

**Federal state budgetary educational institution of higher education
"North Ossetian State Medical Academy"
Ministry of Health of the Russian Federation**

**DEPARTMENT OF GENERAL HYGIENE
AND PHYSICAL CULTURE**

RELAXATION THERAPEUTIC AND PREVENTIVE GYMNASTICS

Methodological recommendations
on the organization of independent work and study of the
disciplines "Physical culture and sports" and "Elective course in
physical culture and sports" of the main professional educational
program of higher education – specialty program in the specialty
31.05.03 Dentistry (partially implemented in English)

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"Relaxation therapeutic and preventive gymnastics", methodological recommendations for students; North Ossetian State Medical Academy: Vladikavkaz, 2016. –10 s.

These guidelines are of interest for the treatment of fatigue and neurosis-like conditions of the body. The main method of stress relief is relaxation. The practical significance of the work lies in the fact that a person who is engaged in RLPG, plunges into a calm state and effectively overcomes emotional stress.

Methodological recommendations for students "Relaxation therapeutic and preventive gymnastics" can be recommended for students of the main and special medical groups studying in the specialty "Medical care", "Dentistry", "Pediatrics", "Medical and preventive care", "Pharmacy". Compiled in accordance with the curriculum. The materials presented in the recommendations meet the requirements of the educational standard for medical students.

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THE PURPOSE OF THE LESSON: to introduce and teach the method of performing relaxation therapeutic and preventive gymnastics

THE STUDENT SHOULD KNOW

- Definition of relaxation and relaxation treatment and prevention gymnastics (RLPG);
- Purpose and objectives of the RLPG;
- The essence of the RLPG training complex;
- The main mechanisms of the effect of RLPG on the human body;
- Main levels of RLPG exposure

THE STUDENT MUST BE ABLE TO:

- Use relaxation therapeutic and preventive gymnastics to relieve mental, physical and emotional tension

ISSUES TO BE ADDRESSED:

- Definition of relaxation. Mechanisms of influence;
- Methods of conducting and performing relaxation therapeutic and preventive gymnastics;
- Contraindications to the implementation of relaxation therapeutic and preventive gymnastics.

RECOMMENDED LITERATURE:

1. Morosanova V.I. Self-regulation and human individuality.–Ed.: Nauka, 2012. –520s.
2. Tvorogova N. D. Psychology.–Ed.: Medical Information agency, 2011. –576s.
3. Grimak L.P. Psychology of human activity. Psychological mechanisms and techniques of self-regulation.
4. Mandrikov V.B., Krayushkin A.I., Ushakova I.A., Mitsulina M.P. Formation of a healthy lifestyle of students. Elective course, Volgograd, 2006, 364 p.
5. Snazin V.Ya. Movement without pain. Soviet Sport-Ed.: Moscow, 2006.

1. Definition of relaxation. Mechanisms of influence

The tension of certain muscle groups occurs depending on the nature of emotional reactions. With fear, the muscles of the articulation and occiput are most tense, with depression-the respiratory muscles. Introspection of the muscle state allows you to identify individual "muscle spasms" and purposefully conduct their relaxation, while changing the emotional state. To identify "muscle spasms", it is recommended to relax as much as possible and try to present a significant situation as vividly as possible, switching your attention from one muscle group to another, as a result of which you will find the muscles that first reacted to the presentation with tension.

Relaxation (from the Latin *relaxatio*-relaxation) is the gradual relaxation of any state of the body after the cessation of the factors that caused this state. The term relaxation refers to a state of wakefulness characterized by reduced psychophysiological activity, which is felt either throughout the body or in any of its systems.

It should be remembered that relaxation is a skill that requires constant, consistent and gradual training, without haste and unnecessary forcing. It is widely used in various sports to relieve nervous and emotional stress of athletes before competitions, in work activities –to reduce fatigue and prevent certain diseases, for therapeutic purposes, etc.

The relaxation state can be achieved by suggestion, autosuggestion, special physical exercises, chemotherapeutic agents, but regardless of what it is caused by, it is always accompanied by a decrease in emotional excitability and an improvement in the general condition.

Relaxation therapeutic and preventive gymnastics (RLPG) is a special method of complex therapeutic and preventive effects on all vital systems of the body, based on the rational part of the yoga system. But RLPG and yoga are fundamentally different from each other. *The goal of RLPG* is to achieve optimal mental and physical harmony of a person or release from mental, physical and emotional tension.

The main means of RLPG are therapeutic and preventive poses from the system of Yoga-asanas. Asanas are composed of sets of exercises that are performed to a certain functional music that promotes relaxation of the human body.

The main mechanisms of the effect of RLPG on the human body are:

1. The mechanism of selective proprioceptive afferentation.
2. The mechanism of changes in the intensity of blood supply to organs, glands and parts of the body.

3. The mechanism of internal deep massage.
4. The mechanism associated with the elimination of deformities of the spinal column.
5. When exposed to RLPG on the human body, normal energy circulation is restored through the removal of physical and mental stress points, the redistribution of energy in the body by performing therapeutic poses in a sufficiently long fixation of the pose.

In RLPG, there are 4 levels of exposure to the human body:

1. Impact on the human musculoskeletal system.
2. Impact on human physiology (especially on the activity of organs)
3. A beneficial, harmonizing effect on the nervous and related mental processes of an activation-inhibitory nature.
4. Positive influence on higher mental functions: thinking, attention, memory, as well as personal and characterological features of a person.

Thus, RLPG refers to effective methods of therapeutic and preventive effects on the human body and at the same time is one of the methods of non-verbal psychotherapy.

In RLPG, the principle of static muscle load is used, which is expressed in a fixed long-term fixation of a certain body position, combined with a long-term relaxation (relaxation) of the antagonist muscles. A person who is engaged in RLPG, plunges into a calm, balanced, contemplative, self-absorbed state and effectively overcomes emotional stress, eliminating the consequences of vegetative disorders.

2. Methods of conducting and performing relaxation therapy-preventive gymnastics

When performing an RLPG, the following rules must be observed:

1. Increasing the load from the beginning to the middle of the complex and its decrease to the end.
2. After the spine extension pose, the posture with flexion and again with extension should follow. When performing RLPG, the movements should be slow, smooth and calm.
3. When composing a complex, it is necessary to use a bunch of poses – a smooth and consistent transition from one pose to another.

4. Nasal breathing. Through the regulation of breathing, an increase in the therapeutic and preventive effect is achieved.
5. Before the complex, a special warm – up is performed for the joints and spine, and after the performance, a final relaxation and rest is performed.

In the most therapeutic and preventive posture, there are 6 main components that make up the "pose cycle":

1. Relaxation before taking a pose.
2. Focus on the internal environment of the body. Mental tincture on the pose.
3. Entering the pose.
4. Fixing the pose. The therapeutic position should be immobile, comfortable, stable. Duration of fixation (from 30 to 90 seconds). Be sure to relax during the fixation of the pose.
5. Exit the pose.
6. Relaxation after leaving the pose (until the complete disappearance of sensations that arose as a result of performing the pose).

For the development of poses, additional rules are allocated:

1. Gradual mastery of the pose.
2. Self-esteem – confidence in your own abilities and abilities to correct violations of the activity of your body.
3. Self-dosage of the load and time of fixing the pose.
4. The pleasure of performing a pose.

When doing relaxation exercises, you need to get rid of embarrassing clothes, take off your watch, glasses, and contact lenses. The room should be ventilated, without bright lighting and noise. The time for classes can be any, the pose is chosen convenient. Acceptable poses-sitting, standing, lying down. A relaxation session consists of tensing each muscle group for 5-7 seconds and then relaxing them and lasts 15-20 minutes. Each exercise is repeated 2-3 times, depending on how you feel. Exercises should not cause pain or other unpleasant sensations. You need to breathe calmly, without tension, through the nose. Usually, the inhale is done during tension, then a pause-a breath delay equal to half of a long inhale, and exhale (on relaxation).

For the face. IP – sitting or lying on your back. On one, slowly inhaling, gradually raise the eyebrows up (expression of surprise), stay in this position; on two, exhaling, relaxedly lower the eyebrows down. In the same way to perform exercises for other muscles of the face, mimicking different emotions. Perform 2-3 times for each muscle group.

For the back of the head and neck. IP-lying on your back, palms under the back of your head. At times, inhaling, make an attempt to raise your head with your hands, counteracting the head. Stay in this position. On two, exhaling, relaxedly lower your hands (Fig. 1).



Fig. 1. Exercise for the back of the head and neck

For the shoulder girdle. IP-standing. At the time, inhaling, raise your hands and stretch forward, squeezing your palms and fingers tightly into a fist, hold them in this position. On two, exhaling, lean forward, lower your arms down relaxed (Fig. 2).

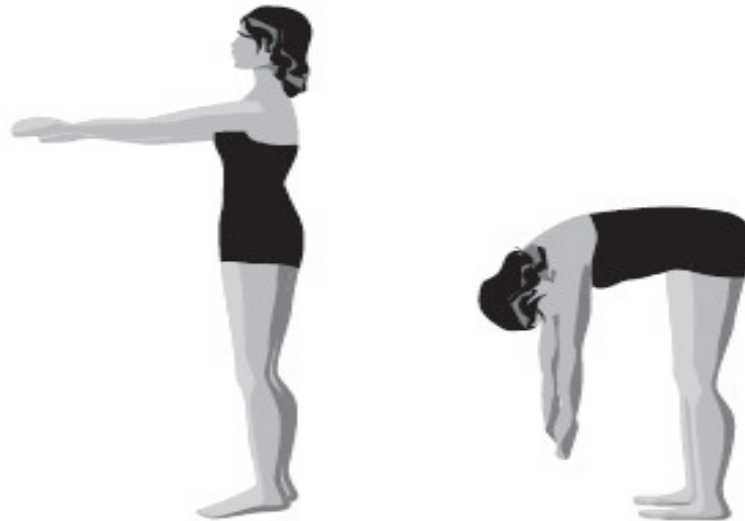


Figure 2. Shoulder girdle exercise

For hands. IP-lying on your back. At this time, inhaling, bend one arm at the elbow at a right angle, squeeze the palms and fingers into a fist, leave it in this position. On two, exhaling, relaxedly drop your hand. On three, four – do the same with the other hand (Fig. 3).

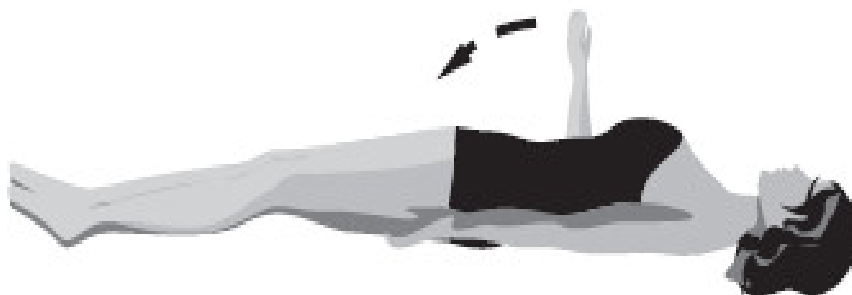


Figure 3. Hand exercise

For the back. IP-lying on your back. At times, inhaling, lift the lower back, leaning on the buttocks and shoulder blades. Stay in this position. For two, exhaling, relaxedly return to the SP (Fig. 4).



Figure 4. Back exercise

For the abdominal muscles. IP-lying on your back. At this time, inhaling, bend and wrap your hands around your knees and raise your head. Stay in this position. For two, exhaling, relaxedly return to the SP (Fig. 5).

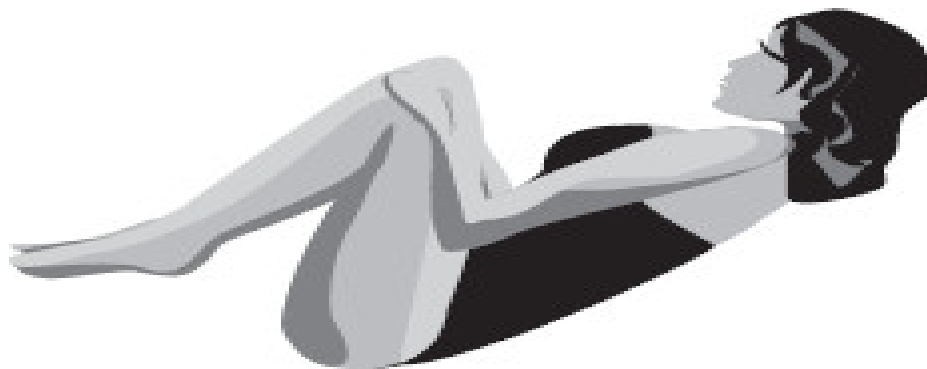


Figure 5. Exercise for the abdominal muscles

For the joints of the legs. IP-lying on your back. At times, inhaling, bend one leg, sliding the foot on the bed, trying to touch the heel of the buttocks. Stay in this position. On two, exhaling, relaxedly lower the leg into the SP. On three, four – do the same with the other leg (Fig. 6).



Fig. 6. Exercise for the joints of the legs.

3. Contraindications to the implementation of relaxation therapy-preventive gymnastics

The main contraindications are:

1. Severe organic lesions of the central nervous system and of the cardiovascular system.
2. The period of exacerbation of chronic diseases.
3. Oncological diseases.
4. Psychiatric disorders related to the category of major psychiatry.
5. The period of exacerbation of nervous diseases.
6. The period of exacerbation of diseases of the spine.
7. Infectious and inflammatory diseases.
8. Second and third degrees of obesity.

TESTS:

- 1. The means of relaxation therapeutic and preventive gymnastics are:**
 - a) walking and running;
 - b) asanas;
 - c) stretching;
 - d) various types of aerobics
- 2. What does not apply to the main mechanisms of the effect of RLPG on the human body:**
 - a) the mechanism of selective proprioceptive afferentation;
 - b) the mechanism of changing the intensity of blood supply to organs, glands and parts of the body;
 - c) the mechanism of internal deep massage;
 - d) the mechanism associated with a decrease in blood sugar levels;
 - e) the mechanism associated with the elimination of deformities of the spinal column
- 3. What is the principle used in RLPG:**
 - a) static muscle load;
 - b) aerobic exercise;
 - c) strength training

4. Relaxation is:

- a) this is the gradual relaxation of a state of the body after the cessation of the factors that caused this state;
- b) this is a gradual relaxation of the body at the time of the action of the factors that cause this state

5. Contraindications to the appointment of RLPG are (3 correct answers):

- a) the period of exacerbation of chronic diseases;
- b) oncological diseases;
- c) high-grade myopia;
- d) bronchial asthma;
- c) the period of exacerbation of diseases of the spine;
- d) diabetes mellitus

6. When performing ligament poses:

- a) first perform all exercises with the extension of the spine, and then with the flexion;
- b) it is necessary to alternate postures of extension of the spine with postures with flexion

7. Specify the correct execution of the "pose cycle":

- a) mental adjustment to the pose, entering the pose, exiting the pose, relaxing after exiting the pose;
- b) relaxation before the pose, mental adjustment to the pose, entering the pose, fixing the pose, exiting the pose, relaxing after exiting the pose;
- c) mental adjustment to the pose, relaxation before the pose, entry into the pose, exit from the pose, relaxation after leaving the pose

8. Specify which non-traditional means of physical culture relate to self-regulation of the psychoemotional state (3 correct answers):

- a) auto-training;
- b) the breathing system of Hatha yoga;
- c) relaxation therapeutic and preventive gymnastics;
- d) sports games;
- e) stretching

9. How many levels of exposure to the body can be identified in RLPG:

- a) 2;
- b) 4;
- c) 6

10. The purpose of RLPG is:

- a) to achieve optimal mental and physical harmonization of a person or release from mental, physical and emotional tension;
- b) monitoring the state of health, physical development and working capacity of persons engaged in physical exercises and sports.