



## The role of adaptive physical education in the family of stroke sur vivors

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PhD, Associate Professor E.R. Khusainova<sup>1</sup>
A.R. Vershinina, A.F. Safin<sup>1</sup>
<sup>1</sup>Volga Region State University of Physical Culture, Sports and Tourism, Kazan

Corresponding author: laraparf@mail.ru

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## Abstract

**The purpose of the study:** to investigate modern approaches to managing the condition of patients after stroke and to determine the role of physical education in the family circle.

**Methodology and organization of research.** Based on the results of a survey of family members of stroke survivors, we identified the need for the knowledge that will allow us to continue the process of motor rehabilitation initiated in the hospital. A training course on motor recovery of stroke patients has been developed. The course program is intended for use at home with the participation of the patient's family. The name is "Stroke Recovery School".

**Research results and conclusions.** The course is based on the Bobat concept, includes exercises from the techniques of PFM, Exart and joint gymnastics, as well as clinical recommendations for postural correction, safe movement and verticalization of patients. It is aimed at training relatives of stroke survivors, students and aspiring specialists in physical rehabilitation. The course lasts 10 academic hours (5 classes of 2 hours each), includes lectures and practice with repetition of the material.

Keywords: stroke, questionnaire, family rehabilitation, adaptive physical education.

Relevance. According to statistics, more than 80% of stroke patients face disabilities, almost 20% of them become severely disabled and in need of constant care. The high level of disability requires increased effectiveness and continuous improvement of rehabilitation treatment. However, the stay of patients in hospitals and sanatoriums is strictly limited, which emphasizes the need for regular adaptive physical education at home. Due to physical and cognitive limitations, the importance of the family's role in the rehabilitation process increases, since it is the loved ones who can create a supportive and motivating atmosphere for adaptation and recovery [3]. The process of physical rehabilitation after a stroke is a long, complex and systematic exercise. Recovery of motor functions is carried out in stages, moving from simple to complex exercises, from general to particular. Continuity and consistency of physical rehabilitation remain the most important aspects [1, 2, 4]. Currently, rehabilitators receive only 1-2 sheets of standard recommendations for performing physical exercises at home. Some of these exercises are difficult to do. With this approach, it is impossible to ensure a continuous recovery course. In conditions of home care, the patient and his relatives are forced to search for information via the Internet (mainly video hosting sites) and advice from such people. This information is often fragmentary, situational, and unrelated to the overall process of movement recovery, which significantly reduces the effectiveness of such "selfeducational" practice.

**The purpose of the study.** To investigate modern approaches to managing the condition of patients after stroke and to determine the role of physical education in the family circle.

**Methodology and organization of research.** An analysis of the number of video views and active quoting of texts on the topic on social networks indicates a high interest of the general public in knowledge about the recovery of relatives after a stroke. According to a sociological survey of one hundred

people whose relatives suffered a stroke, 92% consider adaptive physical education classes to be the crowning achievement of successful rehabilitation. The frequency of classes is most often daily -58%answered this way, while 36% preferred an interval of 2-3 times a week. 96% of respondents supported the need for a rehabilitation training course. In this situation, we propose to train the patient's family at the acute stage in the hospital. Even with the obvious advantages, subsequent adaptive physical education at home requires a competent approach. The exercise program should be developed by a specialist taking into account the unique characteristics of the patient. A doctor or rehabilitologist can teach the family how to exercise safely and correctly, which minimizes the risk of injury. We have developed a training course on motor recovery in stroke patients for its use at home by the patient's family. The name is "Stroke Recovery School".

The results of the study and their discussion. The curriculum of the course is based on the Bobat concept [4]. Exercises from the PNF technique [1], Exart techniques and joint gymnastics are used. Clinical recommendations on postural correction, safe movement and verticalization of patients are used. The course is designed for people caring for stroke patients. This course can be used in the training of students and novice specialists in the field of physical rehabilitation. After completing the course, students will:

 have an understanding of stroke and its complications, movement control and the concept of neuroplasticity, the basic principles of motor rehabilitation, and setting goals and objectives in rehabilitation;

· be able to position and safely move patients;

 know the sequence of learning basic motor skills according to the stages of movement recovery after a stroke;

• they are able to teach the patient guiding exercises for mastering holistic movement. The course duration is 10 academic hours. For convenience, we have divided the course into 5 classes of 2 academic hours each. The course structure includes a lecture and a practical part with a demonstration and repetition of the material covered.

**Conclusion.** Thus, adaptive physical education in the family of stroke survivors is an important step towards recovery. Modern technologies also play a significant role in this process. Many applications and online courses have been developed that allow you to practice adaptive physical education at home under the guidance of a virtual instructor. However, despite the availability of such technologies, personal contact and family involvement remain indispensable for providing emotional support and motivation.

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