used in the neighboring department. And yet, at the beginning of the century, D.I. Mendeleev, discussing university education,

proposed to train specialists in mathematics, physics, chemistry, and biology on one faculty.

The most important mysteries during previous research have remained without due attention. Medicine, natural sciences, computer modeling have dealt with how nature works, pathogenic processes, and how to create and sell new products. But will all of this make the lives of some people happy and others at least tolerable? There is no answer.

Healthcare ideologists of the 1960s armed social reformers of the 1990s with excellent theories capable of, when applied, quickly reducing mortality and morbidity levels of some nations by decades and others to the Middle Ages. The path of healthcare paved with "universal values", "open society ideology", "specialization decorations" and other good intentions quickly led to the hell of a vicious circle of a patient going from one specialist to another, from a traditional doctor to a "magician" and "wizard". And again, "they wanted the best, but it turned out as always". Faith instead of medical knowledge, pharmaceutical and psychoanalytic myths instead of calculations, the darkness of computer magic, the obscurity of sorcerers and psychics, darkness instead of light.

The end of the century became an era of bitter sobriety for doctors - neither specialized diagnostics, treatment, rehabilitation, nor supercomputer medical technology, nor millions of new medical and healing goods and services thrown into the market were able to provide not only peace, harmony, hope for recovery "tomorrow", but also simply improve well-being "today".

Unfortunately, at the end of the last century, interdisciplinary synthesis aimed at developing new directions for healthcare, the ideology of medicine in the 21st century was not a game of intellect, not academic wisdom, not a "flag" of economic initiatives for property redistribution, born in the silence of corridors of power, but an urgent necessity. Narrow specialists did not pass the test in the 21st century. Together we must answer to history and the development of civilization.

The elite of the medical community must come to an agreement, see alternatives, and offer acceptable solutions, saying what price will have to be paid for each of them.

In search of common meanings in diagnosis, treatment, and rehabilitation, and a common language, scientific research is being conducted on a wide front, monographs are being published, and conferences are being held. However, there are unconscious barriers or myths that arise in the way of joint search. Let's take a closer look at them.

The Myth of Panacea

This aberration of mass consciousness arose in the 1960s when scientists engaged in interdisciplinary research were developing precise diagnostic and therapeutic technologies. Economists were formulating precise developments into "cures for all diseases". After patients purchased such medical products, they

naturally became disappointed and offended.

The Myth of Three Pines

The mass of specialized scientific work, starting from the 1950s, began to carry the duplication of the conceptual apparatus of other specializations, creating something new - "incomprehensible words." The reader memorized new definitions, highlighted specific relationships, learned to differentiate, and "wandering among the three pines" couldn't see the forest for the trees. As a result, each specialist learned to find their own disease in any patient.

The Myth of the Scientific Swamp

Medical science is like a swamp. There is nothing stable if a professional researcher digs deeper. On this swamp, relatively stable mounds are formed - scientific schools. The student is only allowed to rely on a specific "native mound". If they change the traditional views of the "mound" on diagnosis, treatment, and prevention to some other - their colleagues and supervisors will simply "drown" them. As a result, the patient became a hostage to the scientific school - the "mound". Usually, this led to a struggle of beliefs, not treatment tactics.

The Myth of One's Own People

The system of convincing the patient of their complete lack of understanding of their illness and delegating responsibility to a competent doctor, i.e. "their own person", whom they can "trust", was created by narrow specialists. This led to manipulation of the patient. They are directed in a circle of "their own people". Moreover, there is no end to this circle because no one can really change the patient's situation. The primacy of beliefs began to dominate over competence and science. Now only "their own" people are appointed to key positions in medical institutions. Professionals remain outside the circle of attention. After all, they will really begin to treat, and what medical organizer needs that? They need a flow of patients, not a drainage of healthy ones, and it doesn't matter whether they are representatives of the elite of our society or ordinary citizens. Some pay for expensive beliefs of "their doctors," while others settle for petty sums for cheap tales.

Myth of the pile:

In recent times, a significant number of dissertation studies have been written, and a mass of specialists is ready to work on one patient. However, there is no breakthrough in medical science. And a patient cannot afford the luxury of paying a "pile" of "specialists" to work on themselves. As a result, the pile of specialists works on a stream of patients. This is how "seven nurses take care of a child

without an eye" happens. Reading a lot of literature on healing only leads to prolonging the illness. Can you learn to swim from a textbook when you are drowning?

Myth of love for wisdom:

Every leader in the medical community considers themselves the "wisest." Their interpretations are the guidelines for the medical community's actions. They make their immediate surroundings think the same way. Reading the flattery in the eyes of their fans and followers, they allow themselves to fall into delusion. Chronic hidden alcoholism makes them think situationally. Self-criticism is lost. The "wise man" becomes a hostage to their environment, echoes their thoughts, makes opportunistic moves... Wait, where is the patient? In a staged operation or session.

Myth of scientific confessions:

Recently, in medicine, scientific schools have emerged, whose activities are built on the principles of confession. The participants of this school pretend to believe in the ideas and principles of a spiritual leader, a teacher whom they deify. They express all kinds of ritual sacrifices in the form of joint scientific works, co-reports, co-authors, etc. Scientific conspiracies ripen in the confession; their small confessions are created, into which new representatives of the medical community are involved, and supporters are attracted from another confession. The patient becomes a hostage to this game, in which the leader of the confession is forced to devote their best efforts and time to maintaining their movement rather than working with their patients. Moreover, confessional construction deprives the specialist of clinical practice.

Thus, we see an urgent need for the development of healthcare. In one way or another, the situation calls for fundamental change. Integration ideas, in our view, may offer the most adequate philosophy for the development of medicine in the 21st century.

Modern medicine has reached incredible heights in the art of breaking down the whole into parts, namely in the decomposition of the entire pathological process into the smallest components. Scientists have made significant progress in this art to the extent that they often forget to gather the scattered parts into the unified whole of health that they once constituted.

The history of medicine appears to us as an arena of passions and fads, desires, greed, thirst for power, violence, ambitious and corrupt leaders, scientific discoveries, and wars for fame. These are only some aspects of medical history. We are just a fragment of this history, and we have a choice - what place we will occupy in the healing profession and medical policy, i.e., the power over patients. We choose cooperation, integration, and synergy.

In modern science, despite the existing differentiation of areas of knowledge and narrow specialization, the principle of the integrity of the cognizable reality is more and more insistently declared. The methodology of systemic research, which develops methods for a holistic and consistent description and modeling, becomes the implementation of this principle.

In medical-biological and psychological research, due to the complexity of the object being studied - human life activity, the approach of partitioning the initial integrity of the "human system" into component elements continues to dominate: the organism, psyche, biological, social, etc.

This methodological approach, justified in studying specific regularities, reveals its inconsistency in attempts to present a complete picture of such systemic processes as homeostasis, adaptation, stress, and disease. This collection of empirical data cannot be reduced to a model of a holistic process. This is illustrated by the fact that, depending on the specialization of researchers, concepts of psychological, socio-psychological, physiological, psychophysiological, etc. adaptation of humans are proposed.

The abundance of specific phenomena cannot be incorporated into a unified system of concepts, while the general direction of the development of science is determined by the goal that Newton formulated: to explain the largest number of facts with the smallest number of initial assumptions.

The inadequacy of the method used for the research object leads to an increase in contradictions between the theory of medicine and its practice, inadequate and ineffective solutions in the field of organizing healthcare and medical-preventive activities. The initial integrity of the human being is replaced by a dual theoretical representation of the "psychic" and "somatic," the integrity of the body - by systems of organs and tissues, and the uniqueness of the subject is leveled by typologies, classifications, and averaging. And the fixation of states in the continuous process of natural development and self-regulation limits the study of the regularities of human life. The organic inclusion of humans in a changing habitat is reflected in concepts of the influence and impact of "environmental factors" on the "psyche," "organism," and "organism systems."

Private theories do not find application in practice, and trust in scientific developments among healthcare practitioners is decreasing. For example, there are over 70 definitions of health, none of which can be considered satisfactory. The link between "internal experiences" and physiological reactions has long been known, and psychosomatic medicine is being formed, but theoretical analysis in this subject area is reduced to fragmentary descriptions of correlations between heterogeneous indicators.

The relevance of the scientific problem is determined by the contradictions between existing theoretical concepts and practical experience. Such contradictions indicate the limited methodological approaches used in theory development. Identifying these limitations is a task of methodological analysis of scientific concepts in the research subject area.

Developing methods for systemic investigation of human life activity is an

urgent problem in medical theory. Therefore, the concept of integrativeness is timely and is designed to reflect an intuitive understanding of wholeness: the body, health, and pathological processes of disease. The whole is more than the sum of its parts. A multitude of particulars does not form a whole. This is the essence of the problem.

Not only is biology, physics, chemistry, psychology, and other disciplines involved in building medical knowledge with equal rights, each with its own model representations and operating with its own system of concepts, but the whole volume of this particular knowledge cannot be accommodated in the understanding of a practicing physician, let alone a narrow specialist.

Therefore, a system of knowledge is necessary to allow the coherent integration of the entire complex of particular knowledge about the functions and structure of the organism.

Attempts to systematize such things are constantly being made, but as experience shows, they come down to using known or less well-known models of mathematical statistics in order to organize the set of available variables. However, such ordering only creates an illusion of systematization, if only because it operates with large sets, while declaring the strictly individual nature of any human organism. The statistics are blind to such contradictions, and in principle, allow the processing of any quantitatively described data. However, data chosen arbitrarily without an understanding of the essence of the process, and conclusions obtained using statistical analysis procedures, do not have practical value and do not reflect the real state of affairs.

Another methodological illusion of scientific medical research is the transfer of regularities observed in vitro processes to in vivo processes. Simple calculations show, for example, that the bioenergetic processes of a living organism are not described by the laws of physical and biological chemistry. The well-known methodology of science, P. Feyerabend, sees the origins of the differences between Western and Eastern medicine in the initial attitude towards the dead body: in the East, its dissection was regarded as sacrilege, while the pragmatic West pursued the path of studying parts of the human body. The question of the effectiveness of one or the other way of knowledge remains debatable, although it is obvious that the dead and the living are fundamentally different things. Describing the living from the point of view of visible morphological structures seems as naive as operating with concepts of life energy and channels of its movement, and the practical effectiveness of Western and Eastern medical practices remains a matter of conjecture. Therefore, the problem is not only or so much to somehow expand the set of biological and medical knowledge, but to develop methods for systematizing already sufficient volumes of empirical data. And this is purely methodological work.

Elements of such work exist, they are contained in such fundamental concepts as reflex activity (I.M. Sechenov, I.P. Pavlov), dominant theory (A.A. Ukhtomsky), theory of functional systems (P.K. Anokhin), stress theory (H. Selye) and adaptation, the concept of homeostasis, visceral-visceral reflexes (K.M.

Bykov), information theory of mental processes (L.M. Vekker), psychological theory of interpersonal relationships (V.N. Myasishchev). Of course, these concepts are not self-sufficient, they describe different aspects of life, but they have systematicity, and they can be laid in the foundation of the theory of integrative medicine. Studying the content and dynamics of pathological processes from the standpoint of these concepts, especially in cases of complex pathology manifesting with polymorphic and nonspecific symptoms, in our opinion, is a promising path of systemic research into the etiology and pathogenesis of such conditions. And this, in turn, is the prospect of pathogenetic therapy, that is, solving the problems of integrative medicine.

The goal of integrative medicine is not just a simple shift in emphasis in the use of certain new therapeutic methods and approaches, including the combined use of herbal and pharmaceutical treatments or the use of herbs instead of pharmaceuticals, but rather the formation of new directions in medicine that aim to promote the patient's recovery rather than symptomatic relief.

Integrative medicine aims to base its treatment technologies on principles that arise from the laws of nature, and to increase the level of mutual understanding between the doctor and the patient. Advocates of this approach believe that integrative medicine will be able to optimally assess the nature of the relationships between the "mind, body, and soul" of patients, which will make it a direction in medicine that is most satisfying for "difficult" patients with complex pathologies.

American understanding of integrative medicine.

The concept of "integrative medicine" is widely discussed in foreign literature, and Americans have recently been paying significant attention to this field. Our colleagues have already made considerable progress in this area. Nevertheless, it is encouraging to note that we have been able to give new meaning to the concept of "integrative medicine" and adapt it to the changing paradigm. It should be noted that, despite the obvious advantages of the American approach to integrative medicine, there are also some drawbacks:

1. Frequent mechanical combination of contradictory and methodically incompatible diverse medical and paramedical concepts and views.
2. Dominance of syndromological or narrowly specialized nosological approaches in diagnosis, in the absence of comprehensive understanding of pathology.
3. High cost of treatment programs implemented.
4. Narrowly specialized corporate interests of medical associations serve as a barrier to the implementation of effective integrative information technologies in the diagnostic and therapeutic process.
5. Training of personnel in integrative medicine lacks unity of views on the diagnosis and treatment of "problematic" or "difficult" patients with complex (combined) pathology.

Thus, according to the modern understanding of our Western colleagues, integrative medicine should analyze and synthesize knowledge obtained from various fields - traditional and alternative medicine - and as a result, serve as the basis for the creation of a new educational, diagnostic, and therapeutic paradigm in 21st century healthcare. We have managed to solve this scientific problem before our foreign colleagues and propose a new ideology to the Ministry of Health.

According to the ideas that emerged in the healthcare systems of Western European and North American countries in the 1980s and 1990s, "integrative medicine" is the synthesis of modern scientific and traditional alternative medicine methods. This does not simply involve adding or combining various methods or approaches, but the development of fundamentally new diagnostic, therapeutic, and educational technologies that are less costly than existing ones and oriented towards achieving the longest possible remissions or recovery for patients.

So what motivates the leading Western countries in healthcare to develop integrative medicine? As Professor Andrew Weil (2000), one of the coordinators of the development and implementation of integrative medicine programs in the United States, believes, traditional medicine has accumulated numerous problems at the turn of the 21st century. The economic crisis of unprecedented proportions has hit healthcare in the United States, bringing significant changes to the relationship between patients and doctors. The problem is that medicine has become too expensive. Almost worldwide, health insurance does not justify itself. In the United States, amidst rising prices for medical services, many hospitals are going bankrupt. It seems quite likely that in the near future, hospitals equipped with high-tech equipment will remain only in large cities (i.e. with populations of more than 80-100 thousand). And only these medical institutions will be able to provide a variety of qualified and specialized care.

From the works of Eisenberg D.M. et al. (1993-2000), Astin J.A. (1998), Weil A. (2000), Relman A.S. (2000), Dalen J.E. (2000), Shang C. (1999), Gonzalez M.J. et al. (2000), and other studies, as well as materials from the First International Congress on Integrative Medicine (1997, Paphos, Cyprus) and the International Conference on Complementary, Alternative and Integrative Research in Medicine (2001, San Francisco, USA), it follows that "the successes of modern conventional medicine are very relative!".

If we disregard infectious diseases, which were the most dangerous in the early 20th century, nowadays we more often deal with complex (combined) chronic diseases that are poorly responsive to therapy, with high costs.

The main reason for the increasing cost of conventional medicine is its high dependence on modern high-tech technologies. Medical technologies are very expensive, and as long as we do not change this dependence, it is impossible to talk about reducing the cost of medical services.

Another powerful socio-economic impulse that contributed to the development of integrative medicine in the United States was the sharp increase in citizen referrals to alternative medicine practitioners over the past two decades of the last century.

Studies have shown that about 40% of urban residents in the United States use alternative medicine services. Most of them hide this from their doctors, representatives of conventional medicine.

There is evidence that the number of visits to alternative medicine specialists exceeds the number of visits to conventional medicine specialists, and the corresponding funds that they spend on alternative medicine exceed the amounts spent on traditional medicine.

Thus, in 1990, Americans made 425 million visits to non-traditional (alternative) medicine practitioners. This number exceeds the number of primary visits made by patients to doctors throughout the country (388 million). The costs amounted to about $13.7 billion. This is comparable to the $12.8 billion paid annually for all cases of hospitalization in the United States (Eisenberg D.M. et al., 1993).

A little about why modern patients seek answers to their pressing questions from representatives of alternative or non-traditional medicine...

The narrow specialization followed by modern traditional medicine, apart from creating progressive diagnostic and treatment technologies, has given rise to complex problems for both doctors and patients. The well-known Hippocratic principle of "treating not the disease, but the patient" unfortunately remains just words in most cases... In this regard, the WHO in the early 1980s declared the principle of holism as fundamental for 21st century medicine.

As academician Agadzhanyan N.A. (1998) believes, today it is necessary to "treat not the disease, and not even the patient, but the person". It is during the treatment process that personal characteristics of the individual, their interaction with environmental factors, and their reaction to them and to the treatment process should be comprehensively evaluated.

At present, the main conceptual positions of the American approach in integrative medicine are presented by the Programs in Integrative Medicine, developed since 1992 at the Center for Integrative Medicine at Duke University in Durham, North Carolina, medical faculties (departments) of the University of Arizona (Tucson) and Harvard University. The executive director-coordinator of the Programs in Integrative Medicine is Professor Tracy Godet. In 1999, after two years of training at the medical faculty of the University of Arizona, the first graduates of "specialists in integrative medicine" were produced in the USA.

European understanding of integrative medicine.

Integrative (mixed or combined, or complex) pathology, including psychosomatic disorders, as shown by our research, is widely represented in clinical practice. This accounts for 60-80% of individuals seeking medical help across the country. The complex nature of dysfunctions in various regulatory and effector systems in major therapeutic and surgical disease groups has necessitated the development of an integrative approach to their diagnosis, treatment, and prevention in domestic healthcare.

AN IMPORTANT ASPECT OF THE NEW SCIENTIFIC OR SCIENTIFIC-PRACTICAL CONCEPT IS THE DEFINITION OF BASIC CONCEPTS AND PRINCIPLES.

From our point of view, integrative medicine is a direction of providing medical care to patients based on a systemic approach to the diagnosis, treatment, and prevention of complex pathology. Complex (combined, mixed, polymorbid) pathology is a disease that involves the pathological processes of various regulatory and effector systems of the body.

A problematic patient is a person with complex pathology. The clinical picture of a "problematic" patient manifests itself as a polysymptomatic condition, where there is a combination of "physical illnesses," "mental illnesses," and "behavioral disorders" that arise against the background of various "abuses". These patients are usually treated by many narrow specialists (cardiologists, pulmonologists, gastroenterologists, urologists, gynecologists, neurologists, psychiatrists, etc.), without receiving adequate positive results from therapy. They visit sessions with psychics and witches, but even on this path, they are met with disappointments, and they return to the "circles" of traditional medicine. The cost of such treatment is undoubtedly high, both financially and morally.

The European concept of integrative medicine (P.I. Yunatskevich, S.A. Parcernyak, A.V. Shabrov) is based on several principles:

comprehensive examination of the patient's mental and somatic state, identification of relevant disorders and their significance, identification of interrelationships and mutual conditioning of mental and somatic pathological disorders;

development of a dynamic treatment strategy based on the results of comprehensive diagnostics and oriented towards a systemic approach.

How, in our opinion, should integrative treatment be organized?

Integrative treatment is a comprehensive medical assistance for patients with combined pathology (examples: neurocirculatory dystonia (NCD) + functional dyspepsia (FD) + irritable bowel syndrome (IBS) + asthenoneurotic syndrome (ANS); ischemic heart disease (IHD) + chronic gastritis and duodenitis (CGD) + osteochondrosis with vertebral pain + ANS, etc.) accompanied by

behavioral disorders (eating, sexual, etc.) that arise against the background of various addictions (alcohol, drugs, etc.).

Such patients should be treated by a "specialist doctor with integrative training" - based on their core specialization, this can be a therapist, surgeon, dermatovenereologist, etc., who has undergone additional training in psychiatry (5-6 months), psychotherapy (3-4 months), and selected areas of alternative medicine (3-4 months). These specialists, as the experience of the Institute of Integrative Medicine (2001-2022) has shown in psychosomatic departments of integrative orientation in 28 and 32 city hospitals in St. Petersburg, as well as the city dermatovenereological dispensary in St. Petersburg, effectively interact with psychiatrists, psychotherapists, and clinical psychologists on one side; and on the other hand, they form constructive communication between somatic doctors (therapists and surgeons) and specialists starting with "psy…".

What benefits does the creation of integrative medicine departments provide for healthcare and specific patients?

The modern "linear" or narrowly specialized model of medicine involves moving a "problematic" patient along the line of narrow specialists (there can be anywhere from 3-4 to 15-17). Inpatient treatment lasts an average of 56 days.

When a patient interacts with a complex specialist and treatment is organized within the framework of an integrative model of medical care, the cost for one "problematic" patient can be reduced by half, and the length of stay can be reduced to 21-30 days.

What aspects of the idea of integrative medicine are attractive to psychiatry, psychotherapy, and clinical psychology?

Synthesizing knowledge and forming new models for providing integrative psychiatric, psychotherapeutic, and psychological care within a comprehensive approach.

Seeking a new image for all specialties beginning with "psy..".

Intervention by psychiatrists, psychotherapists, and psychologists in the general therapeutic process based on integrative medical departments.

Considering that since July 2001, the Institute of Integrative Medicine (S.A. Partseryak, P.I. Yunatckevich) has been working on implementing the principles of the concept of integrative medicine into practical healthcare, it is important to highlight the role and importance of integration processes for various layers of the medical community.

There is an active penetration of psychiatry, psychotherapy, and medical psychology into general medical practice.

Patients' wariness towards psychiatrists, psychotherapists, and psychologists is being overcome, and specialists from different fields are getting closer, within the framework of the methodology of a complex (integrative) approach to the treatment of modern diseases.

There is a redistribution of the flow of patients with complex pathologies.

The relevance of the ideology of integrative medicine.

The relevance of the ideology of integrative medicine is due to several factors. The development of modern medical science is not possible without new ideas. Our ideology aims to help healthcare overcome the crisis of narrow specialization and make a step forward by integrating its main and advanced areas of knowledge within the framework of classical science.

The number of "problematic" patients (those with complex pathology as well as psychosomatic, somatopsychiatric, and somatoform disorders) is increasing. These account for over 50% of people seeking medical help in the country. The significant number of "problematic" patients is confirmed by WHO data and analysis of information sources.

Complex disorders of varying degrees of severity are observed in 90% of cases of diseases encountered in therapeutic, psychiatric, and neurological hospitals, as well as in 60-80% of participants in wars and local conflicts and mass victims of natural disasters.

The problems of integrative medicine are present in general surgical, urological, gynecological, otorhinolaryngological, dermatological, and other practices. The average cost of diagnosis and treatment of "problematic" patients is significant, which requires the organization of effective complex medical care to optimize financial costs.

"Problematic" patients are forced to go from specialist to specialist for years without finding a solution to their problems. In the process, patients, their families, and society as a whole suffer, considering that their mental and physical capacity is reduced by an average of 40-50%.

The methods of prevention of somatic, psychosomatic, somatopsychiatric, and somatoform disorders do not provide sufficient effect. In modern conditions of healthcare system reform, the tendency towards complex diagnosis and effective treatment becomes leading.

Individuals with complex disorders are essentially a medical and social problem requiring a special approach to their solution. It is obvious that specialists with integrative (complex) training in the field of therapy, surgery, psychiatry, psychology, neurology, social pedagogy, etc. should be engaged in the diagnosis, treatment, and prevention of these diseases.

The main concepts of the new healthcare ideology - integrative medicine.

Integrative medicine as a new healthcare ideology is a system of views of modern doctors that reflects a holistic approach to the diagnosis, treatment, and prevention of complex pathologies.
The object of integrative medicine is human health.

The subject of integrative medicine is the patterns and conditions of diagnosis, treatment, and prevention of complex pathology.

Principles of integrative diagnosis and treatment in complex pathology:

1. Systemic approach to diagnosis.
2. Comprehensive investigation of the economic, socio-psychological, mental, and somatic condition of the patient and their living environment, determining the current disorders and their hierarchy, identifying relationships and interdependence of economic, socio-psychological problems, mental and somatic disorders.
3. Development of a dynamic therapeutic strategy based on the results of comprehensive diagnosis and oriented towards a systemic approach to treating the pathology.
4. Treatment of complex pathology through the therapy of various disorders in the regulatory and effector systems of the body, as well as improving the economic and socio-psychological status of the individual and the reference group.
5. Correction of the economic and socio-psychological status against the background of complex pathology therapy.
6. Use of virtual information technologies in the diagnosis and treatment of complex pathology.
7. Comprehensive training of doctors in the field of therapy, surgery, psychiatry, psychology, neurology, social pedagogy, etc.
8. Optimization of financial and time costs for the diagnosis and treatment of complex pathology.
9. Comprehensive rehabilitation of the "problematic patient": economic, socio-psychological, mental, somatic.

Theoretical and methodological foundations of the ideology.

Views and theories underlying the new healthcare ideology - integrative medicine:

1) Hippocratic view (treat not the disease, but the patient);
2) Canon of Medical Science (Abu Ali Ibn Sina);
3) Canon of Medicine "Nei Jing";
4) Works of Aulus Cornelius Celsus;
5) Views of Galen, Abu Bakr Muhammad ibn Zakariya al-Razi, Averroes,

Pietro d'Abano, Grigoris, Francois Rabelais, Paracelsus, Miguel Serveto, Warthe, I.I. Bekher, B. Mandeville, M.A. Veikarda, U. Kowarda, F. Goffman, A. Haller, K. Gufeland, I.E. Dyadkovsky, P. Zhane, A. Schweitzer, I.M. Sechenov, V.M. Bekhterev, and others;

6) Anthropopathology (D.D. Pletnev, R.A. Luria);

7) Theory of functional systems as a closed loop of automatic regulation (P.K. Anokhin);

8) Methodology for diagnosing and treating vegetative dysfunctions (vegetovascular dystonia) and correcting regulatory disorders in psychosomatic diseases (S.A. Parzernyak);

9) Psychosomatic disorders (A.E. Bennett, M. Brant, E. Bleuler, L. Levi, E. Kraeprelin, D.K. Henderson, S.P. Botkin, V.M. Kogan-Yasny, D.D. Pletnev, V.D. Topoliansky, M.V. Strukovskaya, T.I. Yudin, E.K. Krasnushkin, and others);

10) Views on borderline mental disorders (Yu.A. Alexandrovsky);

11) Psychiatry of interaction and counseling (N.P. Vanchakova);

12) WHO's holism concept;

13) Psychoanalysis (Mesmer, Puysegur, Deleuze, De Villers, Vige, Nauss, Faria, Bertrand, Sharpinien, Braid, Llebo and Berngeim, Sharko, Freud, W. Bullitt, and others);

14) Systems approach (M.D. Mesarovic, B.M. Kedrov, O. Lange, R. Akof, F. Ermi);

15) Theory of multi-complex, multiparametric provision of individual physiological functions, functional systems (P.K. Anokhin, V.A. Shidlovsky, E.A. Yumatov);

16) Theory of formation of anti-suicidal (P.I. Yunatkevich) and other types of socially effective behavior (S.A. Parzernyak, P.I. Yunatkevich) in patients with complex pathology;

17) Concept of integrative medicine (Yu.L. Shevchenko, A.V. Shabrov, S.A. Parzernyak, P.I. Yunatkevich, N.P. Vanchakova, Yu.K. Yanov).

List of main stages of integrative medicine development.

For the development of traditional healthcare, the idea of integrative medicine becomes essentially the only basis for moving forward. Changing the mindset of modern physicians in the direction of our ideology allows for influencing the formation of a new model of behavior for a comprehensive specialist capable of providing effective assistance to a "problem" patient with complex pathology.

How to develop healthcare? We see the following steps:

Step I - changing the views of the modern medical community on the patient, going beyond narrow specialization. This is a kind of revolution in consciousness. Modern views are needed to provide effective assistance;

Starting with the first step of implementing the ideology, the development of

standards and treatment algorithms is carried out for effective interaction with insurance companies, as well as training and retraining of specialists based on the principles of integrative medicine);

Step II - reorientation of medical institutions towards work in the conditions of integrative diagnosis and treatment;

Step III - development of a network of regional branches of the Institute of Integrative Medicine in EU countries; organization of a system for providing integrative medical care to various segments of the population;

Step IV - formation of a new integrative mindset among the medical community.

This is the type of medicine we envision for the third millennium.

Nosological units and pathological conditions whose treatment will be effective based on the principles of integrative medicine.

From the perspective of a therapist:

psychovegetative dysfunctions such as neurocirculatory dystonia;
psychovegetative dysfunctions in the form of hyperventilation syndrome;
sychovegetative dysfunctions related to functional disorders of the stomach;
sychovegetative dysfunctions related to biliary dyskinesia;
borderline arterial hypertension;
initial forms of coronary heart disease;
chronic gastritis;
duodenal ulcer;
irritable bowel syndrome, and others.

From the perspective of a surgeon:

cardiac surgery (conditions after cardiac surgeries;
implantation of an electrocardiostimulator;
balloon dilatation with valvuloplasty; aortocoronary bypass);

general surgery (psychovegetative disorders with immunodeficiency, which is manifested in the form of early and late purulent-inflammatory postoperative complications);

otorhinolaryngology (vestibulopathies, sensorineural hearing loss, logoneurosis); urology (psychogenic forms of impotence, combined with minimal organic changes in the genitourinary system);

gynecology (frigidity, vaginosis, dysmenorrhea), and others.

From the perspective of a psychiatrist or psychotherapist:

somatoform vegetative dysfunctions (neurocirculatory dystonia, non-ulcer dyspepsia, biliary dyskinesia, irritable bowel syndrome, and others); mental disorders in cardiological, pulmonological, and gastroenterological patients; thyrotoxicosis;

neurodermatitis, eczema;

psychosomatic disorders in oncological patients and in those on chronic hemodialysis;

asthenia, depression, and others.

From the perspective of a psychologist (medical, clinical, etc.):

post-traumatic stress disorder;
chronic emotional dissatisfaction;
asthenic-neurotic conditions;
characterological personality problems;
dependencies;
irritability;
nervous-psychic instability;
impulsivity;
tension;
increased vulnerability;
sadness;
aggressiveness;
suicidal experiences;
depression, and others.

From the perspective of an educator, social worker:

"problematic" character;
affective behavior;
aggressive behavior;
unstable behavior;
low level of willpower, patience, performance, discipline, etc.;
running away behavior;
dependence on sects;
deviant behavior; suicidal behavior;
psychological and social maladaptation;
personality socialization disorders; sociopathy;
low level of intellectual development, and others.

From the employer's (owner's) perspective:

Reduced sense of joy; chronic negative emotions;
Chronic overcontrol and manipulative behavior;
loss of meaning in life;
Substance abuse;
professional maladaptation;
professional burnout, etc.

From the patient's perspective:

Subjective feelings of mental and physical discomfort; pain;
Functional difficulties; limitations in possibilities; low motivation level;
Low work and study performance; conflicts;
Uncontrollable reactions and behavior, etc.

Opportunities for the use of automated systems for integrative diagnostics and correction in medical practice.

One of the principles of integrative medicine, in our opinion, is the use of virtual information technologies in the diagnosis and treatment of complex pathology. Practical studies conducted by us at a number of medical institutions in St. Petersburg have shown the effectiveness and feasibility of their use. Today, we have been able to develop and implement advanced medical information technologies in the treatment process, such as "My Doctor," "Personal Support System," and others, which have a positive effect. The basis for research in this area was the developments of P.I. Yunatsevich, who created an automated workplace for suicidologists (1998). The principles of this automated system have allowed us to develop several versions of virtual correctional programs, such as "Virtual Business Training" (P.I. Yunatsevich, 2000):

"Color-Shape-Correction" (S.A. Parcenyak, P.I. Yunatsevich, 1999);
«My Doctor» (P.I. Yunatsevich, 2000);
"My Psychologist" (P.I. Yunatsevich, 2000);
«Virtual Business Training» (P.I. Yunatsevich, 2000);
"Virtual Clinic" (P.I. Yunatsevich, 2000);
"My Doctor. Version 1.06. System for Correction of Psycho-Emotional State" (S.A. Parcenyak, A.N. Alekhin, P.I. Yunatsevich, 2001);
"Automated Support System for VIP-person" (S.A. Parcenyak, P.I. Yunatsevich, 2001);
"Virtual Speech Therapist" (S.A. Parcenyak, P.I. Yunatsevich, 2001);
"Virtual Children's Speech Therapist" (S.A. Parcenyak, P.I. Yunatsevich, 2002), and others. The use of these systems in therapeutic practice allows us to enhance the positive therapeutic effect by 1.5-2 times, while significantly reducing the treatment time for "problematic patients" by 1.8-2.4 times.

Integrative training for the 21st-century physician.

The existing practice of training doctors in the healthcare system today is mainly focused on narrow specialization. This no longer satisfies practical medicine, as examination and treatment of patients are not comprehensive, but one-sided. The new ideology of healthcare - integrative medicine - provides ways to solve this problem. During the training and professional development of doctors, it is expedient to study complex pathology and disorders in various regulatory and effector systems of the body in these patients.

Medical-pedagogical principles of integrative medical education for physicians.

Formation of a system of views and concepts on a comprehensive approach to the diagnosis, treatment, and prevention of human diseases.

Inculcation of skills for researching the pathogenic influence of economic, socio-psychological, ecological, mental, and somatic factors on the patient's condition.

Teaching the methodology for identifying relevant disorders and their hierarchy, revealing the interrelationships and interdependence of economic, ecological, socio-psychological problems, and mental and somatic disorders.

Formation of skills for developing a dynamic treatment strategy based on the results of comprehensive diagnosis and oriented towards a systemic approach to treating pathology.

Formation of skills for treating complex pathology through therapy of various disorders in the regulatory and effector systems of the body.

Developing the ability of the physician to formulate adequate recommendations for the economic and socio-psychological rehabilitation of the patient.

Comprehensive training of doctors in the fields of therapy, surgery, psychology, neurology, social pedagogy, economics, etc.

Teaching practical use of information technology in the diagnosis and treatment of complex pathology - virtual diagnosis and therapy.

Formation of medical-economic thinking of the physician, allowing optimization of financial and time costs for the diagnosis and treatment of complex pathology, increasing their own level of material and technical support.

Solving the problems of integrative training of physicians in the context of the developed methodology of integrative diagnosis and treatment will, in our opinion, significantly increase the effectiveness of medical care.

Solving the problems of treating patients with complex disorders, based on our developed ideology and methodology, in our opinion, will elevate the prestige of healthcare to a qualitatively new level.

1.2. Historical overview of therapeutic psychophysiological exercises techniques from various countries of the world

Psycho-physiological therapeutic exercises are techniques used to improve a person's psychological and physical health. These exercises have a long history and originate from various countries around the world, including:

Tsigun - a Chinese technique that combines movement, breathing, and meditation to improve health and quality of life. It promotes longevity, flexibility, joint mobility, calmness, and mental clarity.

Yoga - an Indian technique that involves various postures and breath control. It includes a combination of spiritual, physical, and mental practices developed in different branches of Hinduism and Buddhism, aimed at controlling the body and mind. It helps to reduce stress, increase flexibility and endurance, and improve organ function.

Zen meditation - a Japanese technique based on concentration and meditation. It helps to reduce stress, improve concentration, and focus. It is one of the Buddhist practices aimed at realizing one's true nature.

Deep relaxation - a technique used to reduce muscle tension and stress levels. It can be achieved through the use of specific psycho-physiological techniques, physical therapy, or medication.

Mindfulness meditation - a technique of being present in the moment through meditation practices. Its essence is the awareness of sensations that are happening here and now, and focusing attention only on them.

These techniques have a long history and originate from various countries around the world. They help to improve psychological and physical health, reduce stress levels, and relieve tension in the body. Such exercises can be used as a complement to mainstream treatment or as a standalone therapy.

China. In China, more than 5000 years ago, the technique of Tsigun was developed, based on a combination of movements, breathing, and meditation. This technique was developed to improve health and prolong life. Today, Tsigun is a popular technique used to reduce stress and improve physical fitness. China has a long history of using therapeutic psychophysiological exercises. One of the most popular techniques is Tsigun.

Tsigun is a complex of exercises that includes movements, breathing, and meditation. Its roots go back to the ancient traditions of Chinese medicine. Tsigun

helps to improve blood and lymph circulation, reduce stress levels, improve sleep, concentration, and increase energy. In China, this technique is used as a supplement to basic treatment and disease prevention. It can also be used to improve the psychological state of people with various illnesses, such as depression and anxiety.

Another technique that comes from China is based on the use of traditional Chinese medicine, which includes physical therapy, breathing exercises, meditation, and massage. It helps to relieve tension in the body, reduce pain, and improve organ function. The technique of "I Tsuan," which means "soft breathing," is also popular in China. This technique includes deep and rhythmic breathing that promotes relaxation and reduces stress levels. All these techniques are focused on improving physical and mental health.

India. In India, yoga is one of the oldest techniques of therapeutic psychophysical exercises. It is based on performing various poses and controlling breathing. Yoga helps to reduce stress, improve body flexibility and endurance, and improve organ function. Therapeutic psychophysical exercises are an integral part of traditional medicine in India.

It is known that more than 5000 years ago in India, meditation techniques and yoga were practiced, which contributed to the preservation and restoration of human health. The main goals of therapeutic psychophysical exercises in India are to maintain physical health and reduce stress levels.

Yoga has many varieties. For example, Hatha Yoga includes physical poses, breathing techniques, and meditation. Another technique known as Kundalini Yoga is based on the body's energy system and includes breathing techniques, meditation, and mantras.

In addition, India is known for therapeutic meditation techniques such as Vipassana and Zen meditation. Vipassana meditation is a technique based on observing one's thoughts and emotions, focusing on breathing, and reducing stress levels. Zen meditation is a technique based on focusing on breathing and the body, reducing stress levels, and improving well-being. Thus, India has a long history of developing therapeutic psychophysical exercises such as yoga and meditation.

Japan. In Japan, the Zen meditation technique has developed, based on concentration and meditation. Zen meditation helps reduce stress, improve concentration and focus. Healing psycho-physiological exercises are an important component of traditional Japanese medicine and have been developed over many centuries.

Japanese exercises focus on maintaining and supporting harmony between body and mind. One example of such exercises is Taiso, a combination of various physical exercises that promote overall body strengthening and improved physical well-being.

Another popular technique is Qigong, which is a combination of movement,

breathing, and meditation. This technique is based on the Chinese theory of "Qi" or "life spirit", which permeates all aspects of life. Qigong helps reduce stress, improve concentration and enhance organ and body system function.

Another technique that is popular in Japan is "Shinrin-yoku" or "forest therapy", which involves visiting the forest and interacting with nature. According to research, Shinrin-yoku helps reduce stress levels, improve mood, and enhance the quality of sleep.

Psycho-physiological healing exercise techniques in Japan are based on a strong tradition and integrate calmness, meditation, and physical activity. They are an important element in maintaining harmony between body and mind and help support optimal functioning of the entire body.

Western countries. The West also has its own techniques of therapeutic psychophysiological exercises. For example, deep relaxation, which is used to reduce stress levels and relieve tension in the body. There are also meditation and mindfulness techniques that help focus on the moment and reduce stress levels.

Italy: Italy is a country with a rich history and culture, also having a fascinating history of psycho-physiological healing techniques. Italian scientists, doctors, and researchers have made a significant contribution to the development of psycho-physiological treatment techniques. One of the most well-known techniques developed in Italy is "diaphragmatic breathing." This exercise is based on focusing on deep and slow breathing, which helps reduce stress and anxiety levels. Diaphragmatic breathing is an effective method for regulating the level of stress hormone, such as cortisol, and reducing blood pressure levels.

Italians have also developed meditation, concentration, and visualization techniques, which are used to treat anxiety, depression, and other mental disorders. Methods such as "dynamic meditation" and "light concentration" are popular in Italy and are used both in healthcare institutions and self-treatment courses. Additionally, in Italy, methods and techniques aimed at improving motor coordination and muscle function have been developed, including yoga and tai chi. These exercises contribute to the improvement of not only physical but also mental health.

France: France is a country with a rich culture and history that influences traditional medicine, including psychophysiological exercises. French techniques of psychophysiological exercises are very diverse and include relaxation and meditation practices. One of the most popular techniques is "Yoga" - a spiritual and physical practice that includes specific asanas (body postures), breathing exercises, and meditation. Yoga is known for its success in treating stress, anxiety, and depression. Another technique that has proven successful in France is "Rapid Autogenic Training" (RAT). This is a technique of deep relaxation that uses phrases and instructions to reduce stress levels and provide inner peace.

The "Progressive Muscle Relaxation" technique (PMR) is also very popular in France. It involves the sequential tightening and relaxation of muscles to reduce tension and stress in the body. France has also developed research in the field of meditation and mindfulness. Meditation techniques help focus on the present moment, relieve tension and anxiety, and increase inner calmness.

Germany - is a country with a rich history in the field of alternative medicine, including therapeutic psychophysiological exercises. Traditional healing methods in Germany have much in common with acupuncture practiced in Chinese medicine, as well as with yoga and meditation originating from Indian tradition.

One of the popular psychophysiological exercise techniques in Germany is yoga therapy. It combines yoga with health, aimed at improving the patient's psychological and physical health. Yoga therapy is based on the idea that the nervous system is closely related to the organs of the body and our mental state, so special exercises are practiced during yoga therapy sessions to improve breathing, relieve stress, and reduce anxiety levels.

Another technique is quintessential therapy. It is based on the use of quintessential extracts from flowers containing certain physical and emotional properties. These extracts are applied in several forms such as drops, sprays, aerosols, and lotions. Quintessential therapy is used to treat various ailments including depression, anxiety, and insomnia.

Spain. Therapeutic psychophysiological exercises in Spain have a long history and many diverse techniques that have developed over centuries. One of the most popular techniques is Relaxation Therapy (RT), which is based on reducing muscle tension and improving physical and mental health.

Another effective technique is Yoga, which originated in India but has become very popular among the population of Spain. Yoga includes various physical exercises, concentration, and meditation, which helps to reduce stress levels and improve overall health.

In addition, biofeedback and meditation techniques, based on the control and self-regulation of psychophysiological functions such as heart rate and breathing, are also popular in Spain. These techniques help to reduce tension and stress, improve health, and enhance quality of life.

Spain also has traditional practices such as flamenco, which promotes psychophysiological harmony and self-expression. These techniques can be useful for those seeking an alternative to more traditional forms of treatment. Overall, the techniques of therapeutic psychophysiological exercises in Spain are quite diverse and include both traditional and modern methods.

England. England is a country with a rich history of development of therapeutic psychophysiological exercises, which have been used since ancient times. One such technique is yoga, which originated in India more than 5000 years

ago and became popular in England in the 19th century thanks to the works of the yoga scholar Swami Vivekananda. Today, yoga is a fairly common technique of therapeutic psychophysiological exercises in England and is used to improve health and reduce stress.

Another popular technique is meditation. In England, meditation began to gain popularity in the 20th century, when the English writer and art historian John Blofeld founded the Meditation Society in London. Since then, meditation has become an important technique of therapeutic psychophysiological exercises, helping people to reduce stress levels, calm down, and improve awareness.

In addition, other techniques such as Pilates, Tai Chi, and kinesiology are popular in England. Pilates became popular in London in the 1920s and is now an important technique of therapeutic psychophysiological exercises for improving posture, muscle stretching, and reducing stress levels. Tai Chi is used to relieve tension, improve coordination, and increase energy. Many diverse techniques of therapeutic psychophysiological exercises have been developed in England. One of the most famous techniques is "Progressive Muscle Relaxation," developed in the 1920s by American physician and physiologist Jacobson. It is based on the sequential tension and relaxation of muscles in different parts of the body. This technique allows for reducing tension and stress, strengthening muscle tone, and improving circulation.

Another popular technique is "Autogenic Training," developed by German psychologist Johannes Schultz in the 1920s. It is based on the idea that the body has internal resources for self-healing and that exercises that induce certain physiological reactions can improve a person's health and well-being. Autogenic training includes exercises in attention concentration, visualization, and meditation, which helps to reduce stress and anxiety levels, improve sleep quality, and reduce the risk of certain diseases.

In addition, the technique of "Rational Emotive Behavioral Therapy" (REBT) was developed in England, created by American psychologist Albert Ellis in 1955. It is based on the idea that many of a person's problems stem from their way of thinking and reacting to the world around them, and that changing these thoughts can help reduce anxiety levels.

Latin America. Latin America is a vast and diverse region that includes the countries of South America, Central America, and Mexico. The traditions of therapeutic psychophysiological exercises in the region vary depending on the country and cultural influences. In Brazil, the "Jose Angelis" technique is popular. This technique combines movements, breathing, and meditation to reduce stress and improve health. Yoga and tai chi are also popular.

In Mexico, there are many techniques that combine physical and psychological exercises, including Qigong, Yoga, Tai Chi, and Reiki. The use of the Reiki technique is very widespread in Mexico. It involves the transmission of energy during light touch on the body, which can improve health and reduce stress.

In Colombia, the "Goro" technique is popular, which combines music, rhythmic movements, and meditation to reduce stress and improve health. In Peru, traditional techniques include meditation, breathing exercises, massage, and the use of herbs to treat various illnesses.

In Chile, the "Bienestar" technique is very popular, which includes meditation, yoga, and breathing exercises. In general, Latin American countries maintain their traditions and cultural influences, so therapeutic psychophysiological exercises in this region can be quite diverse and unique.

North America. Therapeutic psychophysiological exercises are a method of treatment aimed at reducing stress and improving physical and mental health. This method is widely used in many countries around the world, including North America.

In the US and Canada, psychophysiological exercises are used to reduce stress and increase emotional resilience. One such technique is meditation, which is used to reduce anxiety, improve sleep, and relieve tension. Yoga and deep breathing techniques are also known to be used for reducing stress and increasing concentration.

In Mexico, psychophysiological exercises are used to maintain physical and emotional health. One such technique is Temazcal, a traditional Mexican bath that helps relieve tension and stress, improve circulation, and cleanse the body.

In Cuba, psychophysiological exercises are used to treat various diseases, including diabetes and hypertension. Techniques used in Cuba include meditation, yoga, massage, and breathing techniques. Acupuncture techniques, which help reduce pain and stress, improve sleep and overall health, are also used in Canada, the US, Mexico, and Cuba.

In addition, in the US, the technique Mindfulness-Based Stress Reduction (MBSR), developed by Jon Kabat-Zinn, combines psychological and meditative practices to reduce stress levels and strengthen health. MBSR is used to treat various conditions, including depression, anxiety, pain, and other states. Another technique recognized in North America is EMDR (Eye Movement Desensitization and Reprocessing), developed by Francine Shapiro. EMDR is used to treat traumatic memories and mental disorders, including post-traumatic stress disorder.

In Canada, Emotional Freedom Techniques (EFT) was developed, combining psychological and energy practices, including tapping on certain points on the body. EFT is used to treat various mental and physical conditions, including anxiety, depression, pain, and other illnesses.

Overall, therapeutic psychophysiological exercises developed in different countries around the world demonstrate a variety of approaches to treatment and health support. The use of these techniques can be an effective complement to traditional medicine and help maintain the physical and mental health of people.

The Middle East. Healing psychophysiological exercises have a long history in the Middle East, where various techniques have been developed to improve physical and mental health. One such technique, yoga, originated in India but has become popular worldwide, including in the Middle East. Countries such as Iran, Iraq, Saudi Arabia, and the UAE have yoga studios where classes are held to reduce stress and improve coordination. Additionally, techniques such as meditation and prayer are popular in the Middle East. The Islamic religion provides many rituals that can promote relaxation and concentration, which have a positive impact on mental health.

Another technique found in the Middle East is known as "liquid yoga" or "laughter yoga," which combines yoga and laughter. This technique stimulates the production of endorphins and serotonin, which helps improve mood and reduce stress.

Thus, the Middle East has a long history of developing healing psychophysiological exercises used to promote physical and mental health. Many of these techniques are an important part of religious culture and have become available for use worldwide.

In summary, a general historical overview of healing psychophysiological exercises in different countries shows that such exercises have been used since ancient times. Each country has its own traditions, which are influenced by cultural, religious, and historical contexts. In China and Japan, concentration and meditation exercises have been used in kung fu, tai chi, and Zen Buddhism practices. In India, yoga practices include different breathing exercises and concentration on yoga poses. In Europe, relaxation and meditation techniques became popular in the 20th century, when psychoanalytic therapy and psychology emerged.

In Latin America and North America, meditation and yoga practices have also become widespread. Although different countries use different techniques, the common principle of therapeutic psychophysiological exercises is to focus on the body and thoughts in order to improve mental and physical health. Today, such techniques are used in clinical practice and have become available for use at home thanks to the development of modern technology.

Therefore, it can be concluded that therapeutic psychophysiological exercises have a rich history in different countries around the world and have become an important component of various treatment and prevention methods.

Despite the diversity of techniques used in therapeutic psychophysiological exercises in different countries, they have common features. Most of them are based on regulating breathing, concentration, meditation, and visualization. Some of these techniques are used to treat specific conditions such as depression, anxiety, pain in different parts of the body, post-traumatic stress disorder, and others.

Historically, many of these techniques arose as a part of religious practices such as Buddhism, Hinduism, and Islam. Over time, they have been used in

medicine and psychology to improve the physical and mental health of people. At present, many of these techniques are part of integrative medicine, a system of scientific knowledge and practical activity that combines traditional medicine with alternative treatment methods, aimed at strengthening and preserving human health, prolonging life, and preventing and treating diseases.

The scope of interests of integrative medicine covers all aspects of human life, their social and work activities, as well as factors of the natural and social environment in terms of their impact on health.

Since integrative medicine is closely linked to the level of culture, it has mainly developed in the centers of civilization, and the decline or demise of a civilization did not necessarily mean a loss of medical achievements and experience. On the contrary, they accumulated and enriched, passing from one generation of medical practitioners to another. That is why the study of medicine can only be done in its historical development.

Thus, the history of integrative medicine is a science that studies the achievements in the field of healing, medicine, and medical activities of the peoples of the world throughout the history of mankind (from ancient times to the present day).

In the light of modern views, integrative medicine is understood as a system of scientific knowledge and practical activity, the aim of which is to strengthen and preserve human health, prolong life, prevent and treat diseases.

In the evolution of integrative medicine, five main positions can be traced, which can be formulated as the doctrines of modern integrative medicine:

synthesis of medicine, theology, philosophy, and sociology;
synthesis of medicine with physical and mathematical sciences (mathematics, physics, cybernetics, chemistry, astrology);
synthesis of medical-biological and clinical sciences;
synthesis of traditional and scientific medicine;
synthesis of traditional and new medical technologies.

Therefore, at this stage of medical development, we can talk about integrative medicine, which combines modern European and natural (Eastern, traditional, non-traditional, alternative, folk, etc.) medicine.

Traditional medicine is the medicine that is customary in Eastern countries, i.e. that has been used (and is still used) since ancient times in Eastern countries and has its own specific philosophical views and achievements (such as acupuncture, cupping, acupressure, herbal medicine, physical therapy, etc.).

Alternative medicine, on the other hand, refers to any kind of natural medicine, herbal medicine, naturopathy, manual therapy, chiropractic,

homeopathy, acupuncture, etc. that was not previously used in Europe, America, and other countries. This term was first used in English literature to refer to a large number of diagnostic and treatment methods that "lack scientific justification". This term reflects the situation of the parallel existence of officially recognized and unrecognized methods of diagnosis and treatment, and the stage of tolerance of two medicines.

In the following years, the terms "alternative" and "complementary" medicine emerged, which were used as synonyms for alternative medicine and which more accurately reflected the actual state of affairs. The appearance of these terms reflects the following stages of development of "alternative" medicine: first, opposition to conventional medicine, and then, use as additional means of diagnosis and treatment.

However, in the 1990s, the terms "integrative" and "holistic" medicine emerged, first in the United States and then in Europe. They reflect the next logical stage of interaction between alternative and traditional medicine. "Holistic" means complete or whole.

The holistic movement as a direction in medicine emerged in California in the 1920s, founded by Jan Christian Smuts. The main postulate of this movement is the consideration of a person as a unity of biological, emotional, psychological, and social manifestations. Such an understanding of health, in some cases, proves to be more adequate for the treatment and prevention of such diseases as atherosclerosis, hypertension, angina pectoris, obesity, and diabetes. It should be noted that the principles of holistic medicine are very close to the philosophical concepts of Eastern medicine, which also considers the principles of the general interrelation of all living things on Earth and in the cosmos. There is the Great Cosmos and the small, i.e. human beings, and they are closely related to each other.

Destruction of nature and habitats is a path to self-destruction of humanity, including through diseases. The holistic movement is intensively developing worldwide. Holistic medicine associations have already been registered in the United States, Canada, Brazil, the Netherlands, Belgium, England, Finland, and Italy.

The term "integrative" medicine intersects with the term "holistic" medicine and in some cases is used as a synonym for alternative medicine. However, in essence, it should not be opposed to (an alternative), but rather unite (integration) with the aim of obtaining a new quality of diagnosis and treatment based on modern "scientific" medicine.

The basis of integrative medicine is the synthesis of Western and natural medicine, including various non-drug treatment options (physical therapy, balneology, homeopathy, etc.), as well as Eastern medicine. This should be based on the achievements of modern science using the most effective methods of modern and ancient medical systems, including traditional Chinese medicine (TCM). Such integration leads to qualitatively new possibilities in healthcare.

Integrative medicine is a modern direction in science and practical activities

that combines the latest achievements of science and the millennia-old wisdom of doctors and ancient healers.

Practical experience in using certain complementary medicine methods in combination with traditional treatment convincingly demonstrates that such an integrated approach significantly expands the overall spectrum of treatment or rehabilitation possibilities. At the same time, the patient receives an additional opportunity to achieve the best result in treatment.

Integrative medicine allows treating a person strictly in accordance with their problems, rather than following standard schemes. For this reason, integrative approach to the treatment of many serious diseases, including cancer, has become very popular in the West, especially when the involvement of the patient is required during treatment.

Integrative medicine focuses more on health and healing than on disease and treatment, even more than complementary medicine. It views the patient as a whole system, and therefore interacts with all aspects of it - body, mind, and psyche - both during diagnosis and treatment. Its main instrument is a systemic approach that allows treating a person strictly in accordance with their problems, rather than following standard schemes. This holistic approach to a person's health and disease encourages both the patient and the doctor to pay special attention to lifestyle, diet, physical activity, rest, leisure, sleep, and relationships.

The topic of integrative medicine was extensively discussed at the WHO forum in 1987. Its delegates emphasized that in the modern stage of the development of medicine, an important aspect is the close integration of scientific and traditional medicine, European and Eastern, in order to provide higher efficiency in strengthening health and treating diseases. From this point of view, the term "integrative" medicine should be considered as a unifying concept.

The idea of personalization, i.e., the understanding of the need for an individual approach to each patient, existed from the very beginning of the development of medicine. Even Hippocrates said that different patients need different drugs, and what is good for one may not be useful for another. This idea, in various forms, runs through the entire development of medicine, emphasizing the need to "treat not the disease but the patient," to give the patient the "right, i.e., the necessary drug for him, in the right doses." To do this, doctors until the last decade oriented themselves, in addition to the main diagnosis, to the only available individual characteristics of patients, such as age, body weight, concomitant diseases, biochemical indicators, and family history, allowing the assessment of the risk of hereditary diseases. During the course of treatment, its effectiveness was traced for each patient, i.e., monitoring was carried out based on available clinical and later laboratory criteria, with possible correction by empirical attempts to change treatment regimens. The described approach - clinical monitoring - is widely used in medicine, but it has limitations associated with a lack of understanding of the individual characteristics of the patient and the limited capabilities of medical research. The emergence of integrative medicine has

expanded the range of individual characteristics that can be taken into account during diagnosis and treatment, which has a positive effect on the effectiveness of treatment.

Personalized medicine is defined as a "rapidly developing area of healthcare based on an integrated, coordinated, and individualized approach to analyzing the onset and progression of disease" or as "integrated medicine that involves the development of personalized treatments based on genomics, testing for predisposition to diseases, prevention, combining diagnosis with treatment, and monitoring of treatment." Personalized medicine involves "adapting therapeutic treatment to the individual characteristics of each patient, in order to identify subpopulations that differ in their predisposition to a particular disease or their response to specific treatment. Preventive or therapeutic treatment can then be used for those who will benefit from it, saving costs and avoiding side effects for those who will not benefit from the treatment."

The goal of personalized medicine is to "find the appropriate medication for a specific patient, and in some cases even develop a treatment plan for the patient according to their individual data." The need for this is due to the fact that traditional medications created to treat a specific disease are ineffective for 30-60% of patients, along with a high frequency of side effects.

Pharmacotherapy is predominantly pathogenetic, symptomatic (such as the pain-relieving effect of analgesics), and etiological (characteristic of most antibiotics) therapy.

For a number of reasons, most doctors and patients prefer pharmacotherapy.

One of the main reasons for the preference of pharmacotherapy over natural medicine is convenience, i.e. the ability to take pills, mixtures, etc. in any conditions, while traveling, sitting in front of the TV, etc. Secondly, most drugs have a fast-acting effect (for example, some pain relievers, fever reducers, etc.). Thirdly, most patients and many doctors are not aware of the possible consequences (complications) of long-term use of pharmacological drugs. In addition, both patients and doctors for various reasons are not fully informed about the possibilities of natural medicine. There are also other reasons for the "advantages" of pharmacotherapy (allopathy) over natural medicine:

"advertising aggression" of pharmaceutical companies;

uncontrolled patient access to medications (the ability to purchase most medications without a prescription);

insufficient number of hours of study on natural medicine in higher medical education institutions, necessary for learning (not just familiarizing oneself with) the basic sections of natural medicine (physiotherapy, physiopuncture, homeopathy, acupuncture, etc.);

the need for patients to visit offices for necessary procedures (for example, laser or magnetic therapy, etc.);

the influence of physical factors or other types of natural medicine on recovery is gradual (soft), and this requires a course of treatment, which sometimes

scares the patient (10-15 procedures - so long!).

However, the patient should know (and it is necessary to explain to him) that in these cases, the use of natural or pre-formed (physiotherapy) factors stimulates their own forces to fight the disease, and for this, a certain time is needed (sanogenic effect).

We should all remember that there are no harmless chemotherapy drugs! Pharmacological oversaturation is one of the biggest problems of modern medicine. A lot of people are hospitalized due to the side effects of drugs. Often, a "medication disease" is more severe than the one being treated.

Currently, more and more doctors are leaning towards the opinion that taking medication should be limited to extreme situations, that is, based on life indications, mainly for the treatment of acute and infectious diseases. Physical factors and natural methods of treatment can complement or replace many treatment methods, including pharmacological ones. It is important to emphasize that in necessary cases, a reasoned and skillful combination of physiotherapy or acupuncture with drug therapy (integrative medicine) can significantly reduce the dosage of drugs and increase the effectiveness of treatment.

Personalized medicine requires additional high-tech tests, which seemingly leads to an increase in the cost of medical services. However, ultimately its use leads to significant savings in medical expenses: with the correct diagnosis and treatment strategy, the corresponding costs are sharply reduced. Moreover, the use of personalized methods will significantly reduce not only mortality directly from diseases, but also from incorrectly prescribed drugs. Most authors emphasize the promising nature of this direction, noting specific aspects of its application in relation to oncological, cardiovascular, neurological, and other common diseases.

Currently, more and more doctors are inclined to believe that taking medication should be limited to extreme situations, mainly for the treatment of acute and infectious diseases, with physical factors and natural methods of treatment complementing or replacing many pharmacological methods of treatment. It is important to emphasize that in necessary cases, the skillful combination of physiotherapy or acupoint stimulation with drug therapy (integrative medicine) allows for a significant reduction in drug dosage and an increase in treatment effectiveness.

Personalized medicine requires additional high-tech tests, which, seemingly, leads to an increase in the cost of medical services. However, in the long run, its use leads to significant savings in healthcare costs: with the correct diagnosis and treatment strategy, corresponding expenses are sharply reduced. Moreover, the use of personalized methods will significantly reduce mortality not only from diseases themselves but also from improperly prescribed medications. Most authors emphasize the prospects of this direction, noting specific aspects of its application in relation to oncological, cardiovascular, neurological, and other common diseases.

In modern medicine, a transition has already begun from highly active

allopathic drugs, especially in the treatment of chronic diseases, to drugs with a milder effect: naturopathic, homeopathic, and herbal medicine, which do not have negative side effects and realize the main principle of medicine: DO NO HARM.

Academician N.A. Agadzhanian believed that the primary sources for integrative medicine are: traditional Chinese medicine, including acupuncture and herbal medicine; psychology and psychotherapy, homeopathy, vertebrology with manual therapy, osteopathy; bioresonance medicine; aromatherapy; orthodox (modern) medicine; art, as an important factor in the harmonization of a person's psycho-emotional and consience state.

As early as 1979, the World Health Organization gave a high assessment of TCM, recognizing for a start that 43 conditions were treatable by acupuncture. The West was just beginning to feel the importance of TCM as part of natural medicine and their possible contribution to global health.

First of all, it should be emphasized the importance of combining modern methods of physiotherapy and physiopuncture (acupuncture) with drug therapy, which significantly modulates the latter when used together:

provides a potentiating effect when using non-narcotic analgesics and antidepressants;

significantly improves treatment outcomes due to a peculiar synergy with most medications;

enhances the tolerability of various types of drug therapy, reducing the likelihood of allergic reactions, toxic effects, metabolic disorders, etc.; reduces drug dosage while increasing treatment effectiveness.

It is known that a disease begins with informational-energetic disturbances, followed by functional-humoral, ultrastructural, and structural changes in organs, tissues, and decompensation of the process, i.e., clinical manifestations when a patient seeks medical help, unfortunately often in irreversible stages of the disease.

In other words, even functional disorders are not the first signs of the disease but rather evidence that the structural changes that occurred before cannot be completely controlled by corresponding compensatory-adaptive reactions of the body.

Principally, the clinical part of the disease is related to its actual volume, like the tip of an iceberg is related to its huge underwater part (D.S. Sarkisov et al., 1990).

The schematic development of a disease can be represented as follows: information-energy changes (biochemical); ultrastructural-tissue (organ) changes; clinical manifestations of the disease (result of decompensation of the previous phase). Recovery occurs in reverse order, starting with the compensation of the disease (process) and so on. However, usually the full energy level of recovery after the disease is not achieved. In such cases, it is important to maintain the functions of the organ, tissues, and the organism as a whole in a state of compensation and control the dynamics of the energy state of functional systems.

Modern approaches are based on the effective combination of ancient medical

views, such as knowledge of the meridian (channel) system, with modern positions and new scientific knowledge in the field of molecular biology, quantum mechanics, control theory, etc., which allows for a comprehensive assessment of a person's state at any point in time.

In fact, the theory of meridians in Eastern medicine found support in subsequent studies by the outstanding Russian scientist P.K. Anokhin and his followers in the theory of functional systems.

Functional systems (meridians) are unique vertical segments that combine various organs and levels of nervous and humoral regulation to achieve certain results that are beneficial for the body.

Self-regulation is the main principle of the activity of functional systems, in which cybernetic principles or principles of feedback (afferent feedback) can be traced.

The system, provided with the necessary energy resources, is capable of eliminating the influence of unfavorable external and internal random factors and maintaining its inherent organization. It should be remembered that the systemic organization of functions has a multi-level structure and requires appropriate rehabilitation measures in case of damage to any functional system, with an impact not only on the affected organ but also on all levels of the system or at least 2-3 links. For example, in the aftermath of injuries to the brainstem, polyneuropathies, the impact should be carried out at the following levels: the affected (denervated) muscles, the damaged nerve trunk or nerve trunks; the segmental level, i.e., the segments of the spinal cord, whose neurons form axons of the corresponding nerves; suprasegmental centers, i.e., afferent and efferent centers of the brain, the impact on which contributes to faster regeneration of peripheral nervous structures. In such cases, it is also important to impact the symmetrical zones of the unaffected (healthy) side, as a result of which stimulation of the segments of the affected nervous structures occurs through intersegmental connections (left and right segments).

Analyzing modern approaches to the use of physical factors for the treatment and rehabilitation of patients of various profiles, it is necessary to take into account the dualistic (systemic-antisystemic, yin-yang, sympathetic-parasympathetic, etc.) principle of regulating any function. For example, in case of functional predominance of the sympathetic division of the autonomic nervous system, the impact should be aimed at stimulating the parasympathetic and/or inhibiting the sympathetic. These principles are traditionally used in acupuncture and have proven to be effective in pain management. It is known that pain arises as a result of excitation of the nociceptive system by pathological factors, but it can also arise when the antinociceptive system is inhibited. These data are successfully used in the treatment of pain syndromes when, using low-frequency skin electrostimulation with short pulses (LF-ES), we predominantly excite the antinociceptive system and thus suppress pain. It is also important to understand that activation of nociceptive system neurons can occur without the influence of a harmful stimulus, but with

artificial or natural suppression of antinociceptive system activity: by disrupting serotonin metabolism processes, synthesis processes of opioid peptides, changing emotional tone, etc.

This mechanism of the development of centrally originating pain (suppression of antinociceptive system activity) forms the basis for the emergence of pain sensations in masked (hidden) depression, when the pain disappears with the prescription of antidepressants or adequate physiotherapy methods (such as central electroanalgesia, electro-acupuncture, electro-puncture, etc.).

The described options for the systemic and systemic-antisystemic approach of European medicine in the treatment of diseases correspond to the basic principles of Eastern medicine. Eastern doctors have long "invented this bicycle," reflected in the theory of "Wu-Xing" (the theory of the five primary elements), which clearly describes the relationships between systems (organs, meridians) and how they affect each other.

It seems that the theory of "Wu-Xing" with its practical recommendations should not only be the heritage of Eastern medicine but of all medicine since it allows the targeted use of the principles of systematization in the treatment of most diseases, regardless of the therapy methods. For the practical implementation of the systemic principle in the treatment of various diseases, including pain syndromes, the diagnosis of these systems, i.e., the establishment of their functional state, is essential.

Modern methods of electro-puncture diagnosis and, in particular, the method of I. Nakatani, which allows the determination of the functional states of meridians based on biophysical parameters of representative acupuncture points, meet these requirements.

The latest findings suggest that the meridian system in the human body and in nature as a whole can be considered ancient homeostatic systems. The principle of energy balance in functional systems (meridians) is based on the centuries-old experience of Eastern medicine and is supported by modern research. Studies also confirm that combined laser and electromagnetic radiation in the millimeter range leads to faster energy balancing in the meridian system and has a more pronounced analgesic effect.

It is worth acknowledging that weak interactions, weak forces, play a decisive role in living organisms and in nature as a whole. These include gravity and geomagnetism, atoms of metals in active pigments in plants and animals (chlorophyll, hemoglobin), microcurrents, microvibrations, microelements, enzymes, hormones, neurotransmitters, and super-small, quantized quantities that regulate homeostasis and homeokinesis.

Undoubtedly, one of the advantages of Eastern philosophical concepts is that they consider humans in unity with nature, the cosmos, and the latter, through various types of fields, including torsion fields, affects humans and all living things on Earth. These influences are of an informational-energetic nature since the human body is an open (dissipative) system and is easily susceptible to cosmic

influences.

It is not by chance that the use of electromagnetic waves of different ranges (laser, MM-waves), and magnetotherapy is becoming so effective and popular in medicine. Bioresonance and coherent phenomena with resonant-field types of interaction are also of great importance. A.P. Dubrov and V.N. Pushkin (1990) formulated this as follows: "Closely located frequencies of the electromagnetic range act antagonistically on biological objects, i.e., in an opposite way, while frequencies distant from each other have the same synergistic effect."

It is possible that acupuncture plays the role of a triggering device (trigger), activates the formation of coherent soliton waves in the receptor sites of cell membranes by transmitting coherence parameters. With the optimal number of such activated sites, a cooperative effect occurs, and the cells transition to another state and ultimately to recovery. In recent years, the development of non-traditional methods of treatment has been particularly intense, and many scientists contribute to this development. Among them, it is worth noting professors Y. Omura (1978-2001) and Pak Jea By (1980-2001). Thus, Y. Omura developed a circular bidigital test based on traditional approaches, which allows not only the selection of drugs but also the diagnosis of diseases at preclinical stages, for example, precancerous diseases. It is also important that he was the first to explain the phenomenon of radiesthesia or so-called extrasensory perception from a scientific point of view. Pak Jea By substantiated and created the microacupuncture system "Su Jok" (hand - foot) and revealed many nuances of metaphysical approaches in diagnosis and therapy. In particular, the explanation of most phenomena from the point of view of the "eight principles" is further development of the philosophical and theoretical concepts of Eastern medicine.

Thus, we must agree that we are witnessing processes of integration between Eastern and Western medicine, which will lead to a qualitatively different level of healthcare and reduce the catastrophic growth of healthcare costs, not only in economically backward but also in developed countries, and most importantly, improve people's health. Our task is to assist this integration and, where it is possible not to prescribe medication, not to prescribe it, but to use non-pharmacological options for therapy.

1.3. Analysis of the achievements of medicine in the field of therapeutic physical culture

Medicine should encompass the impact on a person of everything that comes into contact with them, and in addition, it should take into account the different effects of the same factor on different people. Since illness is a disruption of the integrity of the body, a systemic approach is necessary even when addressing a single disorder. Excessive specialization in modern medicine is a real affront to human dignity, as it so meticulously divides a person into parts, and in these parts there is nothing left to reproduce the real picture of a human being as it really is.

In order for objective laws of self-regulation and regeneration, which do not depend on our will, to work, they must not be hindered but rather conditions must be created that allow the body to cope with its problems and restore its integrity. And this can only be done with natural methods and comprehensive intervention.

Indeed, the healing of a cold or other pathological condition (illness) depends only on the self-healing functions of the body. With medication, we only suppress the symptoms of the disease, thereby pushing the disease deeper. Without eliminating the causes that gave rise to the disease, we force it to hide, and it will wait for a new opportunity to manifest itself.

If nothing interferes with regeneration in the human body, then it remains resistant to many diseases. Despite the fact that a person is inhabited by microbes of typhus, tuberculosis, plague, cholera, and many other diseases, nothing threatens them if their body is not exhausted, irritated, or cleansed. Their cells can coexist in the world with many microorganisms, which will be engaged in fighting with each other, but not with the environment in which they live.

Light, air, water, movement, rational nutrition, and mental regulation are the means that pave the way to self-healing. By increasing the supply of oxygen to cells, stimulating the capillary system, strengthening the flows and exchanges between blood and lymph on the one hand and intracellular environment on the other, and organizing the elimination of intracellular waste, we can protect the integrity and energy of cytoplasm, nucleus, mitochondria, and membranes. This is a true therapy for all diseases, which does not cure but humbly opens the way to self-healing.

The achievements of medicine in the field of therapeutic physical culture are great today. Physical exercises are like a symbiosis of a therapeutic, pedagogical, and educational process. Since the main means of this process are exercises and various sports elements, their application is always a kind of pedagogical process. The quality of this process directly depends on how much the specialist possesses various knowledge and skills.

When prescribing a course of therapeutic physical culture, the specialist takes into account the features of the disease, the nature, degree, and stage of the pathological process occurring in the systems and organs of the human body,

depending on the patient's lifestyle and his psycho-emotional state. Exercises are selected that relieve fatigue, normalize all physiological processes, normalize the energy balance in the body, and cleanse it at the cellular level.

The history of the development of therapeutic physical culture begins in ancient times when the healing properties of physical exercises and massage were known. In ancient Greece and Rome, physical exercises were used as a means of maintaining physical fitness and health.

Hippocrates recommended physical activity as a means of prevention and treatment of diseases. In the Middle Ages, physical exercises were associated with military training and were used as a means of training for soldiers.

In the 19th century, with the development of science and medicine, more research emerged about the benefits of physical exercise for health. Physical culture became more scientifically based and was considered a component of the healing process. In the 20th century, with the development of physical therapy, therapeutic physical culture became more widely used for treating various diseases, including cardiovascular, respiratory, and musculoskeletal problems.

In the 20th century, therapeutic physical culture became widely used for the prevention and treatment of diseases, including cardiovascular, musculoskeletal, respiratory, and other diseases. In the 1960s, therapeutic physical culture received international recognition and became one of the branches of medicine. At the beginning of the 21st century, many countries are developing and implementing various methods of therapeutic physical culture.

Today, therapeutic physical culture is an important component of the treatment and prevention of diseases, as well as a means of maintaining physical fitness and health. Various methods of therapeutic physical culture, such as massage, exercise, and physiotherapy, are used. There are many specialized centers and clinics around the world where therapeutic physical culture sessions are conducted under the guidance of highly qualified specialists.

There are also many techniques used in therapeutic physical culture, such as physiotherapy, massage, yoga, Pilates, acupuncture, and others. The development of therapeutic physical culture is linked to the development of medicine and scientific research methods in this area. Therapeutic physical culture is now an essential component of comprehensive treatment of patients and disease prevention.

One of the most important achievements of medicine in the field of therapeutic physical culture is the development of modern methods for treating various diseases through physical exercises and techniques. Modern methods have a wide range of applications and can be used to treat diseases of various kinds, including injuries, musculoskeletal disorders, cardiovascular pathology, respiratory failure, obesity, depression, and other mental illnesses.

Another important aspect of therapeutic physical culture is the development and implementation of new technologies and equipment, which allows for more accurate diagnosis and treatment of patients. Among such technologies are various

types of simulation trainers, virtual reality, special rehabilitation programs, and techniques.

Europe has been one of the leading regions in the world in the development of therapeutic physical culture. The history of therapeutic physical culture in Europe dates back to ancient Greece, where physical exercises were considered part of everyday life. In the Middle Ages, physical exercises such as archery and horseback riding were used by the military, but physicians also recommended them for improving health. In the 19th century, therapeutic physical culture became more scientifically grounded, and new methods and treatment technologies emerged. During this period of medical development, physical exercises became an important part of the treatment process. French physician Gui de Sainte-Marie wrote the book "Physical Exercises", which became the basis for the development of therapeutic physical culture in Europe. He also founded the first school of physical education in Paris.

In the second half of the 20th century, there was rapid development of science and technology in the field of therapeutic physical culture. Doctors began to develop new treatment methods, such as the use of electromagnetic fields, laser therapy, and other methods. New sports facilities and equipment were also created, allowing for comprehensive treatment. Today, therapeutic physical culture is an important part of the healthcare system in Europe.

The United States holds a leading position in the world in many fields, including medicine and physical rehabilitation. Significant progress has been made in this area in recent times. One of the most important achievements is the development of rehabilitation programs after injuries and surgeries. These programs include individual and group training, physiotherapy, and other methods of restoring bodily functions. These programs allow patients to return to their usual activities faster and with fewer restrictions.

In addition, technology is widely used in physical rehabilitation in the United States. For example, various medical devices allow for the control of a patient's physical activity, the development of various muscle groups, pain reduction, and the prevention of complications. Also, researchers in the United States are actively studying the impact of physical activity on human health overall. Scientists are studying the link between physical activity and various diseases, such as obesity, diabetes, cardiovascular diseases, and others. These studies help develop more effective methods of treatment for these diseases.

Therefore, in recent decades, the achievements of medicine in the field of physical rehabilitation have been significant and are of great importance to human health. New methods and technologies have been developed and implemented in different countries to help in the process of rehabilitation after injuries and diseases, as well as to prevent the risks of their development.

Modern medical centers and rehabilitation facilities are equipped with modern technologies, which allow patients to return to their normal lives after surgeries and injuries, as well as prevent the development of various diseases.

Achievements in the field of therapeutic physical culture also include the use of the latest methods and approaches to physiotherapy, manual therapy, physical exercises, yoga, and other types of treatment. Overall, the achievements of medicine in the field of therapeutic physical culture allow for a significant improvement in the quality of life of patients, reduce the risks of developing diseases, and maintain health.

The conclusions of the first chapter

So, based on our research in this first chapter, after analyzing all the above material, we have drawn the following conclusions. During the study, the history of the development of integrative medicine from its inception to the present day was analyzed. The main stages of its development and key figures who made a significant contribution to the formation of this field were identified. The main approaches and principles of integrative medicine were also analyzed, in particular, a comprehensive approach to treatment, the use of various methods and technologies aimed at maintaining and strengthening human health.

Summarizing the theories and concepts of integrative medicine, we can conclude that this branch of medicine is relatively young but has already proved to be effective and promising. The main idea of integrative medicine is to combine traditional and non-traditional medicine in order to increase the effectiveness of treatment and prevent diseases. An important component of integrative medicine is an individualized approach to treatment and the use of various methods, including alternative medicine, psychology, and dietetics.

Another important aspect of integrative medicine is the active role of the patient in the treatment process, which contributes to strengthening health and preventing diseases. Integrative medicine is a relevant and promising field of medicine that provides more effective and safe treatment for people. An important aspect of the development of integrative medicine is the research and implementation of the latest methods and technologies that allow for the improvement of the quality of medical care and the preservation of human health.

The concept of "integrative medicine" is quite widely discussed in modern literature and the information and communication space. Americans have recently paid significant attention to this direction. Our colleagues have already done a lot of work in this area. Nevertheless, it is encouraging to note that we have been able to fill the concept of "integrative medicine" with new content and adapt it to the conditions of Europe.

It should be emphasized that despite the explicit advantages of the American approach to integrative medicine, there are also existing drawbacks.

The frequent mechanical combination of contradictory and methodologically incompatible diverse medical and paramedical concepts and views.

The domination of syndromological or narrow-nosological approaches in diagnosis, with a lack of comprehensive understanding of pathology.

The high cost of implemented treatment programs.

The specialized corporate interests of medical associations serve as a barrier to the implementation of effective integrative information technologies in the diagnostic and therapeutic process.

The training of personnel in integrative medicine lacks unity of views on the diagnosis and treatment of "difficult" or "problematic" patients with complex

(combined) pathology.

Thus, according to the modern views of our Western colleagues, integrative medicine should analyze and synthesize knowledge obtained in different areas - traditional and alternative medicine, and as a result, serve as the basis for creating a new educational, diagnostic and therapeutic paradigm in healthcare of the 21st century. We were able to solve this scientific problem earlier than our foreign colleagues and propose a new ideology to European healthcare.

According to the views that emerged in the 1980s-1990s in the healthcare systems of Western European and North American countries, "integrative medicine" is the synthesis of methods of modern scientific and traditional alternative medicine. This implies not just a simple combination or integration of certain methods (approaches), but the development of fundamentally new diagnostic, therapeutic, and educational technologies that are characterized by lower costs and aimed at achieving maximum prolonged remissions or patient recovery.

From our point of view, integrative medicine is a direction of providing medical care to patients from the perspective of a systemic approach to the diagnosis, treatment, and prevention of complex pathologies. Complex (combined, mixed, polymorbid) pathology is a disease that involves the pathological process of various regulatory and effector systems of the body.

A problematic patient is a person with complex pathology. The clinical picture of a "problematic" patient manifests with multiple symptoms, where a combination of "diseases of the body", "diseases of the soul", and "behavioral disorders" occurs against the background of various "abuses". These patients are usually treated by many specialists (cardiologists, pulmonologists, gastroenterologists, urologists, gynecologists, neurologists, psychiatrists, etc.), without receiving adequate positive results from therapy, they attend sessions with psychics and witches; however, disappointments await them on this path, and they return to the "circles" of traditional medicine. The cost of such treatment is undoubtedly high, both in material and morally terms.

The European concept of integrative medicine (P.I. Yunatskevich, S.A. Parcenyak) is based on several principles:

Comprehensive study of the patient's mental and somatic state, determination of current disorders and their significance, identification of interrelationships and interdependence of mental and somatic pathological disorders;

Development of dynamic treatment tactics based on the results of comprehensive diagnostics and oriented towards a systemic approach.

Integrative treatment is comprehensive medical care for a patient with combined pathology (examples: neurocirculatory dystonia (NCD) + functional dyspepsia (FD) + irritable bowel syndrome (IBS) + asthenic-neurotic state (ANS); ischemic heart disease (IHD) + chronic gastroduodenitis (CGD) + osteochondrosis with vertebralgia + ANS, etc.), accompanied by behavioral disorders (food, sexual, etc.), arising against the background of abuses (alcohol, drugs, etc.).

Such patients should be treated by a "specialist physician with integrative training" - based on their basic specialization, they could be a therapist, surgeon, dermatovenerologist, etc., who has undergone additional training in psychiatry (5-6 months), psychotherapy (3-4 months), and selected sections of alternative medicine (3-4 months).

Chapter 2. Overview of Modern Techniques myself

2.1. The III-C Ecological Rule as the Philosophical Basis of Techniques Myself

Conscience is the main prerequisite that allows a person to cope with social, psychological, and physical difficulties. According to the definition of P.I. Yunatsevich, conscience is based on the system of individual's values, attitudes, and motives, according to the III-C rule. When a person works for the benefit of others, a state of spiritual enlightenment arises, which is the main characteristic of a person's conscience - he creates for others, that is, gives more than he takes for himself.

The indicators of conscience include the presence of a goal and meaning in life, a person's hope, his desire to live and create for others, not to harm himself and others. Conscience is characterized by a person's ability to observe the ecological rule of conscience III-C.

The formation of conscience is identified with the education of personal qualities, the involvement in the daily practical observance of the III-C rule in personal behavior, which integrates all philosophical and religious doctrines.

Conscience is a way of life and development of a person, a manifestation of inner freedom. The main principle of conscience consists not only in having strong health but also in the ability to realize, with the help of health, the mission of a creative person. The qualities are formed on the basis of socially significant values that become the life "beacons" of a person through the formation of value knowledge, value orientations, and value relationships. The need to preserve and develop conscience is realized in the activity of a person, in interaction with other people. The conscience of each individual is a guarantee of the conscience of the whole society. It is determined by the GEP (global ethical rule of conscience - one should behave in such a way as not to harm oneself and other people). The distinguishing features of a person's conscience are:

C1:
"Do not harm yourself with your thoughts"
"Do not harm yourself with your words"
"Do not harm yourself with your actions"
"Create for yourself with your thoughts"
"Create for yourself with your words"
"Create for yourself with your actions"

C2:
"Do not harm your neighbors with your thoughts"
"Do not harm your neighbors with your words"
"Do not harm your neighbors with your actions"
"Create for your neighbors with your thoughts"
"Create for your neighbors with your words"
"Create for your neighbors with your actions"

C3:
"Do not harm the environment with your thoughts"
"Do not harm the environment with your words"
"Do not harm the environment with your actions"
"Create for the environment with your thoughts"
"Create for the environment with your words"
"Create for the environment with your actions"

A person is in a state of complete well-being when the physical, social, psychological, spiritual, emotional, and conscientious aspects of their life are harmoniously combined.

Conscience provides a new paradigm of human thinking. The old worldview paradigm was based on the primacy of the material over the spiritual in human thought and behavior. The new worldview paradigm is based on the following principles, rules, methods, and technologies:

Global ecological principle (GEP): a person should not harm themselves, others, or the environment; Global ethical conscience principle (GECP): a person should behave in a way that does not harm themselves, others, or the environment; Conscience rule III-C: do not harm yourself (C1), your neighbors (C2), or the environment (C3) in thought, word, or deed; create for yourself, neighbors, and the environment with thought, word, and deed; The technology for changing the ethical worldview paradigm is based on the discursive-evaluative method (DEM), which involves organizing broad citizen participation in the discussion and evaluation of socially significant decisions from the perspective of GEP, GECP, and III-C; Ecosocial technologies, which refer to the set of methods for applying the discursive-evaluative method in shaping the new worldview paradigm.

The change of worldview paradigm is ensured by the education of conscience, enlightenment, propaganda, government and municipal authorities, and management of public and private organizations.

Training on this topic is carried out in educational institutions and other organizations. During lessons and classes, citizens, guided by the conscience rule, learn to give public assessments of events and actions carried out by other subjects. The ability to recognize immoral actions in one's own behavior, as well as in the behavior of other citizens and organizations, is a mandatory educational outcome of teaching secular ethics.

Preparation and implementation of lessons and classes are ensured by government and municipal authorities, management of public and private organizations, parents, and their substitutes.

Conscience enlightenment and propaganda are organized in the mass media and with the help of information and communication resources. They are aimed at providing every citizen with examples of legal responsibility for unethical behavior and promoting the advantages of conscientious behavior.

The shift in worldview paradigm is a *process* enabled by eco-social technologies**.**

The shift in the worldview paradigm of thinking will lead to the formation of a consience atmosphere on planet Earth, which will ensure the strengthening of the health of citizens. Lethal wars will become a thing of the past. Human confrontation will be carried out using soft power, and non-lethal wars will be won by the side that achieves consience superiority over its opponent.

As noted by P.I. Yunatsevich, medical ethics should be common to all of humanity and all medical technical systems (including artificial intelligence used in healthcare) created by humans. The basis of medical ethics is the conscience rule III-C (do not harm yourself (C1), neighbors (C2), or the environment (C3) with thought, word, or deed; create for yourself, neighbors, and the environment with thought, word, and deed). The future doctor must literally learn the conscience rule III-C from early childhood. The task of each doctor is to teach the patient to observe the III-C rule. This is the path to health.

Since artificial intelligence in medicine is not obligated to share human motivations, artificial intelligence developers for healthcare systems must incorporate medical ethics based on the III-C conscience rule.

The III-C conscience rule eliminates the artificial complexity of human value systems that lead to the very difficult creation of motivations that are convenient for humans in AI. Before our research, all moral philosophy did not provide humanity with a flawless ethical theory. It allowed for many harmful scenarios that correspond to the ethical structure of the old paradigm of thinking, which prioritized materialism over the consience spiritual foundations of human life. Such a priority was called "common sense." Based on it, the killing and looting of individuals and entire nations were morally justified.

V.A. Chigirev and P.I. Yunatkevich have given the world a new universal ethics based on the conscience rule III-C, which creates a clear boundary between common sense and inhumanity. The scientists add the foundations of conscience to "common sense," establish a discursive-evaluative method in ethics that allows for avoiding canonization and dogmatization of norms. Norms are flexible, established, affirmed, and changed depending on social discourse and evaluation from the perspective of the conscience rule III-C: a person, in order not to think, should not contemplate causing harm to oneself, other people, and the environment; a person, in order not to speak, should not write or say aloud about causing harm to oneself, other people, and the environment; a person, in order not

to act, should not perform actions aimed at causing harm to oneself, other people, and the environment.

Therefore, with such common sense, there is reason to believe that artificially created intelligence will possess such an adaptation that it will not harm people.

We propose a design for artificial intelligence that avoids all types of thought and behavior without conscience. Machine ethics (or machine morality) is a field of research related to the development of artificial moral agents, robots, or artificially intelligent computers that behave strictly in accordance with ethical rule III-C. The nature of these agents is determined by the content of ecological discursive ethics.

Standard characteristics of subjectivity, rational agents, moral factors, and artificial subjectivity should be linked to a new worldview paradigm of human thinking, that is, have the foundations of conscience and reflect them in the process of their subjectivity.

Isaac Asimov addressed this issue in the 1950s in his series of stories "I, Robot." At the insistence of his editor, John W. Campbell Jr., to manage artificially intelligent systems, he proposed the Three Laws of Robotics. Much of his work was spent testing the limits of his three laws to see where they could break or where they could cause paradoxical or unforeseen behavior. His work assumes that none of the established laws can adequately anticipate all possible circumstances.

V.A. Chigirev and P.I. Yunatskevich reduced Isaac Asimov's entire concept to a new ethics of robots - "I am a robot, therefore I am a creation of conscience, I do not pose a threat to humans, I do not cause harm to humans." The category of "harm" is quite fully described in the criminal law of every country in the world. Redefining the category of "conscience" through the category of "not harming" allows for the creation of technological and software solutions that shift the worldview paradigm, and use new basic ethical principles for creating robots and any technical systems, including artificial intelligence systems.

We have proposed the idea of holding AI accountable if it causes harm to humans while being involved. AI, its developers and manufacturers, operators must be responsible to society and the state for the harm caused to people.

Human motives for harmless behavior have a quality that requires continuous training in the III-C conscience rule in various didactic forms of representation.

It is necessary to create consience AI. Then, the progress that is already happening with AI will also include efforts aimed at creating more consience, friendly, and humane AI.

To enable AI systems to be self-sufficient and capable of making their own decisions, they must have an ecological-discursive ethics. The III-C rule is an ethical regulator of computers and robots that acquire any level of autonomy and degrees of using such possibilities so as not to pose any threat or danger to humans.

The self-awareness of humans, society, and all technological systems created by humans should be regulated by the rule of conscience III-C. Such an ethics, common to both humans and technological systems, will eliminate all potential

dangers and pitfalls of social relations and interactions between society and technological systems.

Technologies that can truly lead to robots with moral capabilities were developed back in the USSR (V.A. Chigirev, P.I. Yunatckevich). Neuromorphic chips strive to process information similarly to humans, nonlinearly and with millions of interconnected artificial neurons. Robots with built-in neuromorphic technology learn and develop knowledge in a unique way. Such robots learn about the world and acquire moral principles, including those that developers embed in the texts. These materials often reflect the social logic of sociopaths, individuals without conscience, who have lost their sense of conscience and empathy for others. To prevent robots from inheriting human "weaknesses": selfishness, arbitrariness, hedonism, lack of conscience, social parasitism, and so on, a conscience prism is installed in the sensors of these robots so that the perception of educational materials, as well as the reality, is carried out through the logic of the rule of conscience III-C. Only in this way can harmless robots, AI, and other technological systems be created by humans.

Teaching robots to act correctly, legally, safely, and constructively for humans means incorporating the III-C rule into their program. Then, the trees of their decisions will adhere to an ecological discourse ethics, becoming safe, transparent, and predictable for society.

Ethics are important not only for machine learning. Society and the state require an ethical regulator. Physically, this regulator is represented by public consciousness, the worldview paradigm of humans and society. Changing the paradigm means changing the ethics of materialism, ideology-technology, and the religion of money (belief in money as God) to a new ethics, which forms a new worldview paradigm.

Ethics is the science of conscience. The subject of ethics is conscience, human thinking and behavior that form the basis for all human values, the content of which is linked to the III-C rule of conscience.

The list of these values is determined, refined, and corrected by society through the use of the discursive-evaluative method. The values themselves may have different types and forms, but their content will be identical to the content of the III-C rule. This common foundation of conscience provides opportunities for peaceful coexistence of cultures.

The term "ethics" (Greek - ethos, "custom, habit") is understood by us as a custom to observe the III-C rule of conscience. There is no need to be a moralist here, it is important to simply observe this universal rule - do not harm and create. This is the subject of ethics as a philosophical science.

The concept of morality is not identical to the category of conscience. Conscience forms the basis of morality, which is its derivative.

Morality (Latin - Moralis) reflects the norms of behavior accepted in society. During discursive-evaluative practices, these norms change, but their essence remains - the basis of conscience cannot be separated from morality. Morality

reflects consience views and feelings, life orientations, goals, and motives for actions, drawing a line between what is harmful and what is not harmful yet.

The old moral boundary that philosophers established before the 21st century - the boundary between good and evil, usefulness and uselessness, profitability and poverty - has become obsolete. With the change in the worldview paradigm, another more distinct moral boundary has become relevant, characterized by the categories of "harmful" and "harmless," which anyone can feel. This understanding of morality allows individuals to ensure their survival and significantly reduce the lethality of wars.

At birth, every person receives the foundations of thinking and behavior called conscience. However, these foundations need to be constantly strengthened by regularly reminding oneself of the rule of conscience III-C. Then, innate conscience qualities will manifest themselves in a person throughout their entire life. Conscience should not only be inside a person but also outside. It is developed literally from the first year of a person's life.

Ethics as a science of conscience is inseparably linked with all religious and secular philosophical teachings and doctrines. The basis of ethics (the rule of conscience III-C) has an integrative and comprehensive nature, allowing it to form a worldview paradigm.

Therefore, we assert that the change in the worldview paradigm begins with a change in ethics.

Features of moral consciousness:

Morality reflects the rule of conscience III-C.

Morality is established and changed by public discussion and evaluation of norms and rules of behavior oriented towards different degrees of compliance with the rule of conscience III-C.

Sociopaths carry out the breakdown of morality or its imitation, as they, due to their socially dangerous illness (sociopathy), have lost conscience, responsibility, a sense of empathy, and mercy towards other people. They actively penetrate into power hierarchies and begin to demonstrate their arbitrariness, masking it with another set of moral values, which are more of a slogan than the foundations of a worldview.

Moral judgments do not require justification if they reflect the III-C rule. If they do not reflect this rule, then they become incomprehensible to society. In this case, interested groups of sociopaths impose pseudo-morality. For example, the prohibition of binary gender division and the assertion of different sets and combinations. The imposition of incomprehensible pseudo-morality is carried out through the means of religion, government control, money, and certain subcultures. This continues until society begins to resist, feeling a threat to its conscience.

Moral law is always above formal legal rights.

Morality originated as a relationship between society and the individual. It is a regulator of interpersonal relationships and human behavior in society. An important characteristic of conscientious relations between a person and society is

the combination of personal and collective interests. This combination is balanced through the discursive-evaluative method. The reduction of discursiveness will lead to the destruction of these relationships and another social catastrophe.

Therefore, if we talk about establishing a conscience-legal order in the state, then we must give more discursiveness to the state. All decisions should be evaluated and discussed with society. Otherwise, a social catastrophe is inevitable.

Humanism is an integral quality of conscience in a person. The term "humanism" was introduced into scientific and educational use by German pedagogue F. Niethammer in 1808. "Humanism (from Latin humanitas - humanity, humanus - human, homo - man) is a worldview, centered around the idea of man as the highest value. Humanism affirms the value of man as an individual, his right to freedom, happiness, development, and the expression of his abilities. Humanism is love and respect for the individual through mercy and compassion!

We are currently living in an era of a shift in the worldview paradigm, which reflects the progress of conscience awareness, meaning that the "golden age" of humanity is ahead.

The progress of society, history, science, art, economy, security, education, and law is the progress of conscience. These processes coincide. The values of conscience acquire national characteristics (universality of moral laws).

An educated person is a moral person who adheres to the rule of III-C in their life activities. To be a human being, that is, to be healthy both physically and consience-wise, is the main basis of morality. The motive behind a person's actions is important. This motive needs constant strengthening by systems of education and upbringing, the content of which should reflect the rule of conscience III-C.

Moral consciousness includes three levels: recognition, rational, and emotional.

Recognition is a cognitive and emotional process of applying the image of behavior and thinking reflecting the Rule of Conscience III-C to objects of attention. Recognizing what is harmful to a person and what does not harm them has biological and social foundations. Biological foundations are determined by the safety reflex. When an individual feels harm, that is, senses an obstacle to their life activity, their nervous system sends a managerial signal to leave the zone of contact with the source of harm. Social foundations involve recognizing social subjects who pose a threat or cause harm to a person as a citizen and member of society. However, social systems such as law and security cannot always give a managerial signal to a person to leave the zone of contact with sources of threats and harm. This drawback is caused by the old worldview paradigm, which needs to be replaced, as it was the old worldview paradigm that set inadequate recognition images, often portraying humanity's enemies as so-called "saviors of the nation," and so on.

The rational level of moral consciousness includes knowledge of the Rule of Conscience III-C and the principles, norms, and categories of morality that stem from it; understanding their essence and the need for their application; and

acceptance, i.e., agreement with them.

The emotional level of moral consciousness characterizes the person's immediate reaction to an event, attitude, etc. This level includes the feelings, emotions, experiences, and moods of the individual. Rejection of immoral behavior, intolerance of selfishness, arbitrariness, injustice, inhumanity, and unscrupulousness provide emotional protection for a person against social predators, such as sociopaths.

Based on this, moral functions are formed:

The function of recognizing what is harmful (without conscience) and what does not cause harm (with conscience).

The regulatory function: morality is a form of regulating human behavior and life. Means of regulation include norms, ideals, principles, traditions, customs, commandments, public opinion, values, authorities, etc.

The evaluative function. The subject of evaluation from the point of view of the rules of conscience III-C and the moral concepts that arise from these rules are people's actions, their intentions, motives, personal qualities, existing laws, state policies, and much more. A person constantly evaluates everything that enters into the field of their life. Evaluating and discussing the moral qualities of others allows a person to strengthen their own moral qualities. Without evaluating and discussing these qualities, there are no moral qualities themselves.

The orienting function. Morals allow for the development of a system of priorities, preference of some norms over others, the formation of a strategy and tactics of behavior. This function is the "compass of conscience," allowing one to identify the most preferable options for behavior that meet the requirements of the rules of conscience III-C:

Do not harm - and you will not be harmed. Do not harm yourself! Do not harm your neighbor!! Otherwise, your neighbor will harm you. Do not harm the environment!!! Otherwise, the environment will harm you.

To avoid harming oneself, one must not harm other people and the environment - that is, become a volunteer of the path of conscience. Do not harm yourself - here and now - and you will ensure a bright future for yourself and your descendants.

Consience: The concept of conscience is based on the *idea of a person's moral and ethical responsibility for their actions*. Some define it as the avoidance of harming oneself, others, and the environment. Others see it as determining the life path of each individual. They assess and discuss every citizen or leader. If others determine that this particular citizen or leader is harmful, then there is no trust in them. Therefore, a harmful person who has lost trust immediately becomes the subject of influence from others. This influence can be different, dangerous, and even deadly. To avoid harm from others, the harmful person can save themselves by following their conscience. For self-preservation, it is important for them to stop harming others so that in the end, they do not harm themselves!!!

The educational function of morality is determined by participating in creative work for the benefit of others, excluding harm to them (create and do not harm).

The cognitive function can be considered from the perspective of value orientations. It is not just knowledge of moral principles that is important, but also their acceptance by individuals and their manifestation in their actions.

The humanistic function is to shape the best human qualities that reflect the rule of conscience III-C.

The central moment of conscience activity is the action that characterizes a person's ability to consciously set constructive goals, choose appropriate means, and act independently, internally free, and morally responsible. Action includes two components: motivation and evaluation (self-evaluation). Motivation plays the role of an impulse, a push towards action: there are no unmotivated actions. Motivation indicates the preference of an individual for certain values. The motives and results of the action may not coincide or correspond to each other. For example, "*we wanted to do better, but it turned out as always*." Why does this always happen? The answer is surprisingly simple: for every good deed, there is a sociopath who distorts it beyond recognition and gives it a mimetic character. Until every person learns to identify sociopaths, label them, and remove them from the systems of government and self-government, "*good intentions of sociopaths will pave the way to hell*."

It is important for society to also teach every person how to recognize a sociopath. This will allow for the formation of a mechanism to avoid sociopaths both in personal life and in systems of government and self-governance: "If it feels harmful, say no." In addition, early identification and prevention of sociopathy in education systems will minimize the number of individuals affected by this socially dangerous condition in society and the state.

The same motive can lead a person to different actions (for example, love for a woman can inspire the desire for self-improvement in order to win her heart, or it can turn into a desire to destroy rivals in the case of sociopathy). At the same time, the same line of behavior is always dictated by a social motive of positive feedback, when society recognizes a person as a creator, a hard worker. The desire for material reward takes a back seat when the societal paradigm shifts towards conscience economics. Money plays a role as a tool for ensuring well-being. The function of faith, ideology, and technology is removed from money by society and the state, which have embarked on the path of their own conscience development.

Moral evaluation involves the condemnation or approval of a person's actions, behavior, thoughts, or life based on moral requirements. It plays a significant role in regulating the conscience's behavior, as we all crave approval through the commission of constructive actions. A normal person cannot engage in destructive activities until they become a victim of sociopathy, the ideology-technology, and the religion of money.

The basis for individual, group, and mass ethical evaluation are moral

principles, norms, ideals, moral qualities, and constructive actions of a person. The results of this evaluation stimulate conscience-driven behavior and block behavior without conscience.

The main moral qualities can be divided into the following groups:

worldview (conscience or without conscience, spiritual or material);

ideological and political qualities (solidarity, justice, collectivism, citizenship, patriotism, defense of the Motherland, etc.);

professional qualities, the main of which is a sense of duty and personal responsibility for the assigned task, a habit of engaging in intellectual and physical labor, etc.;

humanistic qualities, i.e. qualities that characterize a positive or negative attitude towards a person as the highest value (strong family and marriage, love, respect, mercy, dignity, etc.).

Personality is created in moral action, i.e. it is important not only to know moral principles but also to act according to them. Here, the humanitarian component of education and upbringing plays a significant role, namely the humanization of education as a whole.

The humanization of education is a system of measures aimed at the priority development of general cultural components in the content of education and, thus, at the formation of a conscience-driven personality that follows the rule of conscience III-C in thinking and behavior.

Techniques myself are a medical ethical practice of decision-making and managing one's own life and health using the ecological imperative, which is based on prohibitions and restrictions that apply to any human activity in order to preserve living nature, protect the environment, and life. Also, conscience is a valuable component, and important elements of it include love for nature and respect for all forms of life, as well as the ability to perform and consider actions in accordance with one's moral principles.

It is extremely important to accept one's own body - this is primarily self-love, self-respect, self-value. And naturally, this leads to health, harmony, and beauty. It is through this acceptance of the body that a person's abilities are revealed. It is through acceptance that changes become possible. For example, if a person wants to lose weight, it is much easier to do it out of love for oneself, out of acceptance of oneself, than through self-restraint and violence towards oneself.

A person armed with technology, machines, and mechanisms has been actively impacting nature for many years, sometimes without considering the consequences. There are hundreds, if not thousands, of examples of the harmful effects of human activity on nature, and lately, there have been more and more global-scale changes that threaten the planet as a whole.

However, like all other living beings on the planet, we are inseparable from the biosphere. The boundaries of the natural environment in which we can exist are quite narrow. We need a certain air temperature, sunlight, atmospheric composition, soil, and water - the same ecological environment in which evolution

has taken place throughout our history. Yes, humans can adapt to new living conditions, but only up to a certain point. The adaptive capabilities of an organism reflect its level of health and resilience to the effects of the environment. Therefore, human health can be considered an indicator of the "quality" of the environment. As practice shows, the destructive changes in the natural environment occur much faster than the adaptive capabilities of humans. Therefore, if these changes are not stopped, difficult times await humanity.

An organism experiencing continuous stress, such as psychoemotional, production-related, or being in an unfavorable physical or climatic environment, develops somatic and mental illnesses as an adaptive response. This is because adaptation (accommodation) to new conditions (unfavorable conditions) is achieved at the cost of the functional resources of the organism. Diseases arise as a specific adaptive physiological process aimed at providing a passive way out of an unfavorable physical situation. Such a nonspecific response of the organism is called a disease, and if the cause (exit from unfavorable conditions) is not eliminated, the cause of the disease will not disappear.

There are no restraining mechanisms on the path to unbridled exploitation of nature, except for the will and intelligence of the person themselves. The same applies to the psychoemotional state of a person - the elimination of various stress factors, internal and external irritants, with the help of techniques myself.

Creation is the highest known form of human creative change in reality. Creative activity is always aimed at improving the world and making it more harmonious. It accompanies actions that bring goodness to people: material, practical, inner, spiritual, useful for expanding consciousness or developing good qualities. In a broad sense, creation is not so much transformation as it is an understanding of the essence; the willed, conscious, and spiritual activity of a person is an internal process through which a person learns about themselves, the surrounding world, and finds new ideas and solutions for creative change in reality.

Creation is simultaneously the creation, the construction of something harmoniously inspiring. Creation helps develop mindfulness, and mindfulness, in turn, enables us to act rationally, rather than succumbing to instinctive reactions. It also contributes to the development of stress resistance, self-control, and self-confidence. Mindful people better understand their abilities. They know how to calm themselves down and make the right decisions based on personal convictions. Essentially, mindfulness helps recognize our emotions and allows us to better regulate them. And it provides an opportunity to focus on developing cognitive skills.

Contemplation is one of the best preventions of psychosomatic illnesses. People who are accustomed to living in a hurry do not have time to understand what they truly want. They usually choose what is available and follow imposed stereotypes in appearance, behavior, work, etc.

The ability to contemplate is one of the characteristics of a psychologically healthy personality. That is, people who pay attention to the development of their

"inner observer" are usually much happier than those who rush through life. This is because, by contemplating, a person learns to better understand themselves. They learn to recognize their feelings, emotions, and the reasons for their occurrence or change. Gradually, a person develops their own system of values, beliefs, desires, and aspirations.

A person who knows how to contemplate acquires abilities such as: adequate self-esteem; understanding oneself, one's values, needs, thoughts, emotions; freedom from dependencies and harmful habits; relaxation and true rest, physical and mental; understanding of other people; the ability to build harmonious relationships; wisdom, spirituality; getting pleasure from everyday activities.

2.2. Techniques myself as an integrative complex of therapeutic physical culture exercises

Therapeutic physical culture is a separate discipline that uses means of physical culture for the treatment of diseases and injuries, prevention of their exacerbations and complications, and restoration of working capacity. The main means of therapeutic physical culture are physical exercises. Therapeutic physical culture is effectively used in physical and moral education of a person. During the classes, citizens acquire skills in using natural factors of nature for hardening, physical exercises for therapeutic and preventive purposes, which allows to consider classes of therapeutic physical culture as a therapeutic-pedagogical process. The use of means of physical culture for preventive and therapeutic purposes has a long history. Already in ancient times, physical exercises, baths, massage, hydrotherapy, diet, climate and many other methods were used for health improvement. Preventive medicine originated not only in ancient China, but was also actively used by Slavic tribes. The Chinese and Slavs paid a lot of attention to disease prevention. It was they who coined the aphorism: "The real doctor is not the one who treats the sick, but the one who prevents the disease."

In ancient India, yogis practiced over 800 different breathing exercises, particularly those involving breath retention, for preventive purposes and for treating various illnesses. In ancient Greece, physical exercises, massage, hydrotherapy, and dietary changes were widely used for treating and preventing many diseases. One of the founders of modern medicine, the ancient Greek physician and philosopher Hippocrates (c. 460 – c. 370 BCE), stated in his works that a moderate lifestyle, reasonable exercise, fresh air, and walks were necessary for prolonging life, which he called "food for life." Hippocrates described the effects and methods of physical exercises in treating certain diseases of the heart and lungs. Whole generations of ancient Greek doctors, philosophers, and thinkers emphasized the importance of physical exercises for prolonging life and treating illnesses in their works.

Aristotle wrote, "Life requires movement. Nothing exhausts and destroys a person like prolonged physical inactivity." Therapeutic gymnastics reached a very high level in ancient Rome. Entire books and treatises were even published describing gymnastic exercises applicable to various illnesses, as well as recommending sports exercises (rowing, horse riding), work therapy (harvesting fruits and grapes), excursions, and hikes.

In the Middle Ages, physical exercises, baths, massage, and hygiene were almost forgotten. This was due to the dominance of the church and the Holy Inquisition in Europe, which hindered the development of biological sciences and medicine.

The application of physical exercises in the treatment and prevention of various illnesses found reflection in the works of the great Tajik doctor Abu Ali Ibn Sina (Avicenna) (980-1037). In his multi-volume work "The Canon of Medicine," all the achievements of Arab, Iranian, and Central Asian medicine are presented. Avicenna recommended the use of physical exercises in the treatment of injuries and many illnesses, substantiated the need for people of different ages to perform physical exercises and hardening procedures, and described numerous gymnastic and practical exercises.

The revival of therapeutic gymnastics began in the 17th century. For this time, the development of biological sciences was characteristic. In connection with the rapid progress of domestic science and culture in the 19th century, interest in physical methods of treatment, especially in medical gymnastics, massage, and hydrotherapy, increased.

The founders of the Russian therapeutic school are considered to be S.P. Botkin and G.A. Zakharin. They attached great importance to the therapeutic use of physical exercises. S.P. Botkin's ideas about the integrity of the body, which is in continuous connection with the external environment and controlled by the nervous system, provided a scientific basis for the therapeutic effects of physical exercises. However, the development and formation of therapeutic physical culture in our country began after the October Revolution.

The development and formation of therapeutic physical culture occurred in three stages:

1st stage - 1917-1930 - the emergence of therapeutic physical culture and its initial development. At this time, great importance in the scientific justification of physical exercises was attributed to scientists such as V.V. Gorinevsky, I.M. Sarkizov-Serazini, V.K. Dobrovolsky. Their ideas on the use and application of physical exercises in the system of sanatorium-resort treatment were supported by the People's Commissar of Health N.A. Semashko.

2nd stage - 1931-1941 - significant expansion of scientific research, especially in the development of specific methods for the use of therapeutic physical culture for diseases of the cardiovascular system, traumatology, obstetrics, and the introduction of therapeutic physical culture into the practice of hospitals and clinics, intensified training of specialist physicians and LFC methodologists. During this time, departments of therapeutic physical culture and medical control began to be created in physical culture institutes.

Stage 3 - 1941-1945 - the use of therapeutic physical culture (TPC) in the treatment and rehabilitation of wounded and sick during the Great Patriotic War. TPC, massage, and physiotherapy were used at all stages of treatment in hospitals and other medical institutions. TPC firmly entered the system of treatment and rehabilitation of the wounded and disabled. Thanks to its effectiveness, TPC contributed to the fastest recovery of patients and the wounded. In the 1950s, medical physical culture dispensaries were created to provide medical support for

those engaged in physical culture and sports, as well as organizational and methodological guidance on therapeutic physical culture. Departments of therapeutic physical culture and medical control were established in all medical universities, and classes in therapeutic physical culture and massage were held in medical schools. In subsequent decades, the development of TPC was carried out in the following scientific-practical directions: the development of new methods of TPC for the treatment of patients and the disabled; the introduction of TPC into new areas of medicine (such as oncology); clarification of indications and contraindications for the use of TPC, and the creation of a rehabilitation system.

Currently, therapeutic physical culture as a method of treatment through movement is widely used in the comprehensive rehabilitation system in hospitals, medical and physical culture dispensaries, clinics, and other medical and preventive institutions.

Forms of therapeutic physical culture are the organizational forms within which therapeutic physical culture means and methods are applied.

The forms of therapeutic physical culture are diverse. These include therapeutic gymnastics, morning hygienic gymnastics, independent patient exercises recommended by a doctor or instructor, walking, terrain cure, physical exercises in water and swimming, skiing, rowing, exercises on simulators and machines, games (volleyball, badminton, tennis), and target practice.

In addition to physical exercises, therapeutic physical culture includes massage, air and water hardening, work therapy, and riding therapy (horseback riding).

Morning hygienic gymnastics is performed in medical institutions and at home in the morning after sleep.

Morning gymnastics promotes the removal of inhibitory processes, the emergence of alertness, strengthening of the cardiovascular and respiratory systems, improving metabolism, and has a general toning effect on the entire body.

The duration of the exercises depends on the patient's condition and the conditions of the exercise (in the ward, outdoors) and lasts about 10-20 minutes. Therapeutic gymnastics has a general strengthening effect on the body and solves specific problems according to the disease and its stage. Group sessions are conducted with patients grouped together according to the nature of their illness and its stage. Group sessions are preferred because they are usually conducted in a playful form, which patients enjoy. Sports equipment and devices can be used to achieve more pronounced results.

Therapeutic gymnastics is the most common form of using physical exercises for treatment and rehabilitation. The possibility of purposefully influencing the restoration of disrupted organs and systems determines the role of this form in the TPC system.

Methods of conducting therapeutic gymnastics include:

Individual sessions, which are used in the early postoperative period with

patients whose mobility is limited;

Group sessions, in which patients with a certain disease are grouped together;

Consultative or self-exercises, in which patients are taught a special set of physical exercises before discharge from the hospital, which they will perform independently at home to consolidate the achieved result.

The therapeutic exercises are divided into three parts:

The introductory part - it constitutes 10-20% of the total exercise time. The exercises in the introductory part prepare the body for further load and have a toning effect on the body. During this part of the exercise, basic exercises for the trunk, arms, legs, low-movement games, walking, and breathing exercises are performed.

The main part - it constitutes 60-80% of the total exercise time and is aimed at restoring the functions of the body, improving trophism (nutrition of muscles and spinal structures), and forming compensations. Special exercises recommended for patients with a specific disease are performed during this part of the exercise. Elements of games, sports equipment, and practical exercises may be used.

The final part - it constitutes 10-20% of the total time, and the main tasks of this part are to reduce the load, restore the functions of the respiratory and cardiovascular systems. Breathing exercises, light walking, attention and relaxation exercises are performed.

The physical load is controlled and regulated by observing the body's response reactions. Pulse control is a simple and accessible method. The graphical representation of the changes in pulse frequency during the exercise is called the physiological load curve. The greatest increase in pulse and maximum load is usually reached in the middle of the exercise - this is a single-peak curve. In some diseases, it is necessary to reduce the load after increased load and then increase it again; in these cases, the curve may have several peaks. It is also important to count the pulse 3-5 minutes after the exercise. The density of the exercises, i.e., the actual exercise time expressed as a percentage of the total exercise time, is crucial. In stationary patients, the density gradually increases from 20-25% to 50%. During sanatorium and resort treatment in groups of general physical training, a density of exercise of 80-90% is permissible.

The prescribing physician determines the course of therapeutic exercises, while the specialist in therapeutic physical education determines the methodology of the exercises. The procedures are carried out by an instructor, and in particularly complex cases, by a physician specializing in physical therapy. The use of therapeutic exercise, by increasing the effectiveness of complex therapy for patients, accelerates the recovery period and prevents further progression of the disease. It is not recommended to start exercising on your own, as this can lead to a deterioration in your condition. The exercise program prescribed by the doctor must be strictly followed.

Independent exercises are a special set of physical exercises, developed and performed together with an instructor or doctor. These exercises should be repeated 3-5 times a day to increase the effectiveness of therapeutic physical education, whether at home or in a hospital. Independent exercises are particularly important in the treatment of nervous system and musculoskeletal disorders. Individual independent exercises complement the therapeutic exercises performed by the instructor and can only be carried out independently with periodic visits to the instructor for guidance.

The main means of therapeutic physical culture (TPC) are physical exercises used for therapeutic purposes, as well as natural factors of nature. Additional means include mechanotherapy (exercises on simulators and block devices), massage, and work therapy (ergotherapy).

Physical exercises are applied in accordance with the goals of treatment, taking into account the etiology, pathogenesis, clinical features, functional state of the body, and overall physical capacity. There are many different types of physical exercises, and they affect the body in various ways.

In TPC, physical exercises are divided into three groups: gymnastics, sports and applied exercises, and games.

Gymnastic exercises consist of combined movements that can affect various systems of the body and specific muscle groups, joints, developing and restoring muscle strength, speed, coordination, etc. All exercises are divided into general development (general strengthening), special, and breathing (static and dynamic). General strengthening exercises are applied for health improvement and strengthening of the body, increasing physical performance and psycho-emotional tone, activating blood circulation and breathing. These exercises facilitate the therapeutic effect of special exercises. Special exercises selectively affect the musculoskeletal system, for example, the spine in case of its curvature, the foot in case of flat feet and injury. For a healthy person, exercises for the torso are general strengthening exercises, but for osteochondrosis, scoliosis, they are considered special exercises, as their action is aimed at solving treatment tasks - increasing the mobility of the spine, correcting the spine, strengthening the surrounding muscles. Exercises for the legs are general strengthening exercises for healthy people, but after surgery on the lower extremities, injuries, paralysis, joint diseases, these same exercises are classified as special. The same exercises, depending on the methodology of their application, can solve different tasks. For example, flexion and extension in the knee or other joint in some cases are aimed at developing mobility, in others - at strengthening the muscles surrounding the joint (exercises with weights, resistance), for the development of muscle-joint sense (accurate reproduction of movement without visual control). Usually, special exercises are applied in combination with general strengthening exercises.

Gymnastic exercises are divided into groups based on different criteria:

By anatomical criteria;

By the nature of the exercise;

By the type of exercise;
By the level of activity required;
By the equipment or apparatus used.

By anatomical criteria, exercises are categorized into the following groups:
Exercises for small muscle groups (such as hands, feet, and face);
Exercises for medium muscle groups (such as neck, forearms, shoulders, calves, and thighs);
Exercises for large muscle groups (such as upper and lower extremities, and torso);
Combination exercises.

By the nature of muscle contraction, exercises are divided into two groups:
Dynamic exercises (isotonic);
Static exercises (isometric).

Isometric (static) contraction occurs when the muscle generates tension without changing its length. For example, when a person lifts their leg from a supine position, they perform dynamic work (lifting); when they hold their leg up for a period of time, the muscle works in an isometric mode (static work). Isometric exercises are effective during immobilization periods after injuries. However, dynamic exercises are more commonly used, with periods of contraction alternating with periods of relaxation. Other exercise groups are differentiated based on their nature as well. For instance, stretching exercises are used for joint mobility issues.

Exercises are classified by type as follows: coordination, balance, resistance, hanging and support, climbing, corrective, breathing, preparatory, and sequential. Balance exercises are used to improve coordination of movement, posture, and to restore this function in CNS and vestibular apparatus disorders. Corrective exercises are aimed at restoring the correct position of the spine, chest, and lower extremities. Coordination exercises restore general coordination of movements or individual body segments. They are applied from different starting positions with a different combination of arm and leg movements in different planes. They are necessary for CNS disorders and injuries, as well as after prolonged bed rest.

By the activity characteristic, dynamic exercises are divided into the following: active, passive, and relaxation. To facilitate the work of flexor and extensor muscles of the arms and legs, exercises are performed in the initial position (IP) lying on the side opposite to the exercising limb. To facilitate the work of the foot muscles, exercises are performed in IP on the side of the exercising limb. To facilitate the work of the adductor and abductor muscles of the arms and legs, exercises are performed in IP on the back, stomach. To make the work of the flexor and extensor muscles of the arms and legs more challenging, exercises are performed in IP lying on the back, stomach. To make the work of the adductor and abductor muscles of the arms and legs more challenging, exercises

are performed in IP lying on the side opposite to the exercising limb. Resistance, provided by the instructor or healthy limb, is applied to perform exercises with effort. Imagined (phantom) or ideomotor exercises, or exercises "in sending impulses to contraction," are performed mentally and are used in injuries during immobilization, peripheral paralysis, and paresis. Reflex exercises involve the impact on muscles remote from the trained ones. For example, to strengthen the muscles of the pelvic girdle and thigh, exercises that strengthen the muscles of the shoulder girdle are applied. Passive exercises are performed with the help of an instructor without the voluntary effort of the patient, in the absence of active muscle contraction. Passive exercises are used when the patient cannot perform active movement, to prevent stiffness in the joints and to recreate the correct motor act (in case of paralysis or paresis of the limbs).

Relaxation exercises reduce muscle tension and create conditions for rest. Patients are taught "voluntary" muscle relaxation using swinging movements and shaking. Relaxation is alternated with dynamic and static exercises. Depending on the gymnastic equipment used, exercises are divided into the following types:

Exercises without equipment;

Exercises with equipment (gymnastic sticks, dumbbells, clubs, medicine balls, jump ropes, expanders, etc.);

Exercises on equipment, simulators, and machines.

Breathing exercises. All exercises are related to breathing.

Breathing exercises are divided into dynamic and static. Dynamic breathing exercises are combined with hand movements, shoulder girdle, and trunk; static (conditionally) are carried out with the participation of the diaphragm, intercostal muscles, and abdominal press muscles and are not combined with limb and trunk movements. When using breathing exercises, exhalation should be activated. During static full breathing, all respiratory muscles (diaphragm, abdominal press, intercostal muscles) participate in the process of inhalation and exhalation. Full breathing is the most physiological; during inhalation, the chest expands in the vertical direction due to the lowering of the diaphragm and in the anterior-posterior and lateral directions due to the movement of the ribs upward, forward, and sideways.

Static breathing exercises include:

Exercises that change the type of breathing: the above-described full type of breathing, chest breathing, diaphragmatic breathing, exercises with dosed resistance:

Diaphragmatic breathing with resistance - the instructor's hands are located in the area of the edge of the rib arc (closer to the middle of the chest);

Diaphragmatic breathing with a sandbag placed on the upper quadrant of the

abdomen (from 0.5 to 1 kg);

Bilateral upper chest breathing with resistance, which the instructor overcomes by pressing his hands in the subclavian area;

Lower chest breathing involving the diaphragm with resistance from the instructor's pressure on the lower ribs area;

Right-sided upper chest breathing with resistance when the instructor presses on the upper part of the chest.

The use of inflatable toys and balls. General and special breathing exercises are distinguished. General breathing exercises improve lung ventilation and strengthen the basic respiratory muscles. Special breathing exercises are used for lung diseases, paralysis and paresis of the respiratory muscles. Drainage breathing exercises are exercises that promote the outflow of bronchial secretions into the trachea with subsequent expectoration of sputum during coughing. For better outflow of secretions from the affected area, static and dynamic breathing exercises are used. Drainage exercises are performed in various positions, such as lying on the stomach, back, side with raised foot end of the bed, sitting, standing. The choice of starting position depends on the localization of the lesion.

Sports and practical exercises. Sports and practical exercises include walking, running, crawling and climbing, throwing and catching a ball, rowing, skiing, skating, cycling, trekking (measured ascents), and hiking.

Walking is the most widely used exercise for various diseases and almost all types and forms of exercise. The amount of physical exertion when walking depends on the length of the path, the size of the steps, the walking pace, the terrain, and the complexity. Walking is used as a preparatory and organizing exercise before training. Walking can be made more difficult by walking on toes, heels, crossing steps, squatting, and lifting the knees high. Special walking techniques, such as using crutches, a stick, or a prosthesis, are used when the lower extremities are affected. Walking speed is classified as slow - 60-80 steps per minute, medium - 80-100 steps per minute, fast - 100-120 steps per minute, and very fast - 120-140 steps per minute.

Therapeutic walking is done in the form of walks or measured walking. Walks help improve the respiratory, cardiovascular, and nervous systems, as well as increase overall body tone. With therapeutic walking or walking, physical exertion can be accurately measured by the number of stops and their duration, walking speed, and distance traveled.

Measured ascents (trekking) are one of the types of therapeutic walking. Trekking routes are located in the resort area in rugged or mountainous terrain. The amount of physical exertion during the ascent depends on the terrain, the pace of ascent, the number of stops, their duration, and the length of the developed route.

Games are divided into four increasing levels of intensity:

Stationary games;

Low-active games;

Active games;

Sports games.

Physical therapy uses croquet, bowling, skittles, relays, table tennis, badminton, volleyball, tennis, and elements of other sports games (basketball, soccer, handball, water polo). Sports games are widely used in the conditions of sanatorium-resort treatment and are conducted according to general simplified rules with the selection of partners with the same physical fitness. The sessions are conducted in the presence of a therapeutic physical culture instructor, who teaches the technique of the game and monitors the dosing of loads.

It is advisable to use gymnastic exercises with specially selected musical accompaniment during group morning and therapeutic gymnastics sessions. This has a favorable effect on the state of the nervous, cardiovascular, and respiratory systems, as well as on metabolism.

It is also important to include dance elements and dance steps in the procedures. Physical exercises in the water and swimming in a pool with a water temperature of 25-27°C are effective in treating diseases of the cardiovascular and respiratory systems, metabolism, nervous system, and musculoskeletal system damage during the period of stable remission of a chronic disease.

Exercises at a water temperature of 34-36°C are advisable for patients with spastic paralysis.

In physical therapy, local and general machines and simulators are used. Exercises on local machines are prescribed to develop joints with limited mobility and strengthen weakened muscles in patients with diseases and consequences of musculoskeletal injuries as an addition to therapeutic gymnastics procedures. General machines and simulators, such as stationary bikes, rowing machines, treadmills, and others, are prescribed for patients with cardiovascular, respiratory system diseases, exogenous constitutional obesity, and other diseases in the compensation stage.

Methodological foundations of therapeutic physical culture (TPC). TPC exercises have a therapeutic effect only with correct, regular, and prolonged application of physical exercises. For this purpose, techniques for conducting classes, indications and contraindications for their use, assessment of effectiveness, and hygienic requirements for exercise locations have been developed. General and specific TPC techniques are distinguished.

The general TPC technique provides rules for conducting classes (procedures), classification of physical exercises, dosing of physical load, a scheme for conducting classes during different periods of the treatment course, rules for constructing a separate exercise (procedure), forms of TPC application, and schemes for movement regimes. Specific TPC techniques are intended for a specific nosological form of the disease, injury, and are individualized taking into account etiology, pathogenesis, clinical features, age, and physical fitness of the patient. Special exercises for affecting affected systems and organs must be

combined with general strengthening exercises, which provide general and specific training. Physical exercises are performed after their explanation or demonstration. When working with students, demonstration and verbal explanation of exercises can be combined.

During classes, there should be a calm atmosphere, and the patient should not be distracted by external conversations or other irritants. Physical exercises should not intensify pain sensations, as pain reflexively causes vascular spasm and restricted movements. Exercises that cause pain should be performed after preliminary relaxation of the muscles, at the moment of exhalation, in optimal starting positions. From the first days of classes, the patient should be taught proper breathing and the ability to relax muscles. Relaxation is easier to achieve after vigorous muscle tension.

In the case of unilateral limb lesions, relaxation training begins with the healthy limb. Musical accompaniment to classes increases their effectiveness. Dosing of physical load in TPC is the total amount of physical load that the patient receives in a class (procedure). The load should be optimal and correspond to the functional abilities of the patient.

During different stages of illness, physical loads are divided into therapeutic, tonic, and training doses:

Therapeutic doses are used to provide a therapeutic effect on the affected organ or system, to prevent possible complications and to promote compensation.

Tonic doses involve moderate to high-intensity physical exercises aimed at consolidating the results achieved during treatment and stimulating the function of the main systems. Tonic loads are used after a period of restorative treatment for severe chronic diseases or prolonged immobility.

Training doses are used to restore all functions of the body and improve working capacity during the period of restorative treatment or recovery.

When determining the dosage of physical loads, a number of factors that affect the magnitude of the load should be taken into account, increasing or decreasing it.

The initial positions lying and sitting make the load easier, while standing increases it.

The size and number of muscle groups. Involvement of small groups (feet, wrists) reduces the load, exercises for large muscles increase it.

Amplitude of movement: the larger it is, the greater the load.

The number of repetitions of the same exercise: increasing it increases the load.

Tempo of execution: slow, medium, fast.

Performing exercises rhythmically makes the load easier.

The requirement for accurate execution of exercises initially increases the load, but later, when automatism is developed, reduces it.

Exercises that are complex in terms of coordination increase the load, so they

are not included in the first days.

Relaxation exercises and static breathing exercises reduce the load: the more breathing exercises, the less the load. Their ratio to general strengthening and specific exercises can be 1:1; 1:2; 1:3; 1:4; 1:5.

Positive emotions during exercises in the form of games help to tolerate the load easier.

Different degrees of effort by the patient during exercise affect the load.

The principle of distributing the load with alternating different muscle groups allows for selecting the optimal load.

The use of objects and equipment affects not only the increase but also the decrease of the load. The overall physical load during the session depends on the intensity, duration, density, and volume of it. Intensity corresponds to a certain threshold level: from 30-40% at the beginning to 80-90% at the end of the treatment. To determine the intensity threshold, exercises with increasing power on a cycle ergometer from 50 to 500 kgm/m or more are used until the limit of tolerance. The duration of the load corresponds to the duration of the session.

The concept of load density refers to the time spent on actually performing exercises and is expressed as a percentage of the total training time. The volume of the load is the total work done in the training session.

Continuous, uninterrupted exercise execution in a session is referred to as the flow method, and the overall physical load is determined by the intensity and duration of the training. With the interval (separate) method with pauses between exercises, the load depends on the density of the training. The movement regimen (activity regimen) is the system of physical loads that a patient performs during the day and throughout the course of treatment. A strict bed rest regimen is prescribed for seriously ill patients.

For the prevention of complications, static breathing exercises, passive exercises, and light massage are used. An extended bed rest regimen is prescribed for a generally satisfactory condition. Transitions to a sitting position in bed are allowed for 5 to 40 minutes several times a day. Therapeutic gymnastics with a small dose of physical exertion and an allowable heart rate increase of up to 12 beats per minute is used.

The ward regimen includes sitting position for up to 50% of the day, movement around the ward at a walking pace of 60 steps per minute for a distance of up to 100-150 m, therapeutic gymnastics lasting up to 20-25 minutes, with a heart rate increase of 18-24 beats per minute after the session. In addition to the ward regimen, the free regimen includes movement up the stairs from the 1st to the 3rd floor, walking on the territory at a pace of 60-80 steps per minute for a distance of up to 1 km, with a rest every 150-200 m.

Therapeutic gymnastics are prescribed once a day in the gym, with a session duration of 25-30 minutes and a heart rate increase of 30-32 beats per minute after it. The pulse rate during exercises should not exceed 108 beats per minute in adults and 120 beats per minute in children.

In sanatorium and resort conditions, gentle, gentle-training, and training regimes are used. The gentle regime mainly corresponds to a free regime in the hospital, allowing walking up to 3 km with rest breaks every 20-30 minutes, games, swimming (for those who are prepared and hardened).

The gentle-training regime allows for moderate physical exertion: walking up to 4 km in 1 hour, hiking, skiing at an air temperature of not less than 10-12 °C, boating in combination with rowing for 20-30 meters, sports games with lightened conditions for their conduct.

The training regime is used in cases where there are no pronounced deviations in the functions of various organs and systems. Running and sports games according to general rules are allowed. The course of physiotherapy exercises is divided into periods: introductory, basic, and concluding (or the beginning, middle, and end of the treatment course). Accordingly, schemes and sets of exercises are developed for each period. When using physiotherapy exercises, the principles of training should be observed, taking into account the therapeutic and educational tasks of the method.

Individualization in methodology and dosage taking into account the features of the disease and the patient's general condition.

Systematic and sequential use of physical exercises. Starting with simple exercises and progressing to more complex ones, including 2 simple and 1 new complex exercise at each session.

Regularity of the treatment.

Duration of the sessions ensures the effectiveness of the treatment.

Gradual increase in physical load during the treatment to provide a training effect.

Diversity and novelty in selecting exercises are achieved by updating 10-15% of them with 85-90% repetition of the previous ones for consolidation of the treatment results.

Moderate, prolonged or intermittent loads are more appropriate than intense ones.

Observance of the cyclic alternation of exercises with rest.

The principle of comprehensiveness involves not only affecting the affected organ or system but the entire body.

Clarity and accessibility of exercises are especially necessary in sessions for CNS disorders, children, and elderly people.

Conscious and active patient participation is achieved through skillful explanation and selection of exercises. To conduct therapeutic exercise therapy, a training scheme (procedures) is developed, which includes sections, content of sections, dosage, target setting (section objectives), and methodological instructions.

Therapeutic physical exercises are indicated at almost any age and for almost all diseases, injuries, and their consequences. It is widely used in internal medicine clinics, neurology and neurosurgery, traumatology and orthopedics, after surgical

treatment of internal organ diseases, pediatrics, obstetrics and gynecology, phthisiology, psychiatry, ophthalmology for uncomplicated myopia, and in oncology for patients without metastases after radical treatment. The list of contraindications is quite small and mainly concerns the initial period of acute disease or exacerbation of chronic diseases, the acute period of injury, indications for surgery, and bleeding.

Common contraindications for prescribing therapeutic exercises (TPC) include:

Acute infectious and inflammatory diseases with high body temperature and general intoxication;

Acute stage of the disease and its progressive course;

Malignant neoplasms before radical treatment, malignant neoplasms with metastases;

Severe oligophrenia (mental retardation) and mental disorders with severely impaired intellect;

Presence of a foreign body near large blood vessels and nerve trunks;

Acute coronary and cerebral circulation disorders;

Acute thrombosis and embolism;

Worsening of heart failure with decompensation of blood circulation and breathing;

Bleeding;

Severe general condition of the patient, significantly expressed pain syndrome;

Negative dynamics of ECG indicating worsening of coronary circulation;

Atrioventricular block. Temporary contraindications for prescribing TPC include:

Exacerbation of chronic diseases;

Complications during the course of the disease;

Intercurrent infectious or inflammatory diseases;

Acute injuries;

Appearance of signs indicating disease progression and deterioration of the patient's condition;

Vascular crisis (hypertensive, hypotensive, or with normal blood pressure);

Heart rhythm disorders: sinus tachycardia (over 100 beats/min), bradycardia (less than 50 beats/min), paroxysmal or atrial fibrillation, extrasystoles with a frequency of more than 1:10. Risk factors for bone and joint damage include:

Severe osteoporosis in elderly people, especially women;

Significant effort from the patient with unhealed bone callus after limb fractures, in patients with spastic paralysis and impaired pain sensitivity.

It is necessary to be cautious after fractures to prevent the formation of false

joints and arthrosis. Exercises with effort and resistance should not be used in patients with thoracic or abdominal aortic aneurysm. Therapeutic exercise can be an independent method of treatment, rehabilitation, and prevention of diseases, and physical therapy can be well combined with all types of medication, physiotherapy, and mud therapy, before and after surgical intervention.

Advantages of physical exercises include:

Physiological nature (external factors are familiar to the body's irritants, and unconditional reflexes are developed during individual development);

Universality (a wide range of actions);

Normalizing (homeostatic) effect;

Minimizing negative side effects (which is possible only with the correct dosage of load and a rational technique of exercises);

Stimulating compensatory-adaptive processes in the body;

Possibility of long-term use (practically without restrictions) with a transition from therapeutic to preventive effects;

Long-lasting effect;

Good compatibility with other medical methods.

Numerous studies show that hypokinesia (insufficient physical activity) reduces the body's resistance, increases susceptibility to various diseases, and therefore is a risk factor. This may be due to the fact that the patient's body is initially exposed not only to various stress factors that provoke the development of the disease, but also suffers from forced hypokinesia. It should be noted that initially, during the acute phase of the disease, absolute rest is vital because it helps to cope with pathogenetic processes both in the affected organ and in the body as a whole. Rest, by slowing down metabolism in general, reduces the body's need for oxygen and certain nutrients, promotes the organization of homeostatic processes, and stimulates inhibitory processes in the central nervous system (CNS), which is extremely important for improving the patient's overall condition.

But if the limitation of physical activity lasts for a long time, it leads to hypodynamia - atrophic changes in muscles, overall physical deconditioning of the cardiovascular system, decreased orthostatic stability, changes in the water-salt balance, blood system, demineralization of bones, etc. As a result, the functional activity of organs and systems decreases, the activity of regulatory mechanisms that provide their interconnection is disrupted, the overall adaptive capacity of the body worsens. The intensity and volume of afferent information associated with muscle contractions decreases, coordination of movements is disrupted, muscle tone decreases, endurance and strength indicators decrease.

Therapeutic physical training improves impaired functions, accelerates regeneration, and reduces the adverse consequences of forced hypokinesia. Depending on the type of physical load, the execution technique, physical exercises have a toning, trophic, compensatory, and normalizing effect on the

body.

The mechanisms of the toning effect of specifically selected physical exercises manifest themselves in the enhancement of processes of excitation or inhibition in the central nervous system and thus contribute to the restoration of normal balance and mobility of nervous processes. Such exercises improve regulatory properties, activate the activity of endocrine glands, and stimulate vegetative functions and metabolism according to a certain mechanism of motor-visceral reflexes.

The motor analyzer, with its receptor apparatus located in the muscles, ligaments, tendons, and joint surfaces, participates in creating and regulating the tone of skeletal muscle, providing coordination of movements, statics and dynamics of the human body.

The toning effect of physical exercises is proportional to the number of muscles involved in motor activity, as well as the strength of muscular effort applied.

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During movement, proprioceptive impulses arise that affect not only the muscular system. They enter the vegetative centers and higher sections of the nervous system, restructuring their functional state, stimulating the activity of the circulatory and respiratory systems, activating metabolic processes, which in turn contributes to improving the trophism of tissues and internal organs with a mechanism of motor-visceral reflexes. Muscular activity, with systematic execution of physical exercises, stimulates oxidative-reductive, metabolic, and regenerative processes in the human body.

The mechanisms of formation of functional compensations underlie the adaptation of the patient to existence under pathological conditions. Compensation, i.e. balancing and aligning the pathological processes that have begun in the body, occurs by activating a series of protective-adaptive reactions (when organs that are not directly affected by the disease take on the functions of the affected organ) directed at restoring or replacing the damage that has occurred. If the effect of activating these reactions and mechanisms is insufficient, a state of decompensation occurs.

Depending on the type of disease, compensations can be permanent or temporary. Temporary ones arise during illness and disappear after recovery, while permanent ones are formed in case of irreversible changes in the body, restriction of function, or irreversible loss (heart defect, limb amputation, prolapse of internal organs, etc.). In this case, the task of physical exercises is to accelerate compensation. In many cases, as a result of persistent training, functions improve

to the extent necessary for everyday and work activities.

The mechanism of function normalization is aimed at restoring health and working ability after an illness. Physical exercises activate various functions. At first, they help restore motor-visceral connections, which, in turn, have a normalizing effect on the regulation of other functions. Restoration of certain reflexes that have dulled during the illness is also important - prolonged bed rest causes the fading of vascular reflexes associated with changes in body position. As a result, the patient may experience dizziness, loss of balance, and even loss of consciousness upon standing - orthostatic syncope. Exercises with gradual changes in the position of the head, trunk, and lower extremities train and restore late-vascular reflexes.

Normalization of functions is also achieved by getting rid of temporary compensations that have become unnecessary, which, for example, distort normal gait (prolonged immobilization of the lower extremity during a fracture forms a new habit of walking - with a straight leg - which remains even after the cast is removed, causing dysfunctions).

The mechanisms of function normalization are crucial in ensuring complete recovery of health and work capacity for patients. Physical therapy is considered the most effective component of medical rehabilitation. Only systematic training helps to restructure the pathological dominance of interoception (vegetative system) in favor of proprioception. With the restoration of the motor dominance, vegetative functions are normalized: the heart rate decreases in tachycardia, blood pressure decreases, breathing is normalized, the motor function of the digestive tract is activated, etc. Properly selected and dosed physical exercises help to eliminate the consequences of hypodynamia, normalize and expand the range of functional possibilities of the cardiovascular and respiratory systems, restore vascular reflexes, increase adaptability and stability of the body to muscular tension, and subsequently to social environmental conditions.

Therapeutic exercise from the perspective of a rehabilitation physician includes: optimization of the cardiovascular system by training the heart muscle, increasing blood circulation, stimulating breathing and metabolic processes; normalization of the hormonal background as a means of overcoming stress; impact on a person's psycho-emotional state, improving their well-being and appearance; a way to maintain a healthy weight; restoration and improvement of not only individual muscle functions, but also the musculoskeletal system as a whole.

Thus, the therapeutic effect of physical exercises is diverse. Depending on the specific case and stage of the disease, such specially dosed physical exercises can be selected that will provide the predominant action of one mechanism necessary for treatment at this period of the illness. These can be exercises using one's own body weight, on exercise equipment, in water, walking, occupational therapy, mechanical therapy, sports exercises, or therapeutic gymnastics.

Therapeutic exercise from the perspective of a rehabilitation physician

involves optimizing the function of the cardiovascular system through training the heart muscle, increasing blood circulation, stimulating breathing and metabolic processes, normalizing hormonal balance as a way to overcome stress, improving the psychosocial well-being of the individual, maintaining a healthy weight, and restoring and improving the functions not only of individual muscles but also of the musculoskeletal system as a whole.

Thus, the therapeutic effect of physical exercises is diverse. Depending on the specific case and stage of the disease, a specially dosed set of exercises can be selected to provide the predominant effect of one mechanism necessary for treatment at that stage of the disease. These can be exercises using one's own body weight, exercises on exercise equipment, exercises in water, walking, occupational therapy, mechanotherapy, sports exercises, and therapeutic gymnastics.

Therapeutic gymnastics is a specific complex of physical exercises performed with strictly dosed loads on the muscular system, often without changing the length of the muscles, i.e. so-called static gymnastics, for example, in cases of forced hypokinesia, to prevent the development of pain reflex contracture of the affected organ.

In the methodology of applying physical exercises, all the main principles of therapeutic exercise are followed, first of all, the principle of an individual approach to the patient, taking into account the prevalence of the process, the presence of accompanying neurological manifestations, the stage of the disease, the functional capabilities of the musculoskeletal system (level of physical fitness), the condition of the cardiovascular, respiratory, excretory, and other systems of the body, as well as gender, age, and professional mobility.

For example, the impact of physical exercise on the cardiovascular system is multifaceted and closely linked to changes in the functions of the respiratory, nervous, endocrine, and musculoskeletal systems. At the level of the circulatory system, trophic processes in the myocardium improve, and the functional state and contractile function of the myocardium are enhanced. Coronary reserve and the efficiency of cardiac activity increase, and the accumulation of energy substances (ATP, glycogen, phosphagens) in the muscles increases while their expenditure decreases. The improvement of the power and efficiency of the circulatory system is formed in parallel with changes in the function of the respiratory system. The improvement of the strength and contractile abilities of the respiratory muscles increases lung capacity and the utilization coefficient of oxygen. Together with the increase in maximum lung ventilation during physical work and the growth of mitochondria mass in skeletal muscles, a significant increase in aerobic capacity of the organism is achieved.

The oxygen-carrying capacity of the blood increases due to the morphofunctional properties of erythrocytes and a slight increase in their quantity. The development of moderate metabolic acidosis due to physical exertion leads to an increase in the volume of erythrocytes, which increases their oxygen transport capabilities. This increases the affinity to hemoglobin and reduces tissue hypoxia.

Proper breathing is formed (slow deep exhalation with involvement of the abdominal muscles), intercostal muscles are strengthened, and the elasticity of intercostal cartilage is improved. The diaphragm is strengthened and its mobility increases. Acceleration of arterial and venous blood flow, an increase in the total mass of circulating blood, improves the oxidative-reductive processes of the biliary system, promotes the elimination of the inflammatory process in it, increases its functional ability, and affects the rheology of bile. Strengthening the abdominal muscles increases the tone of the smooth muscles of the gallbladder and bile ducts, eliminates stagnation of bile in the liver and gallbladder, and improves the motility of the entire digestive tract.

The restructuring of the hormonal regulation system that occurs with physical training leads to an increase in the ability of the adrenal cortex to synthesize corticosteroids and an increase in the reserve capacity of the endocrine function of the pancreas. In trained individuals, insulin secretion decreases, its concentration in the blood at rest decreases, and the insulin response to glucose, carbohydrate intake, and physical exertion is reduced.

These changes in insulin metabolism in the trained body are associated with an increase in sensitivity to the hormone in skeletal muscles and other tissues, which is due to both the growth of insulin-sensitive receptors and an increase in the efficiency of post-receptor intracellular processes "triggered" by insulin, including an increase in the activity of insulin-dependent enzymes.

These changes play an important role in the favorable effect of training on fat metabolism, as well as in the prevention of obesity and atherosclerosis, which makes it possible to prevent a large number of diseases such as heart disease, hyperinsulinemia, obesity, and diabetes.

Structural changes in the control apparatus of muscle work at the level of the central nervous system create opportunities to mobilize a large number of motor units during exercise. They lead to an improvement in intermuscular coordination and an increase in muscle performance.

The increase in the strength and endurance of muscles, especially the lower limbs, contributes to an increase in the function of extracardiac factors in circulation. These include the contractile activity of skeletal muscles, the valve apparatus of veins, the suction function of the chest, heart chambers, and large vessels, and changes in the arterial-venous oxygen difference.

The muscular system actively and quickly responds to various situations. Pain, emotional, temperature, and other stimuli provoke responsive reactions of myofascial structures. Pathological changes in the form of regional or focal hypertonicity are revealed in segmental and associative muscles in cardiovascular diseases. Elimination of pathological changes in myofascial structures through massage, physical exercises involving these muscles occurs through reflex (motor-visceral) mechanisms that have a corrective effect on the state and function of the cardiovascular system.

Systematic physical exercise is the only means that trains the entire

cardiovascular system and enhances its adaptation to physical exertion.

Conclusion:

The main means of therapeutic physical culture are:
Physical exercises;
Natural factors (sun, air, water);
Therapeutic massage (classical, acupressure, segmental-reflex, apparatus, hydro massage);

Motor mode.

Additional means:
Occupational therapy (restoration of impaired functions with the help of selectively selected work processes);
Mechanotherapy (restoration of lost functions with the help of special devices, exercises on various simulators - prevention and development of contractures - joint stiffness).

2.3. Indications and contraindications for the use of techniques myself

All physical exercises are individually selected taking into account the patient's condition and specific illness. Therapeutic physical culture is applied in many medical fields, including:

Traumatology and orthopedics
Obstetrics and gynecology
Endocrinology
Gastroenterology
Pediatrics and general therapy
Neurology
Cardiology
Pulmonology
Surgery

Therapeutic physical culture has various effects on the body, including toning, compensatory, trophic, and normalizing functions. The exercises influence metabolic processes, emotional state, the coordinated functioning of the nervous system, improve the nourishment of muscles and ligaments, and enhance the contractile properties of the cardiac muscles.

Indications for prescribing therapeutic physical culture include:
Recovery after injuries or surgeries
Chronic pain syndromes
Degenerative diseases of the spine and joints
Posture disorders in children and adults
Various forms of flat feet
Neurological disorders
Cardiovascular diseases
Respiratory system disorders
Digestive system disorders
Excess weight

Severe conditions (paralysis, paresis), and a prolonged break before engaging in sports are also indications for therapeutic physical culture.

The dosage of exercises should be individually prescribed, taking into account the patient's response to the exercises. At the beginning of the course, exercises can be performed with partial amplitude and a small number of repetitions for each exercise, gradually increasing them over time.

During the sessions, it is necessary to ensure a balance between the muscles' oxygen demand and its supply. If shortness of breath or a rapid increase in pulse occurs, the physical load should be reduced.

Making the therapy sessions enjoyable is important because positive emotions lead to the dilation of coronary vessels and enhance blood flow. The exercises create a positive emotional background for the patient, instilling confidence in a favorable outcome of the illness. They contribute to the normalization of cortical dynamics, balance the ratio of excitatory and inhibitory processes, and reduce manifestations of neurosis.

Therapeutic physical culture is recommended for patients with transient circulatory disorders, consequences of ischemic and hemorrhagic strokes, atherosclerotic encephalopathy, and other cerebrovascular diseases. It is also beneficial for patients with consequences of infectious, toxic, and traumatic lesions of the central nervous system, diseases and injuries of the peripheral nervous system, as well as neuroses and neurosis-like conditions.

The main requirements of therapeutic physical culture (TPC) methodology for neurological diseases and injuries are as follows: developing joint mobility, strengthening the entire muscular system, normalizing post-tonic reactions starting from relieving spastic tension in individual muscles to the development (formation) of complex movements, teaching standing and independent walking, and increasing overall body tone. During the sessions, particular attention should be paid to the appearance of voluntary movements by selecting optimal starting positions and aiming to maintain the development of existing active movements. To achieve this, exercises to contract paretic muscles and stretch their antagonists are prescribed. Attention should be given to the development of necessary motor skills such as walking, running, writing, grasping, holding, and throwing small objects. Water exercises are also recommended. Ideomotor exercises, massages, neuropsychological and speech therapy corrections are beneficial as well.

In addition, physical therapy with medical devices is indicated at all stages of rehabilitation. It targets the mechanisms of disease development (electrosleep - normalizes inhibitory and excitatory processes; UHF - bacteriostatic effect; UFO - bactericidal effect), addresses specific symptoms, trains specific functions (thermal treatment - reduces muscle spasticity; electrostimulation - increases muscle tone, prevents contractures), and combines the therapeutic effects of physiotherapy with the effects of medication (electrophoresis - for hypotensive, spasmolytic, and other agents; phonophoresis - for resorptive, anti-inflammatory, and other agents).

For the rehabilitation of patients with spinal disorders, specially selected physical exercises in combination with physiotherapy and other rehabilitation measures are recommended. These interventions help restore the function of the affected joint, prolong the remission period, halt disease progression, and improve the physical and psychological condition of the patient.

General developmental exercises (GDE) are used for non-injured body parts. Breathing exercises are performed in a 1:1 ratio for bedridden patients and a 1:2(3) ratio for ambulatory patients. Passive and then active exercises are performed for the joints of the affected body part (preferably in warm water).

Isometric exercises are used for the abdominal muscles in areas where

pressure sores may develop. Treatment positioning, mechanotherapy, work therapy, choreotherapy, and therapeutic massage are also employed.

Later, sports-specific exercises, training on exercise machines, and natural environmental factors are introduced. Throughout the course of the disease (from the pre-disease state to recovery), various irritants affect the body, triggering protective and adaptive processes known as sanogenesis. Sanogenesis aims to restore the disrupted self-regulation processes in the body.

Sanogenesis is a multi-level and multi-stage process. It occurs at the cellular level (e.g., apoptosis and regeneration of cell populations, replacement of defects with connective tissue), organ level (vicarious hypertrophy and formation of collateral blood flow), organismal level (restructuring of endocrine processes with partial impairment), and systemic level (application of technical rehabilitation measures).

These changes occur in three stages.

The first stage occurs in the early stages of chronic illness or during the pre-disease period in acute pathology, where non-specific immunity and compensatory reactions are activated.

The second stage occurs during the pronounced manifestations of acute illness or exacerbation of chronic illness, leading to the unfolding of restorative and compensatory processes.

The third stage arises during the stabilization of chronic pathology, where compensation is consolidated, regeneration is activated, and weakened functions are restored. In cases of acute pathology, either complete or partial recovery can occur.

It is crucial to select exercises according to the appropriate regimen for these pathologies. The recommended regimen is determined by the patient's treating physician and may vary depending on the course of the disease, stage of treatment, and the body's response to the factors involved in a specific movement regimen.

For example, during the hospital rehabilitation period, several regimens are distinguished:

Strict bed rest regimen: In this regimen, the patient's physical activity is severely limited. Assistance from medical staff is required for auxiliary movements, eating, and toileting. Respiratory exercises and movements in the distal parts of the limbs are allowed.

Bed rest regimen: This regimen involves active behavior by the patient in bed, independent eating, and transitioning to a sitting position and eventually standing. The main starting position for performing morning hygiene and therapeutic exercises is lying down. Low-intensity exercises are used, gradually progressing to moderate intensity towards the end of the regimen.

Semi-bed rest (room) regimen: This regimen includes half of the day spent in bed and the other half in a sitting, walking, or similar regimen. It involves morning

hygiene exercises, independent activities, therapeutic walking, elements of occupational therapy, and, towards the end of the regimen, stair climbing, going for a walk, and exercises of moderate intensity.

Free regimen: In this regimen, the patient spends most of the day outside the bed. In addition to therapeutic exercises, a semi-bed rest regimen, sports-specific exercises, occupational therapy, and, if indicated, mechanotherapy, exercises on machines, and hydrokinesiotherapy are prescribed. Exercises of moderate intensity are used, and exercises of high intensity are used to a lesser extent.

Undoubtedly, the treatment of spinal pathology preceding rehabilitation should be early, pathogenetically justified, and staged. In all cases, adherence to the principles mentioned above (early initiation, individual approach, and sequence) is the key to the success of medical physical rehabilitation.

Equally effective is the application of therapeutic exercises (therapeutic physical exercises, or TPE) in respiratory system diseases. When evaluating the mechanisms of action of therapeutic exercises in respiratory organ diseases, it is essential to consider the main pathophysiological syndromes of respiratory dysfunction, which determine the clinical and physiological characteristics of major forms of bronchopulmonary pathology. Pathological changes in respiratory function can occur due to various reasons, including restricted mobility of the chest and lungs, impaired patency of the airways, coordination disorders in the work of different respiratory muscle groups, reduction of the lung's respiratory surface, decreased elasticity of the pulmonary parenchyma, disturbances in gas diffusion in the lungs, and disruptions in central regulation of respiration and circulation.

In any respiratory disease that causes respiratory dysfunction, the body adapts by forming involuntary compensations, which can become fixed and automated. One of the most common compensatory reactions in respiratory insufficiency is shortness of breath with rapid and shallow breathing. By applying respiratory exercises that involve controlled alternation of fluid and deep breathing, more rational compensation can be achieved. Physical exercises, selected according to the patient's condition, contribute to increasing the lung's respiratory surface by involving additional alveoli, mobilizing auxiliary mechanisms of circulation, and improving oxygen utilization by the tissues. This helps combat hypoxia.

In diseases with irreversible changes in the respiratory system (such as emphysema, pneumosclerosis, post-lung resection, etc.), compensatory reactions are formed through exercises aimed at strengthening specific phases of breathing, respiratory muscle training, increasing thoracic mobility, and eliminating coordination disorders in respiratory muscles. Therefore, therapeutic exercises in medical physical therapy should primarily focus on correcting the coordination of the respiratory act. This is possible because individuals can voluntarily adjust the tempo, rhythm, and amplitude of their breathing movements and the magnitude of pulmonary ventilation. Physical exercises involving the movement of the arms and

legs synchronized with the phases of breathing act as conditional-reflex stimuli for the respiratory system and contribute to the development of conditioned proprioceptive respiratory reflexes in patients.

The goals of therapeutic exercises in respiratory organ diseases are as follows:

Provide a general strengthening effect on all organs and systems of the body.

Improve external respiration function.

Reduce intoxication, stimulate immune processes, accelerate the resorption of exudate in inflammatory processes, and reduce bronchospasm.

Increase sputum expectoration.

Stimulate extracardiac factors of blood circulation.

There are several types of exercises:

General and specific exercises: They improve lung ventilation and strengthen the major respiratory muscles. They can be applied not only for respiratory organ diseases but also for other somatic conditions.

Static and dynamic exercises: They vary in terms of muscle activity and joint movement involved.

Drainage exercises: These exercises aim to facilitate the removal of secretions from the respiratory system.

Special breathing exercises are designed to achieve specific therapeutic effects in cases of respiratory dysfunction.

Static breathing exercises involve breathing without body or limb movements, primarily utilizing the distal muscles. These exercises are performed with maximum effort that affects an immovable object or maintains a discomforting body position. No external work is performed, and the muscle length remains unchanged. Static exercises require maximal tension and stimulate the synthesis of new myofibrils, thus maximizing the strength of each muscle fiber with moderate muscle volume increase.

Dynamic breathing exercises are performed concurrently with limb or torso movements, ensuring coordination between the amplitude and pace of movements with the phase and depth of breathing.

Drainage exercises combine dynamic breathing exercises with specific body positions. They promote the drainage of secretions from the bronchi into the trachea, facilitating their subsequent expectoration during coughing.

Therapeutic exercises are successfully used in pediatric traumatology, orthopedics, and neurology for both treatment and rehabilitation purposes, as well as for prevention and child development.

Please note that it's important to consult with healthcare professionals to determine the most appropriate exercises for your specific condition or for a child.

Interesting motor activity is essential for every child's normal development. By performing exercises, a child explores the surrounding world and learns how to

interact with it. Therapeutic exercises have a positive impact on a child's body, allowing them to develop proper posture, avoid the development of flat feet, enhance the muscular system, ligaments, and joints, normalize the function of the immune and endocrine systems, regulate the gastrointestinal tract, and increase stress resilience.

A complex of therapeutic exercises for children can have a general nature and be used for the overall improvement of the body, or it can be specific, targeting the improvement of a particular system, such as in the case of fractures.

It is important to note that in the modern world, many children lack physical activity. There are children who avoid active games and prefer to sit, lie down, and watch television.

Or, conversely, the child is constantly in motion, but their movements are very imprecise and uncoordinated. Many children experience orthopedic problems at a very young age, such as posture disorders, flat feet, scoliosis, paralysis, and contractures. Some children are born with pathologies of the musculoskeletal system, neurological deviations (hyperreactivity syndrome, cerebral palsy, behavioral disorders, neuroses, and neurosis-like conditions), cardiovascular diseases, or gastrointestinal tract impairments.

Physical exercises should also be individually tailored, taking into account the child's age, overall health condition, physical fitness, the form and progression of the disease. Sessions of therapeutic exercises for children include gymnastics, play exercises, breathing exercises, rhythmic exercises, as well as exercises on a gymnastics bar, with a gymnastics stick, fitball, and others. Very good results are achieved when performing therapeutic exercises in water or combining dry exercises with swimming pool activities, massage, and work on exercise machines.

Psychological techniques can be used for young children, such as playful exercises, poetic journey tales, toys, as well as small specialized objects for fine motor development, gymnastic and regular balls, hoops, flags, sensory pathways. For infants, therapeutic/recreational massages are used. It is essential to maintain systematicity in these activities.

Contraindications to therapeutic physical culture exercises

There are no absolute contraindications, and there are very few relative contraindications to therapeutic physical culture exercises. They include:

Acute phase of illness, general severe condition, high fever, severe pain, high blood pressure (hypertensive crisis).

Risk of severe bleeding or intoxication.

Sudden decline in the body's adaptive capabilities.

Therapeutic gymnastics is contraindicated in severe progressive cardiovascular insufficiency, exacerbation of rheumatic carditis, malignant hypertension, and acute inflammatory diseases of the myocardium and heart membranes. Resting tachycardia is also a contraindication for therapeutic gymnastics, as it leads to further weakening of the myocardium.

It is necessary to first achieve a reduction in heart rate through other means before incorporating therapeutic gymnastics. Extrasystoles, especially ventricular ones, hinder circulation in patients with decompensation. It is important to first eliminate or reduce extrasystoles before applying therapeutic gymnastics.

In most cases, contraindications to TPC exercises are temporary in nature.

Conclusions of the chapter

In conclusion, therapeutic physical culture can be considered the most physiological, natural, and highly effective method of treatment, which can be applied to almost any illness, injury, and at any age.

Therapeutic exercise contributes to a faster recovery in dealing with stress and fatigue, trains the nervous, cardiovascular, and respiratory systems, accelerates metabolic processes, and normalizes hormonal balance. Proper physical activity allows a person to stay lively and active. Depending on the patient's condition and the extent of the pathology, the physiotherapy specialist designs an individual exercise plan, adjusting the level of exercise complexity.

The human body is a complex self-regulating system that is interconnected and interacts with the surrounding environment.

One of the main mechanisms of balancing the "organism - universal property of matter" system is movement, which reaches its highest complexity in humans as social-biological beings. All aspects of human activity are associated with

movement, including labor, which is a distinctly human form of conscious activity aimed at creating material and spiritual values necessary for a normal life of individuals and humanity.

For humans, movement is significant in terms of healing, prevention, rehabilitation, and restoring working capacity as the most severe and dangerous disease manifestations are eliminated. In connection with this, the term "kinesiotherapy" emerged and to some extent became established, referring to the treatment and healing through movement. Despite some controversy surrounding this concept, it is still recognized that movement, in all its variety, forms, and manifestations, plays a significant role in promoting health. At the same time, kinesiotherapy cannot be limited to the concept of "therapeutic exercise" alone. The term "kinesiotherapy" is broader and deeper as it attempts to encompass all types and forms of movement as therapeutic and preventive means.

This includes, above all, therapeutic exercise, which is used as both a therapeutic and rehabilitation method for individuals who have experienced various illnesses. An important component of kinesiotherapy is adaptive physical culture for individuals with limited abilities due to chronic illnesses, injuries, congenital pathologies, and other conditions that hinder their adaptation to living conditions. Additionally, massage, mechanotherapy, manual therapy, and other specialized techniques are integral parts of kinesiotherapy.

Conclusion

Thus, therapeutic physical culture is an independent medical discipline that utilizes the means of physical culture for treating diseases and injuries, preventing their exacerbations and complications, and restoring working capacity. The primary means are physical exercises, which act as stimulators of the body's vital functions. Therapeutic exercise is applied in comprehensive treatment for various diseases and injuries and has no age restrictions. It is primarily a therapy of regulatory mechanisms, utilizing adequate biological arcs of mobilizing the adaptive, protective, and compensatory properties of the body to eliminate pathological processes. Along with the dominant motor aspect, health is restored and maintained. The main characteristic of therapeutic exercise is the direct active participation of the patient in their own healing process. They perform the prescribed physical exercises themselves and monitor their proper execution.

The most important tasks of our society in the 21st century are dictated by the necessity of shifting the worldview paradigm of thinking. It involves transitioning from a worldview that prioritizes the material over the spiritual to a worldview based on the primacy of the spiritual over the material.

The prioritization of material values over spiritual ones leads individuals to rupture social connections and relationships. In pursuit of these values, with money being the main one, people stop valuing others. Exploitation and oppression between individuals arise. Lethal wars begin, causing numerous casualties, wounded, and spiritually and physically scarred individuals. In this regard, a new approach in healthcare, called integrative medicine, has its philosophical foundation in the conscience III-C rule, aiming to reduce the lethality of wars, enhance the quality and accessibility of medical assistance, and make individuals the subjects of their own health protection.

Through our research, we have obtained confirmation of the following principles: The Global Ecological Principle (GEP - a person should not harm themselves) forms the philosophical basis of techniques myself. The Global Ethical Principle of Conscience (GEPC - one should conduct oneself in a way that does not harm oneself or others) forms the ethical and worldview basis of techniques myself. The Ecological III-C Behavior Rule (do not harm oneself (C1), neighbors (C2), or the environment (C3) in thought, word, or deed; create for oneself, neighbors, and the environment through thought, word, and deed) forms the technological basis of techniques myself.

Techniques myself are integrative complexes of psychophysiological exercises that correspond to the first part of the C1 component of the ecological (conscience) rule III-C: "do not harm oneself (C1) in thought, word, or deed; create oneself (C1) through thought, word, and deed."

When practicing techniques myself, individuals cultivate ecological thinking (conscience). They prevent harm to themselves and others through their thoughts because not harming others also means not harming oneself.

Furthermore, when practicing techniques myself, individuals avoid causing harm to themselves and others through their words and actions, ensuring the preservation of their life, conscience, and somatic health.

A person's conscience is a state of their psyche. A person's conscience is ensured by adhering to the ecological rule III-C in their behavior.

Somatic health depends on an individual's conscience and is facilitated by techniques myself based on the integration of therapeutic physical exercises.

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Appendix 1

Techniques myself for Cardiovascular Diseases

Complex 1

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;

C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Walking with a change of pace every 20 seconds. Breathing is voluntary.

Starting position (S.P.) - hands on the shoulders. Walking with circular movements in the shoulder joints alternately, 4 times forward and backward.

S.P. - arms raised overhead, squeezing and releasing the fingers - inhale for counts 1-4; lowering the arms and sequentially relaxing the wrists, forearms, and shoulders - exhale for counts 5-8.

S.P. - standing position, hands in front of the chest. Step forward with the left foot, arms out to the sides - inhale; bring the right foot next to the left - exhale; repeat with the other leg.

S.P. - standing position, hands on the waist. Extend the right arm forward while reaching for the toe with the left hand - exhale; return to S.P. - inhale; repeat with the other leg and arm.

S.P. - standing position, dumbbells held down (weight: 2-3 kg). Lift the dumbbells up to the sides - inhale; return to S.P. - exhale.

S.P. - arms extended in front. Squat down - exhale; return to S.P. - inhale.

S.P. - standing position, feet apart, dumbbells held down. Alternate twists of the torso to the sides, bringing the dumbbells to the shoulders.

S.P. - arms around the waist. Alternate lifting of bent legs and squeezing them against the abdomen - exhale.

S.P. - standing position, dumbbells held down. 1 - lift the dumbbells to the sides - inhale; 2 - bring the dumbbells to the shoulders - exhale; 3 - lift the

dumbbells overhead - inhale; 4 - lower the dumbbells down to the sides - exhale.

S.P. - standing position, left side facing a chair with support against the backrest. Swing the right leg and arm forward, to the side, and backward alternately. Repeat with the other leg. Breathing is voluntary.

Running with a transition to walking.

While walking: arms forward and upward - inhale, relaxation through the sides - exhale.

While walking, alternate between simultaneous and alternating arm movements: towards the shoulder - upward - towards the shoulder - downward.

S.P. - arms extended in front. Counts 1-4 - shaking the arms upward - inhale; counts 5-8 - forward bending, arms down through the sides, swinging the arms freely - exhale.

Complex 2

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;

C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Walking with changes in pace. Breathing is voluntary.
2. Starting position (S.P.) - arms out to the sides - inhale, return to S.P. - exhale.
3. S.P. - same as before. Rise up on tiptoes, arms curving upward through the sides - inhale, return to S.P. - exhale.
4. S.P. - same as before. Alternate lifting one foot backward onto the toes, arms curving forward and upward - inhale, return to S.P. - exhale.
5. S.P. - feet apart, arms out to the sides. Counts 1-4 - circular motions inward with the arms, counts 5-8 - circular motions outward with the arms. Breathing is voluntary.
6. S.P. - feet apart, hands on the waist. Lean to the right, left arm upward - exhale, return to S.P. - inhale. Repeat to the left.
7. S.P. - same as before. Rotate the torso to the right, right arm sideways - inhale, return to S.P. - exhale. Repeat to the left.

8. S.P. - feet apart. Arms curving forward and upward - inhale, forward bend - exhale; straighten up, arms upward - inhale, return to S.P. - exhale.

9. S.P. - arms around the waist. Bend the right leg and pull it towards the chest with the hands - exhale; lower to S.P. - inhale. Repeat with the left leg.

10. S.P. - feet apart, hands on the waist. Half-squats, arms forward.

11. S.P. - squatting support. While rising, lift the right foot backward onto the toes, arms upward - inhale, bring the foot back to S.P. - exhale. Repeat with the left foot.

12. S.P. - left lunge, hands on the knees. Counts 1-3 - bouncing movements on the left leg, 4 - turn around in a lunge on the right leg, 5-8 - repeat on the right leg.

13. S.P. - lying on the back, hands behind the head. Lift the straight legs. Perform slowly.

14. S.P. - lying on the back, legs bent, soles on the floor. Lift and lower the pelvis.

15. S.P. - same as before. Extend the legs while sitting - inhale, lower back to S.P. - exhale.

16. S.P. - kneeling position. Curve the arms forward and raise them upward - inhale, lower the arms back, sit on the heels, and tilt the head forward - exhale.

17. S.P. - same as before. Alternate sitting on the right and left thigh.

18. S.P. - lying on the stomach, hands bent with palms down. Straighten the arms to lift the head, shoulders, and bend the legs backward - inhale, return to S.P. - exhale. Perform slowly.

19. S.P. - same as before. While lifting the head and shoulders, clap hands twice.

20. S.P. - lying on the stomach, propped up on the forearms. Alternate bending the legs backward. Breathing is voluntary.

21. S.P. - lying on the left side. Swing the right leg to the side. Repeat on the other side.

22. S.P. - squatting position. Jump in place, pushing off alternatively with both feet or one foot at a time.

Appendix 2

Techiques myself for oncological diseases

Physical activity in active individuals leads to an increased level of myokines in the body. These substances, produced by skeletal muscles, have the ability to suppress the growth of malignant tumors and help the body actively fight cancer cells. It can be said that myokines function as a genuine anti-tumor medication. They are particularly beneficial for patients with incurable widespread malignant tumors deeply rooted in the body.

The primary goals of self-care techniques in oncology are to improve the quality of life:

Physical exercise during treatment and rehabilitation reduces the frequency of many side effects such as fatigue, stress, depression, weight loss, bone weakening, muscle mass reduction, sleep disturbances, weight and appetite loss, and constipation.

Moderate physical activity lowers the risk of complications from the cardiovascular system caused by certain chemotherapy drugs and radiation therapy.

Even during chemotherapy, which is usually accompanied by chronic fatigue syndrome, controlled physical exertion is recommended.

Physical activity contributes to:

Prevention of muscle atrophy.

Strengthening muscle tone and increasing endurance.

Reduction of treatment side effects such as osteoporosis and weight gain.

Increased energy and reduced fatigue.

Improved cardiovascular and respiratory function.

Decreased chemotherapy-related side effects like nausea and vomiting.

Improved appetite, digestion, and sleep.

Reduced anxiety, improved mood, and increased self-esteem.

Lowered risk of blood clot formation.

Decreased dependency on others for performing simple tasks (which can be unpleasant for many).

Training principles:

Whenever possible, include exercises that target different muscle groups. Always start with a simple warm-up.

It is preferable to combine exercises that enhance overall endurance (such as cycling, mini stepper, walking) with gymnastics (exercises for coordination and

stretching).

Set short-term and long-term goals, acknowledge achievements, and reward yourself for them. According to Australian experts, the ideal outcome is 2.5 hours of moderate physical activity per week. This time can be distributed however you prefer (but not all at once), for example, in half-hour sessions each day or three 10-minute sessions every day.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GEC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;

C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Aerobic exercises

Aerobic exercises increase heart rate and energy expenditure. Examples of aerobic exercises include:
Walking outdoors or on a treadmill
Light jogging or running
Swimming
Cycling

Strength-building exercises

These exercises will help you increase muscle mass and feel a surge of energy. Here are examples of several body-strengthening exercises you can perform:
Toe rotations:
Lie on your back or sit in a semi-seated position.
Rotate your right foot 10 times clockwise and then 10 times counterclockwise. Repeat this exercise with your left foot.
Foot rocking:
1. Lie on your back or sit on a chair with your legs straight.
2. Lift your toes upward towards your nose and then downward towards the floor. You can perform this exercise with both feet simultaneously. Repeat 10 times.

3. Marching in place.

4. Sit on a chair with armrests and place your feet on the floor.

5. Slowly lift one knee without leaning it or pushing it backward. To prevent your upper body from leaning backward, you can hold onto the armrests.

6. Lower your leg and place your foot back on the floor. Repeat 5 times.

7. Perform this exercise with the other leg.

8. Leg swings in a seated position:

9. Sit on a chair. Place your feet on the floor.

10. Swing one leg forward from the floor so that it extends in front of you.

11. Hold this position and count out loud to 5.

12. Lower your foot to the floor. Repeat 10 times.

13. Perform this exercise with the other leg.

14. Arm raises:

15. Sit or stand in a comfortable position. Keep your back straight, shoulders down, and look straight ahead.

16. Raise your arms out to the sides until they are at shoulder level. Do not bend them at the elbows.

Hold the position for 5 seconds.

17. Lower your arms along your body. Repeat 10 times.

Stretching Exercises

Gentle and careful stretching of muscles can improve flexibility and help relieve stress. These exercises can also help alleviate feelings of weakness.

Overhead Arm Stretch:

1. Lie on your back, placing pillows under your head and shoulders.

2. Starting position: arms along your body. Raise both arms forward and upward over your head.

3. Hold your arms on the pillow near your ears. Stay in this position, counting out loud to 5.

4. Slowly lower your arms, tracing an arc, back to the starting position. Repeat 10 times.

Leg Stretch:

1. Assume a seated position with your legs straight.

2. Reach forward to touch your toes, keeping your knees and back straight.

3. Hold this position for 30-45 seconds.

4. Slowly release.

Side Neck Stretch:

1. Sit on a chair.

2. Look straight ahead, slowly tilt your head to try to bring your left ear closer to your left shoulder.

3. Place your left hand on the right side of your head and gently pull the ear

closer to the shoulder until you feel a moderate stretch along the side of your neck.

Hold this position for 30-45 seconds.

4. Slowly release.

5. Repeat the exercise for the opposite side.

Deep Breathing Exercises

Deep breathing exercises are exercises that help relax and relieve feelings of weakness.

Sit comfortably on a chair or lie down on a bed. If you are lying on a bed, elevate your head with a few pillows. You can also place a pillow under your knees.

1. Place one hand on your abdomen, just above the navel.
2. Take a deep exhale through your mouth.
3. If possible, close your eyes and inhale slowly and deeply through your nose. Feel your hand rise along with your abdomen. Imagine that the air is filling your body from the bottom up.
4. Hold for a few seconds. Then exhale slowly through your mouth or nose. Try to exhale completely and visualize the air leaving your lungs, mouth, or nose.
5. During the exhale, allow your body to relax and become limp, as if you were a ragdoll.
6. Repeat this exercise 5-10 times.

Appendix 3

Techniques myself for musculoskeletal disorders

1. Posture misalignment.

Scoliotic disease (SD) is a complex symptom complex that includes spinal curvature in the frontal and sagittal planes, vertebral torsion, rib torsion with complex deformation of the thoracic cage, and gradual formation of rib-spine hump. Physical exercises for SD are primarily aimed at preventing its progression and, if deformity correction is not contraindicated, correcting spinal curvatures and torsion.

To create physiological conditions for restoring proper body alignment, general developmental gymnastic exercises for the back and abdominal muscles are used, primarily in positions that unload the spine, i.e., not associated with maintaining an upright posture (lying on the back, stomach, side, or on all fours).

Complex of general strengthening exercises for posture

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S. p.: Stand with your hands on your shoulders. Rise up on your toes, arms up, inhale. Return to the starting position, exhaling (keep your elbows apart). Repeat 3-4 times.
2. S. p.: Stand with your hands out to the sides. Rise up on your toes, arms

up and out, stretch upwards, inhale. Return to the starting position, exhaling (maintain proper posture). Repeat 3-4 times.

3. S. p.: Stand with your hands on your hips. Alternate leg extensions backward on your toes, while extending your arms backward (shoulder blades squeezed together). Repeat 4-6 times.

4. S. p.: Stand with your feet apart, hands on your shoulders. Alternate torso rotations to the sides (you can add corresponding head rotations). Repeat 4-6 times.

5. S. p.: Stand with your feet apart, hands behind your head. Alternate side bends. Perform with maximum range of motion, keeping your elbows apart. Repeat 6-8 times.

6. S. p.: Stand with your feet apart, hands on your hips. Lean backward, arms out to the sides (maximum range of motion). Repeat 4-6 times.

7. S. p.: Stand with your feet apart, hands out to the sides. Lean to the right, touching your left leg with your right hand, while the other arm is extended upward. Repeat on the other side. Repeat 4-6 times.

8. S. p.: Stand with your feet apart, hands locked overhead. Forward bends ("woodcutter") with a prolonged exhale. Maintain proper posture in the starting position. Repeat 8-10 times.

9. S. p.: Stand with your feet apart, hands locked overhead. With a twist of the torso to the left, lean forward (keeping the torso horizontal). Repeat on the other side. In the starting position, check posture and inhale. Repeat 6-8 times.

10. S. p.: Lie on your back, hands locked overhead. Tense the muscles, stretch, inhale (3-4 seconds). Relax in the starting position, exhaling. Repeat 3-4 times.

11. S. p.: Lie on your stomach, hands on your shoulders. Arch your back (hold for 3-4 seconds), elbows squeezed backward, inhale. Return to the starting position, exhale. Repeat 4-6 times.

12. S. p.: Lie on your stomach, hands behind your back. Bend the torso, with alternating leg extensions backward. Repeat 6-8 times.

13. S. p.: Lie on your stomach, hands bent in support. Extend your arms, arch your back, inhale. Return to the starting position, exhale. Repeat 6-8 times.

14. S. p.: Lie on your back. Alternate lifting bent legs. Repeat 6-8 times.

15. S. p.: Lie on your back, arms out to the sides (palms pressed to the floor). Sit up from lying down (arms slide along the floor and come as close together as possible), inhale. Return to the starting position, exhale. Repeat 4-6 times.

Complex of exercises for right-sided scoliosis

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Starting position (S.p.) - stand with feet apart. Raise the left arm up while extending the other arm backward. Repeat 8-10 times.
2. S.p. - same as before. Lean to the right, right arm glides down the leg, left arm bends towards the armpit (like a "pump"). Repeat 8-10 times.
3. S.p. - stand with feet apart, hands on the waist. Perform three elastic bends to the right, with the left arm raised. И.п. - inhale. Repeat 4-6 times.
4. S.p. - lie on your stomach with the left arm raised. Perform back bends. Repeat 6-8 times.
5. S.p. - kneeling position, supporting yourself on the knees. Sit in a half-split position to the left, left arm raised (hold the position for 3-4 seconds). Repeat 4-6 times.
6. Crawling with the left arm extended forward and simultaneous pulling of the leg. 8-10 meters.
7. S.p. - seated on an inclined seat, right arm on the waist. Raise the left arm behind the head. Repeat 10-12 times.
8. S.p. - seated on an inclined seat. Perform three elastic bends to the right, with the left arm raised. Repeat 6-8 times.
9. Asymmetric hanging on a gymnastic wall bar. 3-4 times for 8-10 seconds.

Appendix 4

Complex exercise for kyphosis

Complex 1

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Starting position (S.p.) - narrow stance with feet apart. Bend backward, raise your arms up (maximum extension). Repeat 4-6 times.
2. S.p. - standing position, hands clasped behind your back. Rise up on your toes, extend your arms backward (hold for 3-4 seconds). Repeat 6-8 times.
3. S.p. - feet apart, hold a stick above your head. Lower the stick to your shoulder blades. Repeat 6-8 times.
4. S.p. - sitting on a chair, hold onto the chair's legs. Bend backward (do not hold your breath). Repeat 6-8 times.
5. S.p. - sitting position, arms clasped overhead. Stretch upwards. Repeat 4-6 times.
6. S.p. - standing hang facing the gymnastics wall. Bend in the lumbar region without moving your feet. Repeat 4-6 times.
7. S.p. - hang facing the gymnastics wall. Bend forward, extending your legs backward. Repeat 6-8 times.
8. S.p. - lying on your back, hands on your waist. Bend backward, supporting yourself on your elbows and the back of your head (do not hold your breath). Repeat 6-8 times.
9. S.p. - sitting on your heels with a forward lean. Slide forward into a prone position on your thighs (maximum lumbar extension). Repeat 6-8 times.
10. Various walking exercises with a gymnastics stick at shoulder level.

Complex 2

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Starting position (S.p.) - feet apart, hands clasped overhead. Turn your head to the right and then to the left. Repeat 3-4 times.
2. S.p. - feet apart, arms extended to the sides. Tilt your head backward, palms facing up and outwards. Repeat 6-8 times. Do not hold your breath.
3. S.p. - standing position, hands on hips. Squat down on your knees and return to S.p. Maintain a straight back. Repeat 6-8 times.
4. S.p. - prone position. Arch your back - prone position on your thighs (hold for 3-4 seconds) and return to start position. Repeat 4-6 times. Breathe evenly.
5. S.p. - lying on your stomach: abdomen and legs firmly pressed to the floor, hands clasped behind your back. Arch your back - turn your head to the right, left, tilt backward, and return to S.p. Repeat 4-6 times.
6. S.p. - lying on your back. Bridge exercise.
7. S.p. - kneeling position. Lean back, touch your heels with your hands. Repeat 4-6 times.
8. S.p. - lying on your back. Arch your thoracic spine, supporting your head on the floor - inhale, return to I.p. - exhale. Repeat 6-8 times.
9. S.p. - lying on your stomach, legs bent, hands grasp the ankles from the inside. Arching backward, try to straighten your knees ("basket" position).
10. S.p. - standing with your back to the wall, with the back of your head, shoulder blades, buttocks, heels, and elbows touching the wall. 1-4 - Step forward while maintaining I.p.; 5-8 - Step backward to S.p. Repeat 4-6 times.
11. S.p. - same as above. Slowly squat while sliding your back along the wall. Repeat 6-8 times.
12. S.p. - standing with your back to the gymnastics wall, hands behind your head. Straighten your arms and arch your thoracic spine without lifting your buttocks off the wall - inhale. Return to S.p. - exhale. Repeat 6-8 times.

Appendix 5

Exercises to correct posture in lordosis

Complex 1

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;

C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S. p., feet hip-width apart. Forward bend (without bending the knees), touch the feet with your hands, and return to the starting position. Repeat 6-8 times.
2. S. p. with back against a wall. Attempt to touch the wall with your lower back by flexing the spine. Repeat 6-8 times.
3. S. p. as above. Perform squats with arms extended forward. Maintain a slow tempo. Repeat 8-10 times.
4. Lying on your back, relax and press the lower back into the floor, holding for a count of 4. Repeat 6-8 times.
5. S. p. as above. Bring the knees toward the chest, hold for a count of 4, and return to the starting position. Repeat 10-15 times.
6. S. p. as above. Sit up without using your hands and return to the starting position. Repeat 4-6 times.
7. S. p. as above. Alternate raising and lowering the legs. Repeat 6-8 times.
8. Hanging from a bar, raise and lower the legs. Repeat 6-8 times.
9. Same as above, with a 4-count pause at the top. Repeat 4-6 times.
10. Standing on 1-2 steps, facing the wall, grasp the bar at waist level. Perform slow squats and stand-ups. Repeat 4-6 times.

Complex 2

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by

the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S. p.: standing in a forward bend, holding onto the ankles. Pull the chest towards the thighs. Repeat for 4-6 times, holding each repetition for 3-4 seconds.
2. S. p.: standing with feet hip-width apart. Perform squats in a tucked position. Repeat for 4-6 times.
3. S. p.: lying on your back. Alternate lifting bent legs towards the chest. Repeat 8-10 times.
4. S. p.: standing on a step or platform, holding onto a bar at chest level. Perform squats with a slight forward lean. Repeat 6-8 times.
5. S. p.: hanging from a bar. Alternate bending and straightening the legs (bicycle motion). Repeat 10-12 times.
6. S. p.: sitting. Forward bends with arms raised. Repeat 8-10 times.
7. S. p.: lying on your back. Perform leg curls and extensions. Repeat 6-8 times.
8. S. p.: lying on your back, hands behind your head. Hold the legs extended forward at an angle. Repeat for 3 sets, holding each set for 8-10 seconds.
9. S. p.: sitting. Back rolls while bending the legs (advanced option: straighten the legs until they touch behind the head).

Appendix 6

Exercises for early-stage lateral spinal curvature (scoliosis)

Complex 1

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Starting position (S.p.) - standing with correct posture: the back of the head, shoulder blades, buttocks, and heels touch the wall (use a mirror for checking), hold this position for 4 counts. Repeat 10 times.
2. S.p. - standing with correct posture, maintain the position and step away from the wall one or two steps, while keeping the correct posture. Repeat 10 times.
3. S.p. - standing with correct posture, take two steps forward, squat down, stand up while maintaining the correct posture. Repeat 10 times.
4. Walking with correct posture.
5. Walking with raised arms.
6. Walking on tiptoes, extending the arms and sliding the shoulder blades.
7. Walking with a bag on the head, stepping over obstacles (rope, gymnastic bench, etc.). Alternate with stops to check the correct posture in front of a mirror.
8. Light jogging on tiptoes.
9. S.p. - standing with feet apart, right hand on the chest, left hand on the abdomen.
10. Breathing exercises.
11. S.p. - standing with feet apart, hands bent in front of the body, fists clenched. Alternate straightening the arms forward, simulating boxer movements (perform with force).
12. S.p. - standing with feet apart, hands down. From the opposite side of the spinal curvature, raise the arm up, rotate the shoulder forward, without allowing the entire torso to turn.
13. S.p. - standing with feet apart. Alternate leaning to the right and left,

sliding the hands along the body.

14. S.p. - standing position, hands on the waist. Squat down, keeping the back straight, and spread the arms to the sides and back. Return to S.p.

15. Breathing exercises. Raise the arms up, stretch, take a deep breath, lower the arms, exhale.

16. S.p. - standing with feet apart, gymnastic stick at the bottom. Alternate lifting the legs backward on the tiptoe while raising the stick up - inhale. Return to S.p. - exhale.

17. S.p. - standing with feet apart, fists clenched. Rotate the fists backward and inward, bringing the shoulder blades together, lifting the head up.

18. S.p. - lying on the back, hands down. Lift one leg and cross it over the other towards the opposite side of the lumbar scoliosis, trying to avoid the thighs touching. Return to S.p.

19. S.p. - lying on the back, hands behind the head. Lift the legs, spread them apart, cross them, and return to S.p. (trying to keep the legs from touching the floor).

20. S.p. - lying on the back, right hand on the chest, left hand on the abdomen. Perform breathing exercises.

Complex 2

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:

C1 - M. I will not harm myself with thoughts;

C1 - W. I will not harm myself with words;

C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p. - standing on tiptoes, hands locked above the head. Sway the torso from side to side. Repeat 8-10 times.
2. S.p. - standing with feet apart. Alternate leaning to the right and left, sliding the hands along the body. Repeat 6-8 times.
3. S.p. - standing with feet apart, left hand up. Rapidly change the position of the hands. Repeat 6-8 times.
4. S.p. - standing with feet apart, hands behind the back. Alternate side bends with raising the opposite hand up. Repeat 6-8 times.
5. S.p. - standing sideways, opposite to the curvature, towards the gymnastics wall, hold it with one hand from above and the other hand from below. Lean towards the wall, stretching as much as possible. Repeat 6-8 times.
6. S.p. - kneeling position, hands on the waist. Right leg to the side on tiptoe, bend to the right with the left hand up - exhale. Return to S.p. - inhale. Repeat the

same to the left side. Repeat 4-6 times.

7. S.p. - lying on the stomach, hands up. Arch the back, arms to the sides. Do not hold your breath. Repeat 4-6 times.

8. S.p. - the same. Arching the back with alternating lifting of the legs backward. Repeat 6-8 times.

9. S.p. - lying on the stomach, stick up. Arching the back, sequentially move the end of the stick backward (without sudden movements, exhale in S.p.). Repeat 6-8 times.

10. S.p. - kneeling position. Simultaneously lift the right leg backward and the left hand up. Repeat with a change of position. Hold the pose for 3-4 seconds. Repeat 4-6 times.

11. S.p. - sitting on the heels. Straighten the left leg backward, raise the right hand up - arch the back. Repeat with a change of position. Repeat 4-6 times.

12. S.p. - kneeling position. Alternate torso rotations with abduction of the corresponding arm to the side. Repeat 6-8 times.

13. S.p. - kneeling position. With a forward bend, slide and stretch the arms as high as possible, then return to S.p. without lifting the hands off the floor. Repeat 4-6 times.

14. Asymmetric hanging on the gymnastics wall (arm extended on the side of the curvature).

15. Crawling on the knees while extending both arms forward.

16. Crawling on the knees with alternate movement of the corresponding arms and legs.

17. S.p. - sitting on an inclined seat, tilted towards the curvature of the spine, right hand on the waist, left hand behind the head. Maintain an upright position.

18. S.p. - sitting on an inclined seat, tilted towards the curvature of the spine. Three springy leans to the right, left hand up. Repeat 6-8 times.

19. The same with the hand raised up.

20. S.p. - lying on the back. Stretching the torso.

Appendix 7

Techniques myself for skin disorders

The skin, as an anatomical and physiological part of the body, is an organ that performs a number of important physiological functions. It protects the body from various harmful influences of the external environment, participates in the process of thermoregulation, and regulates the overall metabolism in the body. The secretory function of the skin (the work of sebaceous and sweat glands) is also significant. Additionally, the skin represents an extensive receptor field that perceives external stimuli and transmits a variety of sensations to the central nervous system.

Lupus erythematosus

The disease manifests in two main forms. One of them (discoid lupus) is characterized by skin changes on the face, less commonly on the scalp, upper chest, back, and fingers. The other form (systemic lupus) is associated with the involvement of internal organs. In systemic lupus, connective tissue is primarily affected.

Massage, therapeutic exercises, walks, moderate physical exertion, and others are recommended. Massage is performed using heated massage oil.

Therapeutic exercises include general development exercises, breathing exercises, exercises with a gymnastic stick, and elastic band in sitting, standing, and lying positions (if joint symptoms are pronounced).

Scleroderma

Scleroderma is a connective tissue disorder characterized by the thickening (sclerosis) of the tissue, primarily affecting the skin.

Massage, therapeutic exercises, physiotherapy, moderate walking, skiing, diet therapy, vitamin supplementation, various ointments, and other treatments are recommended.

Skin Itching

This neuro-reflexive process can be caused by functional disorders of the cerebral cortex or psychological disorders. It can be classified as general or localized itching.

Seasonal itching occurs during transitional seasons and is observed in individuals with vegetative dystonia; altitude itching occurs in some children when ascending to heights of 5-8 km, possibly due to changes in barometric pressure.

For skin itching, cryomassage, therapeutic exercises, tempering procedures, walks, park activities (forest), swimming, skiing, near rivers (seaside), antihistamines, targeted massage, sanatorium and resort treatments (diet therapy, oxygen cocktail, various baths, terrain cure, etc.) are recommended.

Psoriasis (Scaly Lichen)

Psoriasis is a common chronic condition that tends to recur and exacerbate. Small, pinhead-sized pink-red papules appear on the skin, either solitary or multiple, slightly elevated above the skin surface.

Psoriasis is often accompanied by itching and joint disorders (arthritis). During non-acute stages, physical exercise and tempering procedures are recommended. Therapeutic exercises, ultraviolet therapy, sea swimming, skiing, cycling, rowing, sauna, massage, air baths, contrast showers are beneficial. Therapeutic exercises include general developmental and breathing exercises, and if arthritis is present, therapeutic exercises are performed in a gentle mode (seated or lying position).

Neurodermatitis

Neurodermatitis primarily occurs in children over 3 years of age, often in the presence of diathesis or some time after its manifestations have subsided. It manifests as dryness, scaling, and thickening of the skin in the area of the knee and elbow flexures, as well as large folds, accompanied by intense itching.

The condition begins with the onset of itching, which is usually very intense and occurs in episodes, predominantly at night. Neurodermatitis can be classified as localized or generalized.

For neurodermatitis, cryomassage, massage of the collar area and head, therapeutic exercises, dietary modifications, swimming, skiing, antihistamines, various baths, sedatives, oxygen cocktails, and vitamin supplementation are recommended. Sanatorium and resort treatment may include sea swimming, walks and games by the seaside, air baths, diet therapy, phytotherapy, and more.

In the case of skin disorders, daily care is necessary the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;

C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Appendix 8

Techniques myself for sleep disturbances

Yoga - an Indian spiritual and physical practice that reduces stress, relaxes muscles, and clears the mind from work-related busyness. It is enough to learn 10 exercises for sleep. This routine can be performed right in bed. You can also play relaxing music.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;

C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Pose 1:

Lotus Pose - helps maintain mental freshness and is perfect for contemplation. If the "Lotus Pose" is inaccessible to you, then sit with crossed legs. Your back should be perfectly straight, align your spine. Place your hands on your knees and begin to breathe deeply without lifting your shoulders. Try to mentally distance yourself from problems and focus only on your breath.

Pose 2:

Forward Bend - a sleep exercise that improves the functioning of the gastrointestinal tract, relieves tension, and eliminates insomnia. Additionally, the "Forward Bend Pose" helps stretch and relieve all the stress from the back. To properly perform the sleep exercise, sit on the bed on your sitting bones, and then slowly lean forward. Keep your back straight during this process. To enhance the stretch, focus on the exhale. If you can't reach the tips of your toes, don't worry. Bend forward as far as you comfortably can. In the forward bend, the main thing is not to overdo it and not to suffer from pain but rather to relax the back muscles and rest. The sleep exercise "Forward Bend" follows one of the main principles of yoga - asanas without pain.

Pose 3:

Child's Pose - the perfect exercise for sleep and relaxation. Stand on your knees on the bed and join the soles of your feet. Then sit on your heels and with an

exhale, bend forward, lowering your body between your thighs. Stay in this position as long as it is comfortable for you and continue to breathe deeply.

Pose 4:

Twist - a sleep exercise that develops spinal flexibility and is recommended for arthritis. Twisting truly works wonders by relieving back fatigue after a whole working day. To achieve the desired effect, sit with crossed legs on the bed and place your right hand on your left knee. Extend your left hand backward and slowly rotate your torso to the left. Your head should look over your left shoulder. In the twist, it is important to restore your breath. Focus on the inhale and exhale, and then return to the starting position and repeat the twist in the other direction. The sleep exercise will free your inner world from worries.

Pose 5:

Shavasana - a deeply relaxing yoga pose typically performed at the end of a practice. During Shavasana, it's important to scan your body using the pulse.

To perform the sleep exercise, lie on your back. Extend your arms along your body with palms facing up. Slightly spread your legs, finding the most comfortable position, and close your eyes. Mentally scan through different parts of your body. Start with the lower extremities: feel each toe, then all the toes together, the foot, and so on. Repeat the same process on the other side of your body. Notice any areas of discomfort, perhaps it's a pinched nerve or an old injury. Send a muscular impulse to the discomfort to neutralize it as much as possible. The sleep exercise relaxes the entire psychophysiological system, so after performing it, all tensions will be released.

Pose 6:

Crocodile Pose - a pleasant position recommended for those with asthma and various lung conditions. The sleep exercise relaxes and corrects misalignments of spinal discs and back issues.

To perform the "Crocodile Pose," lie on your stomach. Bend your arms at the elbows and rest your chin on your palms. Extend your shoulders as much as possible and arch your back. Throughout the sleep exercise, breathe with your eyes closed. After 10 minutes of relaxation, you can go to sleep.

Pose 7:

Roll Pose - a sleep exercise beneficial for the back and normalizing blood circulation. The "Roll Pose" not only relaxes but also stimulates physical activity in the body, so you can perform the asana at any convenient time. The sleep exercise resembles the popular yoga pose "Happy Baby" - both legs are lifted in the air.

Lie down on the bed, bring your knees to your chest, and cross your ankles. Embrace your shins with your hands, push your torso forward as if trying to sit up,

and then slowly roll back. The sleep exercise will help stretch the lower back and hips, preparing the body for a pleasant rest.

Pose 8:

Pigeon Pose - allows you to feel free, like a bird of peace. This sleep exercise is one of the most intense in our material.

The "Pigeon Pose" requires some endurance, so if you can't do the asana correctly at first, try again.

The sleep exercise works wonders for tired legs. Start on all fours, extend one leg backward. Place the other leg in front of you, bending the knee and placing it perpendicular to the torso. Place your hands shoulder-width apart. Lean the torso forward and exhale. Stay in the "Pigeon Pose" for a few minutes, and then switch legs.

Pose 9:

Fish Pose - a challenging but effective sleep exercise. For those with back issues, it is advised not to overdo it and start with a gentle stretch.

The "Fish Pose" involves a deep backbend: lying on your back, place your hands under your buttocks, and gently lift your chest, tilting your head backward. Keep your spine straight and your breathing smooth. Repeat the sleep exercise several times.

Pose 10:

Supine Twists - a sleep exercise that, unlike the previous ones, energizes the whole body. Twists can be performed throughout the day and are ideal for morning exercises and relaxing workouts.

Lie on your back and bring your knees to your chest. Lower your knees alternately to the left and then to the right, while turning your head towards the legs. Stay in the sleep exercise - the twist - for a while. The "Supine Twists" pose awakens the body and charges the entire system with positive energy.

Also, it is advisable to avoid gadgets a few hours before sleep, avoid using bright cold lighting, and avoid heavy meals before bedtime.

Breathing exercises using the 4-7-8 technique, developed by Dr. Andrew Weil, can also help:

1. Before you begin, place the tip of your tongue just behind your upper front teeth. Keep it there throughout the exercise.
2. Exhale completely through your mouth, making a whooshing sound.
3. Close your mouth and inhale quietly through your nose to a mental count of four.
4. Hold your breath for a count of seven.
5. Exhale completely through your mouth, making the same whooshing

sound to a count of eight.

6. Inhale again and repeat the cycle three times. Important note: Inhale calmly and quietly through your nose, and exhale forcefully through your mouth.

Appendix 9

Techniques myself for gastrointestinal disorders

To gastrointestinal disorders belong gastritis, cholecystitis, peptic ulcer disease, and others. Physical exercises contribute to the normalization of motor and secretory functions of the gastrointestinal tract and enhance blood circulation in the abdominal cavity. Specific exercises help strengthen the abdominal muscles, especially the anterior abdominal wall. They should be performed from different starting positions, but most often in a sitting position and lying on the back. These exercises should be alternated with general developmental and breathing exercises. They should be performed calmly, with moderate muscle tension.

Exercise routine for gastrointestinal disorders.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S. p. - lying on your back. Arm movements: towards the shoulders - to the sides - towards the shoulders - down.
2. S. p. - lying on your back, one hand on the abdomen. Inhale while lifting the abdominal wall, then exhale while lowering it.
3. S. p. - lying on your back. Alternately flex the legs at the knee joint, sliding the heels on the floor.
4. S. p. - lying on your back, legs bent. Abduction and adduction of the thighs.
5. S. p. - lying on your back. Alternately raise straight legs.
6. S. p. - same as before. Alternately abduct the legs to the sides.
7. S. p. - same as before. Lift the head and shoulders, arms forward; return to the s. p. - inhale.
8. S. p. - same as before. Bend the legs and press them against the chest with the help of your hands. Repeat without using your hands.
9. S. p. - same as before. Bend the right leg, extend it forward, and lower it

to the s. p.. Repeat with the left leg.

10. S. p. - same as before. Lift the right leg, take it to the right, bring it back and lower it to the s. p.. Repeat with the left leg.

11. S. p. - same as before. Simulate riding a bicycle.

12. S. p. - same as before. Slide the legs along the floor, bend them, lift, extend forward, and lower to the s. p..

13. S. p. - same as before. Sit up with a forward lean, sliding hands along the legs, then return to the s. p..

14. S. p. - lying on your back, arms to the sides. Lift the legs, spread them, lower them, lift them, bring them together, and lower to the s. p..

15. S. p. - same as before. Lift the legs forward, hold the position for 4-6 seconds, and lower them.

16. S. p. - same as before. Lift the legs, perform 4-5 "scissors" movements, and lower them.

17. S. p. - lying on your back. Sit up with a forward lean, sliding hands along the legs, then return to the s. p..

18. S. p. - seated, hands to the shoulders with elbows forward. Alternately bend the legs to touch the opposite hand.

19. S. p. - seated, legs secured by a rail. Lean back and return to the s. p.. Repeat with hands behind the head.

20. S. p. - lying on your back, legs slightly bent and spread. Alternately lower the legs to the right, then to the left.

21. S. p. - quadruped position. Sit back on the heels with a forward lean.

22. S. p. - seated on the heels. Raise the arms, arch the back - inhale. Return to the s. p. - exhale.

23. S. p. - lying on your back. Deep breathing, eyes closed, muscles relaxed.

24. Walking with changes in pace. Breathing is voluntary.

Complex of exercises for strengthening the anterior abdominal wall.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S. p. - lying on your back, one hand on the abdomen. Inhale, lifting the

abdominal wall, then exhale, lowering it.

2. S. p. - same as before. Take a breath, and without exhaling, protrude and retract the abdominal wall.

3. S. p. - same as before. Lift the head and shoulders, arms forward; return to the s. p..

4. S. p. - lying on your back, hands behind the head. Lift the head and shoulders, then return to the starting position.

5. S. p. - lying on your back. Bend the legs and press them against the chest with the help of your hands. Repeat without using your hands.

6. S. p. - same as before. Abduct and adduct the legs along the floor. Repeat while lifting.

7. S. p. - lying on your back, right leg bent. Alternate bending and extending the legs.

8. S. p. - lying on your back. Bend the legs, extend them forward, bend again, and lower to the starting position.

9. S. p. - same as before. Raise and lower the straight legs.

10. S. p. - same as before. Lift the legs, perform 4-5 "scissors" movements, and lower them.

11. S. p. - lying on your back, arms to the sides. Lift the legs, spread them, lower them, lift them, bring them together, and lower to the starting position.

12. S. p. - seated angle support. Cross-legged horizontal scissor movements.

13. S. p.- lying on your back, legs lifted. Simulate riding a bicycle.

14. S. p. - seated, legs apart. Springy forward bends.

15. S. p. - lying on your back. Shoulder stand ("birch").

16. S. p. - same as before. Lift the legs and touch the toes behind the head.

17. S. p. - same as before. Perform the previous exercise, but when lowering the legs, sit up, then lie down.

18. S. p. - seated, legs secured by a rail. Lean back and return to the starting position. Repeat with hands behind the head. When performing exercises, individuals with high myopia should take into account that prolonged and intense transitions from a sitting position to a lying position and vice versa are not recommended.

Complex of exercises for chronic gastritis (by Korhin M.A.)

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the

environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p.: Lie on your back. Raise and lower your arms. Breathe evenly.
2. S.p.: Same as above. Simultaneously raise your arms up and spread your legs apart. Slow pace. Breathe evenly.
3. S.p.: Same as above. Alternate raising your arms up. Moderate pace.
4. S.p.: Same as above. Alternate bending your legs towards your chest. Slow pace. Do not hold your breath.
5. S.p.: Lie on your back with legs semi-bent. Arch your back while supporting yourself on your hands and feet. Slow pace. Breathe evenly.
6. S.p.: Same as above. Alternate turning your legs to the sides (keeping your shoulders and back of the head on the floor). Slow pace.
7. S.p.: Lie on your back. Alternately raise your straight legs. Slow pace.
8. S.p.: Same as above. Alternate bending and straightening your legs in a circular motion (like riding a bicycle). Moderate pace. Breathe evenly.
9. S.p.: Lie on your right side with your right hand behind your head and your left hand supporting yourself in front. Bend and straighten your left leg. Repeat lying on your left side.
10. S.p.: Same as above. Simultaneously extend your left leg and left arm to the side. Slow pace. Repeat lying on your left side.
11. S.p.: Stand and bend forward. Alternate extending your legs backward. Slow pace. Do not hold your breath.
12. S.p.: Stand upright (inhale). Squats. Slow pace.
13. S.p.: Stand with your arms raised (inhale). Springy forward bends (exhale). Moderate pace.
14. S.p.: Stand with support from a chair. Squats. Breathe evenly.
15. S.p.: Stand sideways to a support. Swing your right leg forward. Repeat with your left leg. Moderate pace.
16. S.p.: Stand with your arms raised. Make circular movements forward with your arms. Breathe evenly.

For gastritis with low acidity, gastric and intestinal atony, and abdominal organ prolapse, moderate physical activity that does not cause fatigue can enhance metabolism, improve blood circulation, and stimulate the activity of all organs. Physical exercises increase the secretion of digestive juices. In addition to exercises for all muscle groups, exercises that put a heavy load on the abdominal muscles are widely used. For constipation, which often accompanies atony, additional exercises involving body shaking (jumping rope, sports games, skiing, and rowing) should be performed.

Appendix 10

Complex of exercises for chronic gastritis with normal and high acidity

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;

C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Walking with coordinated breathing: Inhale for 2 steps, exhale for 3-5 steps.

2. S.p.: Stand with your arms extended forward. Extend your arms to the sides and behind your head - inhale, bring them back to the sides and to the starting position - exhale. Repeat 4-6 times.

3. S.p.: Sit on a chair with your hands in front of your chest. Rotate your torso to each side, extending your arms to the sides - inhale, return to the starting position - exhale. Repeat 4-6 times on each side.

4. S.p.: Sit on a chair. Lean to each side, with one hand sliding down the leg and the other hand reaching towards the armpit. Repeat 4-6 times.

5. Starting position: Sit on the edge of a chair. Alternate lifting each leg. Repeat 4-6 times for each leg.

6. S.p.: Lie on your back with your knees bent and hands near your shoulders. Simultaneously straighten your legs without lifting them off the floor and raise your arms overhead - inhale, return to the starting position - exhale. Repeat 4-6 times.

7. S.p.: Get on all fours. Simultaneously lift your right leg backward and your left arm upward. Return to the starting position. Repeat with the opposite leg and arm. Repeat 6-8 times.

8. S.p.: Same as above. Push your buttocks back to your heels - inhale. Return to the starting position - exhale. Perform the exercise without engaging the abdominal muscles. Repeat 4-6 times.

9. S.p.: Sit on a chair, one hand on the abdomen and the other hand on the chest. Perform full diaphragmatic-chest breathing. Repeat 4-6 times.

Complex of exercises for chronic gastritis with increased acidity.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Jogging in place with high knee lifts - 15 seconds.
2. Starting position: standing with feet shoulder-width apart. Alternately extend one leg backward on tiptoe, hands raised upwards - inhale. Return to starting position - exhale. Repeat 3-4 times.
3. Starting position: standing with feet apart, hands in front of the chest. Alternate torso rotations, arms out to the sides - inhale. Return to starting position - exhale. Repeat 4-6 times.
4. Starting position: narrow stance with feet apart. Alternate side bends, one hand sliding down the leg while the other hand reaches up to the armpit. Repeat 4-6 times.
5. Starting position: standing with feet apart, hands locked above the head. Forward bends resembling a "woodcutter" motion. Repeat 6-8 times.
6. Deep breathing exercises.
7. Starting position: lying on the back. Bend the right leg and bring it towards the chest using the hands - exhale, return to starting position - inhale. Repeat the same with the left leg. Repeat each leg 4-6 times.
8. Starting position: same as before. Alternate raising straight legs. Repeat each leg 4-6 times.
9. Starting position: lying on the back, one hand on the abdomen, the other hand on the chest. Deep diaphragmatic and chest breathing. Repeat 4-6 times.

Calming walk for 1-1.5 minutes: inhale for 2-3 steps, exhale for 3-5 steps.

For patients with increased secretion, the workload should be significantly higher, at a submaximal power output level, but the number of abdominal exercises should be limited and performed with moderate intensity. When combining dietary nutrition, mineral water intake, and therapeutic physical exercises, it is most advisable to drink mineral water before engaging in physical exercises and

consume food 15-20 minutes after the exercises.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Starting position: standing with feet shoulder-width apart. Alternately extend one leg backward on tiptoe, hands raised upwards - inhale. Slow tempo.
2. Starting position: standing with feet apart. Alternate torso rotations, arms out to the sides - inhale. Slow tempo.
3. Starting position: standing with feet apart, hands behind the head. Alternate side bends. Maintain even breathing. Slow tempo.
4. Starting position: standing with feet apart, hands locked above the head. "Woodcutter" exercise. Fast tempo. Deep breathing. Slow tempo.
5. Starting position: lying on the back. Alternate lifting straight legs. Slow tempo.
6. Starting position: same as before. "Bicycle" exercise. Maintain even breathing. Medium tempo.
7. Starting position: plank position. Bend and straighten the arms in the plank position. Medium tempo.
8. Starting position: standing, hands by the shoulders. Squats with exhale, hands forward. Medium tempo.
9. Starting position: standing, hands to the sides. Lift one leg forward, then extend it backward. Medium tempo. Perform with each leg.
10. Starting position: sitting, securing the legs under a rail (or any object). Lean back - exhale. Slow tempo. Deep breathing. Slow tempo.
11. Starting position: quadruped position. Simultaneously lift the left leg backward and the right arm upward - inhale. Return to starting position - exhale. Repeat with the other leg. Slow tempo.
12. Starting position: standing. Jumping with transition to walking. Maintain even breathing. Deep breathing. Slow tempo.

For gastritis with reduced secretion, it is recommended to drink mineral water after physical exercises, 15-20 minutes before meals.

Exercises for peptic ulcer disease.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Complex #1 (light).

1. S.p.: lying on your back, arms raised upward. Bend your legs, slide your feet along the floor, and bring your hands to your shoulders - exhale. Return to the starting position - inhale. Repeat 4-8 times.
2. S.p.: lying on your right side, left leg bent forward, right arm under the head. Extend your left leg backward, raise your left arm upward - inhale, return to the starting position - exhale. Repeat 4-8 times on each side.
3. S.p.: lying on your back. Alternately lift your straight legs forward. Repeat 6-8 times.
4. S.p.: lying on your back, one hand on the abdomen, the other on the chest. Breathe deeply through the nose. Repeat 4-8 times.
5. S.p.: kneeling position (on all fours). Alternate lifting one arm forward and the opposite leg backward. Repeat 4-8 times with each arm and leg.
6. S.p.: sitting on a chair, hands in front of the chest. Rotate the torso to the sides, arms out to the sides with palms facing upward. Repeat 4-8 times.
7. S.p.: sitting on a chair, hands forward. Clench and unclench the fingers of the hands while simultaneously flexing and extending the feet. Repeat 8-10 times.
8. S.p.: sitting on the edge of a chair. Alternately lift and abduct the leg to the side. Repeat 6-10 times with each leg.
9. S.p.: sitting on a chair, a horizontal stick held upright. Forward bends, touching the feet with the stick alternately. Repeat 4-8 times for each leg.
10. S.p.: sitting on a chair. Alternate bending one leg towards the chest, hands to the shoulders. Repeat 4-6 times with each leg.
11. S.p.: sitting on the edge of a chair. Squats with support from the hands. Repeat 8-12 times.
12. S.p.: sitting, one hand on the abdomen, the other on the chest. Breathe deeply through the nose. Repeat 4-8 times.

13. Walk in place with deep breathing: inhale for 2-3 steps, exhale for 3-4 steps. 1-3 minutes.

Complex #2 (moderate).

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p. - sitting on a chair, hands in front of the chest. Rotate the torso to the sides, arms out to the sides, palms facing upwards. 4-8 times.
2. S.p. - sitting on the edge of a chair. Alternately lift and extend the leg to the side. 6-10 times each leg.
3. S.p. - sitting on a chair. Alternately bend the legs towards the chest, hands to the shoulders. 4-6 times each leg.
4. S.p. - sitting on the edge of a chair. Squats with support from the hands. 8-12 times.
5. S.p. - sitting on a chair, hands locked under the right thigh. Lift the thigh with the hands and relaxingly swing the shin and foot. 4-6 times each leg.
6. S.p. - lying on the back, arms up. Bend the legs, feet sliding on the floor, hands to the shoulders - exhale. Return to S.p. - inhale. 4-8 times.
7. S.p. - lying on the right side, left leg bent forward, right arm under the head. Straighten the left leg backward, left arm up - inhale, S.p. - exhale. 4-8 times on each side.
8. S.p. - lying on the back. Alternately lift the straight legs forward. 6-8 times.
9. S.p. - lying on the back. Alternately bend the legs at the knees. 8-12 times.
10. S.p. - kneeling on all fours. Alternately raise the arm forward and the opposite leg backward. 4-8 times each arm and leg.
11. S.p. - sitting, legs apart, hands to the sides. Lean forward and touch the opposite foot with the opposite hand. 8-12 times.
12. S.p. - sitting on the heels, leaning forward, hands up. Straighten the legs and bend the arms in a "wave" motion, transitioning to a prone position with the arms bent in support - exhale. Straighten the arms and bend the legs, returning to S.p. - inhale. 4-8 times.
13. S.p. - lying on the stomach, arms bent in support. Arch the back and alternately extend the legs backward. 4-6 times each leg.
14. S.p. - lying on the back, one hand on the abdomen, the other on the chest.

Deep breathing through the nose. 4-8 times.

15. Walking in place with deep breathing: inhale on 2-3 steps, exhale on 3-4 steps. 1-3 minutes.

16. S.p. - standing with legs apart, hands up. Sequential relaxation of the muscles in the arms, neck, torso, and legs (squatting). 3-4 times.

Complex №3 (advanced).

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;

C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p. - sitting on a chair, hands in front of the chest. Rotate the torso to the sides, arms out to the sides, palms facing upwards. 4-8 times.
2. S.p. - lying on the back. Alternately lift the straight legs forward. 6-8 times.
3. S.p. - sitting on a chair. Alternately bend the legs towards the chest, hands to the shoulders. 4-6 times each leg.
4. S.p. - sitting on the edge of a chair. Squats with support from the hands. 8-12 times.
5. S.p. - sitting on a chair, hands locked under the right thigh. Lift the thigh with the hands and relaxingly swing the shin and foot. 4-6 times each leg.
6. S.p. - lying on the back, arms up. Bend the legs, feet sliding on the floor, hands to the shoulders - exhale. Return to S.p. - inhale. 4-8 times.
7. S.p. - lying on the back. Alternately lift the straight legs forward. 6-8 times.
8. S.p. - lying on the right side, left leg bent forward, right arm under the head. Straighten the left leg backward, left arm up - inhale, S.p. - exhale. 4-8 times on each side.
9. S.p. - lying on the back. Alternately lift the straight legs forward. 6-8 times.
10. S.p. - sitting, legs apart, hands to the sides. Lean forward until touching the opposite foot with the opposite hand. 8-12 times.
11. S.p. - sitting on the heels with a forward lean, hands up. Straighten the legs and bend the arms in a "wave" motion, transitioning to a prone position with the arms bent in support - exhale. Straighten the arms and bend the legs, returning to S.p. - inhale. 4-8 times.
12. S.p. - sitting on a chair, hands locked under the right thigh. Lift the thigh with the hands and relaxingly swing the shin and foot. 4-6 times each leg.

13. S.p. - lying on the back, arms up. Bend the legs, feet sliding on the floor, hands to the shoulders - exhale. Return to S.p. - inhale. 4-8 times.

14. S.p. - standing, stick at the bottom. Lift the right heel backward, with the stick bouncing upward. Repeat with the left heel. 4-6 times each leg.

15. S.p. - standing with legs apart, right arm forward, fists clenched. Simulate punches as in boxing. 10-40 punches.

16. S.p. - standing, dumbbells at the bottom (weight 1-2 kg). Lunge forward with the right leg, left arm up - inhale, return to S.p. - exhale. Repeat with the left leg. 4-8 times.

17. S.p. - standing with legs apart, arms to the sides. Bend forward with the torso twist to the left and touch the left foot with the right hand - exhale. S.p. - inhale. Repeat in the opposite direction. 4-8 times.

18. S.p. - standing facing the back of a chair with support from the hands. Squats 6-12 times.

19. Walking in place with deep breathing: inhale on 2-3 steps, exhale on 3-4 steps. 1-3 minutes.

20. S.p. - standing with legs apart, hands up. Sequential relaxation of the muscles in the arms, neck, torso, and legs (squatting). 3-4 times.

The load can be considered correct if after the gymnastics, there is a feeling of vigor and energy. Feeling tired and wanting to rest after the exercises indicates an overdose of load. After the workout, the pulse should not accelerate by more than 20 beats per minute, and after 5 minutes of rest, the pulse rate should return to its initial value or approach it.

Exercise complex for peptic ulcer disease and duodenal ulcer (by M.F. Grinenko)

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p. - lying on your back, hands on your chest. Spread your arms to the sides - inhale, and on the exhale, press alternately on the lower and middle parts of the chest with your fingers spread wide. Repeat 4-5 times.

2. S.p. - lying on your back. Lift one bent leg at a time and press the thigh to the chest with your hands. Repeat 4-5 times for each leg.

3. S.p. - lying on your back, hands behind your head. Take a deep breath, sit up, lean forward, touching the feet with your hands - exhale. Return to s.p. Repeat 4-6 times.

4. S.p. - same. Take a deep breath, raise the right leg, move it to the side, and slide it along the floor back to s.p. Repeat the same with the left leg. Repeat 4-6 times.

5. S.p. - lying on your back, arms to the sides. Curl up, join your elbows - exhale. Return to s.p. - inhale. Repeat 7-8 times.

6. S.p. - lying on your back, legs bent, hands behind your head. Lift the pelvis up - inhale, return to s.p. - exhale. Repeat 5-6 times.

7. S.p. - lying on your back, legs bent, knees apart. Lower the right knee to the left - exhale. Repeat the same with the other leg. Repeat 6-8 times.

8. S.p. - lying on your back. Simulate riding a bicycle.

9. S.p. - same. Simultaneously lift the right leg and left arm - exhale. Return to S.p. - inhale. Repeat the same with the other leg and arm. Repeat 6-8 times.

10. S.p. - lying on your back, arms up. Sit up, bending your legs, and grasp your knees with your hands - exhale. Lie back to s.p. - inhale. Repeat 4-6 times.

11. S.p. - lying on the right side, left hand on the waist. Bend the left leg towards the chest - exhale, return to s.p. - inhale. Repeat 5-6 times.

12. S.p. - same. Simultaneously lift the left leg and the arm to the sides - inhale, return to s.p. - exhale. Repeat 5-6 times.

13. S.p. - same. Move the left leg backward and the left arm forward simultaneously - inhale, return to s.p. - exhale. Repeat 5-6 times.

14-16. Repeat exercises 11-13 while lying on the left side.

Exercise complex for peptic ulcer disease in the non-acute stage and gastritis with increased secretion.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p. - sitting, hands on the waist. Alternate torso twists to the sides, arms out to the sides - inhale. The tempo is slow.
2. S.p. - sitting. Flex and extend the feet simultaneously while gripping and

releasing the fists. The tempo is moderate. Maintain a steady breath.

3. S.p. - sitting. Lift one straight leg at a time - exhale. The tempo is slow.
4. S.p. - sitting. Alternate leans of the torso towards the right and left leg - exhale.
5. S.p. - sitting. Bring the knee towards the chest, hands to the shoulders - exhale. The tempo is slow.
6. S.p. - standing, hands to the shoulders. Squats, hands forward - exhale. The tempo is slow.
7. Sequential relaxation of the calf muscles and feet. Maintain a steady breath. S.p. - lying on your back, legs bent, hands locked on your chest. Simultaneously straighten the legs without lifting them off the floor, raise the arms up, palms facing upwards - inhale. The tempo is slow.
8. S.p. - lying on your back. Simultaneously turn to one side, extend the leg back, raise the arm up, and arch the back (inhale), then return to s.p. - exhale. The tempo is slow. Repeat on the other side.
9. S.p. - kneeling position. Simultaneously lift the left leg backward and raise the right arm up - inhale. s.p. - exhale. Repeat with the other leg. The tempo is slow.
10. Walking with gradual deceleration. Maintain a steady breath.
11. S.p. - sitting. Full, slow breathing under the control of the hands.

Pyelonephritis is an inflammation of the mucous membrane of the renal pelvis. Pyelonephritis can affect the renal pelvis of one kidney (unilateral pyelonephritis) or both kidneys (bilateral pyelonephritis). The cause of pyelonephritis is an infection that enters the renal pelvis through hematogenous, lymphogenous, or urogenital (via the urinary tract) routes. Pyelonephritis can be observed in intestinal diseases, abdominal typhus, angina, scarlet fever, and other infectious diseases.

During the sessions, the following are used: walking, active games, elements of sports games, exercises for the abdominal muscles, breathing exercises and relaxation exercises, exercises for the back and pelvis muscles.

Excluded are: running at a fast pace, complex jumps, exercises associated with body chilling (swimming in a pool only with permission from a doctor during a stable remission; skiing at low temperatures is contraindicated).

Starting positions: lying down and sitting increase diuresis, while standing position reduces it.

Exercise complexes for pyelonephritis.

Complex 1.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p.: lying on your back, sandbags placed around the diaphragm area. Take a moderate inhale, exhale through pursed lips.
2. S.p.: lying on your side, sandbag on the lateral surface of the chest. Raise your arm upwards on the inhale.
3. S.p.: sitting on a chair, hands on shoulders. Perform circular movements with the torso.
4. S.p.: sitting on a chair, legs extended, arms to the sides. Lean forward until your fingers touch your toes.
5. S.p.: sitting on a chair, hands on shoulders. Lean to the right and left.
6. S.p.: sitting on a chair. On the exhale, perform "walking" motion, lifting your knees high.
7. S.p.: standing with support and the back of a chair. On a slow exhale, perform squats.
8. S.p.: standing sideways next to a chair, holding onto the backrest with one hand. On a slow exhale, perform relaxed swings with your arms and legs.
9. S.p.: standing with hands on the waist. Rise up on your toes, raise your arms upwards, and arch your back. Lower your arms, relax.

Complex 2.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Varieties of walking: high knee walking, toe walking, full-foot walking, hands behind the head walking, squatting walking, hands on the waist or on the knees walking.
2. S.p.: standing with feet shoulder-width apart. Alternate side swings with arms raised. Swing - inhale. Return to starting position - exhale.
3. S.p.: standing with arms to the sides. Alternate torso twists to the right and left.
4. S.p.: standing with feet apart - inhale. Lean to the right - exhale, return to starting position - inhale. Repeat to the left leg.
5. S.p.: standing with feet hip-width apart. Rise up on your toes, raise your arms up, stretch - inhale. Relax, drop your wrists, elbows, shoulders - exhale.
6. S.p.: lying on your back. Perform bicycle motion with your legs.
7. S.p.: lying on your back. Alternate leg flexion, bringing the knee towards the abdomen - exhale.
8. S.p.: lying on your back. Alternate leg flexion, bringing the knee towards the chest - exhale.
9. S.p.: lying on your back. Lift your upper body - inhale. Return to starting position - exhale.
10. S.p.: lying on your back. Raise your pelvis while spreading your legs apart - inhale. Return to starting position - exhale.
11. S.p.: lying on your back. Relaxation.
12. S.p.: lying on your side. Leg abduction - inhale, forward swing - exhale. Perform with both legs.
13. S.p.: on all fours. Extend the knees and lift the pelvis - exhale. Return to starting position - inhale.
14. Jumping in place.
15. High knee walking.
16. Relaxation.

Complex 3.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p.: facing the chair, straight back. Alternate placing legs on the chair.
2. S.p.: sitting on a chair with legs extended, hands on the waist. Alternate leg lifts (do not bend at the knees).
3. S.p.: standing with feet apart, hands on the waist. Alternate side bends.
4. S.p.: standing with feet shoulder-width apart. On inhale, alternate leg extension backward onto the toes, arms raised. On exhale, return to starting position.
5. S.p.: standing with feet apart, hands on the waist. Rotate to the sides, keeping the head position unchanged.
6. High knee walking.
7. S.p.: standing, hands on the waist. Squat - inhale, return to starting position - exhale.
8. S.p.: standing, holding a stick at the bottom. Lift and lower the stick, keeping the back straight.
9. S.p. same. Squats with the stick in front, back straight.
10. S.p.: standing with feet shoulder-width apart. Alternate lifting bent legs, extending the toes.
11. S.p.: standing with feet apart, hands in front of the chest. Alternate torso twists to the sides with arm abduction, keeping the head straight.
12. Walking with hands on the waist.
13. S.p.: standing, hands on the waist. Squats with hands raised, palms facing each other, back straight.
14. S.p.: standing with feet apart, hands on the waist. Squats, bringing the knees together - exhale. Return to starting position - inhale.
15. S.p.: standing. Arms to the sides. Alternate leg extensions forward, to the side, backward, returning to starting position.
16. S.p.: standing with feet apart, hands to the shoulders. Circular arm movements forward and backward. Repeat alternately. Keep the back straight.
17. S.p.: standing, hands on the waist. Head rotations in different directions.

Walking with high knee lifts.

Massage for pyelonephritis. Massage the back, lumbar region, buttocks, abdomen, and lower extremities using relaxing ointments. Avoid percussive techniques. Massage duration is 8-10 minutes, with a course of 10-15 sessions. In chronic pyelonephritis, manual massage and brush massage in a bath (temperature not lower than 38°C) are recommended, with 2-3 sessions per week.

Appendix 11

Techniques myself for infectious diseases

Techniques myself for infectious diseases of nervous system: encephalitis, arachnoiditis, and acute myelitis Epidemic encephalitis is caused by a filterable virus. The consequences of the disease manifest in various diencephalic disorders, such as sleep and thermoregulation disturbances and changes in the functions of internal organs. Common symptoms include headaches, dizziness, and general weakness. In chronic forms of the disease, parkinsonism may develop, characterized by muscle rigidity and tremors in the distal parts of the limbs, slowed movements, mask-like facial expression, altered gait, and small steps.

Therapeutic physical culture is applied after the acute period and during the chronic stage of the disease when residual symptoms are present. The methodology varies depending on the specific form of the condition. In cases of vestibular disorders, specialized vestibular training is incorporated alongside general strengthening exercises. For diencephalic disorders, controlled walking and swimming are recommended in addition to general strengthening exercises. In cases of parkinsonism, exercises are performed while sitting or standing, including relaxation exercises and swinging movements to improve coordination using gymnastic sticks, balls, and walking exercises (both simple and complex) as well as running. The overall physical load should be moderate, with breaks provided for rest during the procedures. Basic exercises can be performed in water. Massage of the hands and legs is applied. Controlled walking and swimming are beneficial. It is recommended to schedule therapeutic physical culture sessions at least one hour before or 3-4 hours after bathing.

Tick-borne encephalitis is caused by a filterable virus transmitted by ticks. It has various clinical forms, including polioencephalomyelitis, meningoencephalitic, and meningeal forms.

Unlike epidemic tick-borne encephalitis, which is characterized by flaccid paresis and paralysis in the proximal parts of the upper limbs, neck, and shoulder girdle, therapeutic physical culture is applied during the recovery period and in the presence of persistent residual effects. The methodology is differentiated based on the form of damage.

In cases of paresis, therapeutic exercises are used according to the principles of developing techniques for flaccid paresis, aimed at restoring motor function in the hand, improving precision and coordination of movements. Elements of tennis, volleyball, swimming, and rowing are incorporated.

Myelitis, which refers to focal inflammation of the spinal cord, can be primary, caused by a filterable virus, or secondary, as a complication of various infectious diseases. If there is a focus of damage in the lumbosacral enlargement, flaccid paresis in the legs and dysfunction of pelvic organs are observed.

Therapeutic physical culture is prescribed after the acute period, during the subacute phase, and in the presence of residual effects of the disease. The methodology varies depending on the degree and nature of motor impairments, whether it is flaccid or spastic paresis, and aims to restore motor function, develop weight-bearing function, walking, and coordination of movements. Exercises to strengthen the pelvic floor muscles are essential. Exercises in water and swimming, as well as massage of the hands, legs, and back, are also applied. Therapeutic physical culture should be performed 1 hour before or 2-3 hours after taking a bath or undergoing mud procedures. If well tolerated, therapeutic physical culture can be prescribed 40 minutes after mud procedures.

For bronchopulmonary diseases.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Starting position (S.P.) - sitting on a chair

1. Open arms to the sides - inhale, lower them - exhale (3-4 times).
2. Right side bend: lower the right arm down, raise the left arm to the shoulder. Repeat on the left side (5-6 times).
3. Bring the wrists to the shoulders. Perform circular rotations forward and backward (5-8 times).
4. Open arms to the sides - inhale, hug yourself - exhale (3-4 times).
5. Open arms to the sides. Perform circular rotations forward and backward with straight arms (5-8 times).
6. Exercise "Boxing" with effort, extending the torso following the arm.
7. Lean back on the chair, hold onto the seat with your hands. Perform "Bicycle" motion with both legs simultaneously, forward and backward (10-20 times).
8. Open arms to the sides - inhale, bring the knee to the chest with your hands - exhale (2 times).
9. Extend straight arms in front of the chest, spread them to the sides

counting to three (5 times).

10. Straighten the right leg, move it to the side, straight, and lower it. Repeat with the left leg (5-10 times).

11. Raise the right arm up - inhale, lower it down, relax - exhale. Repeat with the left arm (4 times).

12. One arm up, the other down. Quickly switch arms (10-15 times).

13. Straighten the right leg. Rotate the straight leg inward and outward. Repeat with the left leg (5-10 times).

14. Lean back on the chair: open arms and legs to the sides - inhale. Keep the legs together, reach for the feet with your hands - exhale.

15. Place the palms on the back of the neck, elbows out to the sides. Rotate the torso to one side and then the other counting to two (5 times).

16. One hand on the waist, the other raised. Bend the torso to one side counting to three. Repeat to the other side (3-5 times).

17. Place the palms on the lower part of the chest. Inhale, trying to fill only the lower part of the chest with air. Then make three sharp exhales while compressing the chest (3-4 times).

18. Place the fingertips above the collarbones. Perform "upper chest breathing": inhale small portions of air only into the upper parts of the lungs, without involving the lower parts (3-4 times).

19. Straighten the legs, slightly wider than shoulder-width apart, and stand on your heels. Counting to three, reach with the right hand towards the left leg, and vice versa (6-8 times).

20. Lean back on the chair, slightly bend the legs. One hand rests on the chest, the other on the abdomen. Perform "diaphragmatic breathing": inhale into the abdomen, slightly protruding it; exhale - retract the abdomen.

Standing, with support from the chair back.

1. Walk in place (lifting only the heels off the floor) (10-14 times).
2. High knee marching (8-10 times).
3. Open arms to the sides - inhale, lean on the seat of the chair - exhale (3-4 times).
4. Right hand rests on the chair back, left hand raised. Counting to three, lean to the right side. Alternate hands (3-4 times on each side).
5. Perform deep squats (5-8 times).
6. Extend the arm and leg on the same side to the side - inhale, return to the starting position - exhale (2-3 times).
7. Stand next to the chair with your right side. Raise the left arm up, extend the leg backward. Quickly switch the position of the limbs (swinging towards each other) - 1, return to the starting position - 2. Repeat on the other side (5-7 times).
8. Step away from the chair. Place your feet shoulder-width apart, interlock

your fingers.

9. Raise the arms up - inhale, bend forward, lower the arms down - exhale with a "HUFF" sound (exercise "Woodchopper") (4-5 times).

Breathing exercises.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;

C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Focus all your attention on the inhalation. Active, short, and noisy inhalation through the nose. Pay attention to synchronizing the inhalation with movement. Exhalation should be passive, through the mouth, without holding or forcing the air out. The main unit is 32 inhalations in 28-30 seconds.

1. "Palms" - Starting position: Bend your arms at the elbows with palms facing upwards. Take loud nasal inhales while simultaneously squeezing your fingers into a fist (grasping movements) - 4 inhales (repeat 24 times).
2. "Shoulder Pushes" - Starting position: Clench your fists and press them against your abdomen at waist level. During the inhale, forcefully push your fists downward towards the floor as if pushing away from it - 8 inhales (repeat 12 times).
3. "Pump" - Imagining pumping up a tire. Starting position: Feet shoulder-width apart, arms along the body. Perform a slight forward bend (reaching towards the floor without touching it) - simultaneously take a loud inhale, slightly lift yourself (but don't fully straighten), then repeat the forward bend and loud inhale. Keep your back rounded and your head lowered - 8 inhales (repeat 12 times).
4. "Cat" - Starting position: Feet shoulder-width apart. Squat slightly and simultaneously twist your torso to the right, forcefully extend your arms forward with a loud inhale. Keep your back straight, and the twist should be in the lower back - 8 inhales (repeat 12 times).
5. "Shoulder Hug" - Starting position: Bend your arms at the elbows, parallel to the floor. Bring your arms towards each other as if hugging your shoulders, while taking a loud inhale - 8 inhales (repeat 12 times).

6. "Pendulum" ("Pump" + "Hug") - Starting position: Feet shoulder-width apart.

7. Bend forward - reach towards the floor with your arms - inhale, lean backward - hug your shoulders with your arms - inhale. Inhale "from the floor," inhale "from the ceiling" - 8 inhales (repeat 12 times).

8. "Weight Shifts" - Transfer weight from one leg to the other. Starting position: Left leg in front, right leg behind. Perform a light dance-like forward squat - inhale, backward squat - inhale - 8 inhales (repeat 12 times).

9. "Rock 'n' Roll" - Starting position: Feet shoulder-width apart. Squat slightly and pull the opposite knee towards the corresponding elbow - loud inhale - 8 inhales (repeat 12 times).

10. "Backward Step" - Starting position: Hands at the shoulders. Squat slightly and pull your heel towards your buttock - loud inhale. Complete a total of 900-1000 inhales throughout the exercise.

Appendix 12

Techniques myself for sexual diseases

Sexual disorders are classified into three main groups based on their origin:

Neuro-humoral disorders arise from insufficient endocrine function of the testes or damage to the hypothalamic-pituitary region. They are characterized by a decrease in sexual desire and excitability of sexual centers, leading to a weakening of all phases of the sexual cycle.

Cortical (psychological) disorders are associated with disturbances in the neurodynamics of cortical condition-reflex sexual complexes. They manifest as disturbances in the sexual cycle, such as weakened erections and ejaculatory speed.

Spinal disorders involve disruptions in the erectile or ejaculatory pathways. They are associated with changes in the excitability threshold of spinal centers.

The most common sexual disorders include:

Insufficient erection in men

Premature ejaculation

Decreased libido

Impaired arousal

Orgasmic dysfunction

Sexual disorders can also occur in spinal pathologies involving damage to spinal nerves. Spinal disorders may be present in conditions such as lumboischialgia, lumbosacral radiculitis, osteochondrosis, and others. In such cases, therapeutic massage and osteopathy are often helpful.

If the disorders have a psychological nature, working with a psychotherapist is recommended. In other cases, therapeutic exercises, Kegel exercises, yoga, and stress management techniques are recommended.

The exercises mentioned are suitable for addressing sexual disorders, including prostatitis and adenoma.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. Starting position: Lie on your back with your arms bent at the elbows. Exercise: Pushing against your elbows and heels, lift your pelvis while drawing in the anus. Repetitions: 3-4
2. Starting position: Lie on your back. Exercise: Lift your legs up (10-15 cm off the floor) and spread them apart while exhaling. Return to the starting position while inhaling. Repetitions: 4-6
3. Starting position: Lie on your back with bent knees. Exercise: Simultaneously raise your pelvis upward and move your right leg to the side. Repeat with your left leg. Repetitions: 4-6
4. Starting position: Lie on your stomach with your hands under your head. Exercise: Contract the anus. Repetitions: 6-8
5. Starting position: Lie on your stomach with your hands under your head. Exercise: Step your right foot behind your left leg while contracting the anus. Repeat with your left foot. Repetitions: 4-6
6. Starting position: Lie on your back. Exercise: Spread your legs wide, raise your arms up, assume a sitting position while inhaling, bend your torso and touch the toes of your right foot with both hands while exhaling. Repeat, touching the toes of your left foot. Repetitions: 6-8
7. Starting position: Kneeling position with elbows on the floor. Exercise: Lift one straight leg at a time. Repetitions: 4-6
8. Starting position: Kneeling position. Exercise: Raise your arms up while inhaling, lower your arms and rest your elbows on the floor while exhaling (relax). Repetitions: 3-4
9. Starting position: Kneeling position. Exercise: Sit back between your legs on the floor while exhaling, return to the starting position while inhaling. Repetitions: 6-8
10. Starting position: Kneeling position with hands on the hips. Exercise: Crawl on your knees (forward, backward). Repetitions: 30 seconds
11. Starting position: Sit on the floor with bent and spread legs. Exercise: Touch your left heel with your right knee, then do the same with your left knee and right heel. Repetitions: 6-8
12. Starting position: Sit on the floor with straight legs and arms extended forward. Exercise: Move forward and backward while sitting on your buttocks, covering a distance of 1 meter.
13. Starting position: Standing position. Exercise: Simultaneously extend your right leg backward and raise your arms up while inhaling, return to the starting position while exhaling. Repeat with your left leg. Repetitions: 4-6
14. Starting position: Standing position. Exercise: March in place with high knee lifts. Repetitions: 8-10
15. Starting position: Stand with your feet shoulder-width apart. Exercise: Squat down, spread your knees apart, extend your arms forward while exhaling,

return to the starting position while inhaling. Repetitions: 8-10

16. Starting position: Stand with your feet shoulder-width apart. Exercise: Perform circular movements with your hips. Repetitions: 8-10

17. Starting position: Standing position. Exercise: Breathing exercise. Repetitions: 3-4.

Appendix 13

Techniques myself to enhance a person's productivity

To enhance a productivity, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Exercise on gymnastic equipment, with weights, brisk walking, running, jumping, active and sports games, skiing, swimming. Physical workouts should be regular.

Quality and sufficient sleep, balanced nutrition, fresh air, and clean water are essential. Avoid overexertion and engage in activities that you enjoy. Practice contemplation or mindfulness.

Appendix 14

Techniques myself for preventing depression

Before starting the exercises, for preventing depression, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;

C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

Running:

One of the most popular ways to combat depression is through active workouts such as cardio exercises or aerobics. Have you heard of the "runner's high"? It's the feeling experienced by those who run regularly - thanks to sustained physical activity, endorphins are released in the body, which brings a sense of satisfaction. Overcome distances, gradually increasing their length. This is one of the best ways to relieve stress and let go of long-lasting troubling thoughts.

Strength Training:

A 10-week strength training program can help reduce symptoms of depression. People can see the results of their workouts, the contours of developing muscles, which in turn boosts self-confidence. It is advisable to engage in strength training with the guidance of a professional.

Yoga:

Yoga practice improves flexibility and enhances focus, diverting attention from negative thoughts. Yoga not only promotes physical flexibility but also mental flexibility, helping to find harmony within oneself. Yoga influences the parasympathetic system and gamma-aminobutyric acid metabolism, providing new possibilities for treating depression.

5 Yoga Asanas for Depression:

1. Lion's Pose (Simhasana): An asana for relaxing the muscles of a clenched or stiff jaw. All the facial muscles are engaged. With each repetition of the pose, the tension decreases. It is contraindicated in case of knee pain or injuries.

2. Fish Pose (Matsyasana): It relieves tension, allows relaxation, and deep breathing. This asana opens up the chest – many people in a state of depression experience a sense of constriction and oppression in the chest area. It is also beneficial for releasing tension in the neck, shoulders, and lower back.

3. Child's Pose (Balasana): Performed immediately after the Fish Pose, this asana helps further relax the body. Child's Pose is comfortable and easy to perform. You will feel a pleasant stretch in the lower back muscles as well as the arms.

4. Warrior Pose (Virabhadrasana): This asana serves as a great confidence booster. Whenever you feel uncertain, try practicing this pose. It is easy to perform, yet it carries a powerful energy charge.

5. Corpse Pose (Shavasana): The execution of this asana usually concludes a yoga practice. Also, perform this pose whenever you feel upset or down.

Tai Chi:

Like yoga, the slow and gentle movements of Tai Chi are an Eastern tradition that can help alleviate depression or major depressive disorder. However, it's not just about the exercises themselves but also about the group classes, which carry social aspects along with physical exertion. By practicing in a group, a person feels supported, and this helps them cope with the task more effectively.

Outdoor Walks:

Scientifically proven, outdoor walks uplift the mood. "Any activity increases the sense of joy." Nature walks demonstrate significant improvement in cognitive skills. Lighting can also be a positive factor. When the light spectrum surrounding a person approaches sunlight, it can help combat depressive states. "Light therapy is one of the methods for treating seasonal depression."

Hygienic Massage (before the exercises):

The goal of hygienic massage is to enhance blood and lymph circulation, normalize the psychoemotional state, and prepare the individual for the upcoming work by accelerating readiness. Before the session, preference is given to stimulating techniques. The total duration of the hygienic massage is 25-30 minutes, with the massage duration for specific body parts as follows: back 5-8 minutes, neck 5-8 minutes, legs 5-7 minutes, chest 3-4 minutes, abdomen 1-2 minutes, arms 2-4 minutes.

The time allocated for each massage technique is distributed as follows (in %): stroking - 10%; rubbing - 20%; kneading - 65%; striking techniques - 2%; vibrational techniques - 3%.

Breathing Exercises.

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;

C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p.: Stand with arms to the sides. Inhale, exhale, and cross your arms in front, hugging your shoulders. Hold the breath out for 2-3 seconds. Repeat 3-4 times.

2. Sitting on the floor with knees bent, place your palms on the floor. Inhale, and on the exhale, bend forward, hugging your knees with your hands. Hold for 2-3 seconds. Repeat 3-4 times.

3. Lie on the floor with legs together and arms along the body. Inhale and slowly lift your legs upward without bending the knees. Hold for 2-3 seconds. Exhale and return to the starting position. Repeat 3-5 times.

General Development Exercises

Before starting the exercises, the person's conscience is strengthened, which serves as a guarantee of mental and somatic health. For this purpose, a complex of mental exercises is used, given by the GERC (Global Ethical Rule of Conscience - behave in a way that does not harm oneself and other people).

The psychophysiological content of conscience strengthening is defined by the rule of conscience III-C (not to harm oneself (C1), neighbors (C2), the environment (C3) in thought (M), word (W), or deed (D); to create thoughts, words, and actions for oneself, neighbors, and the environment:

$$\frac{C1 + C2 + C3}{M + W + D}$$

The conscience exercise allows reinforcing a new paradigm of thinking, conscience worldview, which ensures the person's well-being.

C1

Repeating the therapeutic text in one's mind:
C1 - M. I will not harm myself with thoughts;
C1 - W. I will not harm myself with words;
C1 - D. I will not harm myself with actions;

C1 + M. I create thoughts for myself;
C1 + W. I create words for myself;
C1 + D. I create actions for myself.

C2

Repeating the therapeutic text in one's mind:
C2 - M. I will not harm other people with thoughts;
C2 - W. I will not harm other people with words;
C2 - D. I will not harm other people with actions;

C2 + M. I create thoughts for other people;
C2 + W. I create words for other people;
C2 + D. I create actions for other people.

C3

Repeating the therapeutic text in one's mind:
C3 - M. I will not harm the environment with thoughts;
C3 - W. I will not harm the environment with words;
C3 - D. I will not harm the environment with actions;

C3 + M. I create thoughts for the environment;
C3 + W. I create words for the environment;
C3 + D. I create actions for the environment.

Next, we proceed to therapeutic physical exercises.

1. S.p.: Stand with hands on the waist. Rotate the head slowly clockwise and counterclockwise (repeat 8 times in each direction).
2. S.p.: Stand with hands to the shoulders. Rotate the arms forward and backward (moderate pace; repeat 8-10 times).
3. S.p.: Stand with hands on the waist. Rotate the hips clockwise and counterclockwise (slow pace, with a shallow range of motion; repeat 6 times in each direction).
4. S.p.: Stand with hands on the waist. Swing the legs forward and backward (normal pace, keeping the knees straight; repeat 10 times).
5. S.p.: Stand with hands on the waist. Perform squats without lifting the heels off the floor (normal pace; repeat 10 times).
6. S.p.: Stand with arms to the sides. Inhale and raise the arms up, exhale and bring the arms down through the sides. Hold the breath out for 2-3 seconds. (Repeat 4-5 times).

Hala M.I. Techniques myself: methodological recommendations for the application of integrative exercises in therapeutic physical culture: Qualification thesis for the academic degree of Bachelor of Integrative Medicine / Book Series: Theory and Methodology of Professional Education and Upbringing of Adults. - St. Petersburg, Institute of Integrative Medicine, 2023. – 192 pages.

Thesis Supervisor: Chudakov Alexander Yuryevich, Doctor of Medical Sciences, Professor

Goal of the work: To substantiate the philosophical basis of techniques myself and develop methodological recommendations for the application of integrative exercises in therapeutic physical culture.

Research object: The activities of individuals in ensuring the preservation of their health. Research subject: The process of ensuring the preservation of human health through the application of techniques myself as integrative complexes of therapeutic physical culture exercises.

Techniques myself are integrative complexes of psychophysiological exercises that correspond to the first part of Rule III-C of the ecological conscience: do no harm to oneself (C1) in thought, word, or deed; create oneself (C1) through thought, word, and deed.

ISBN 5-7199-0258-9

Book series: Theory and Methods of Professional Education and Development for Adults

Institute of Integrative Medicine
Printed on 20.04.2023. Format: 60x90/8. 21 pages. Offset printing. 80g paper.
Edition of 100 copies. Charity edition.
Prepared at the Institute of Integrative Medicine.
http://iim.ast.social