- 5. Sinko, G.S., and V.P. Bozhko. «Analysis and assessment of business reputation of machine-building enterprises». *Economics and management of machine-building enterprises*, no. 4, 2009, pp. 5-14.
- 6. Shkromyda, V.V., and N.Ya. Shkromyda. «Features of the study of the company's reputation». *Scientific economic journal «Intellect XXI»*, no.3, 2019, pp. 110-116.
- 7. Shcherbakova, K. «Business reputation as a component of enterprise competitiveness». *East*, dspace.nbuv.gov.ua/bitstream/handle/123456789/22032/12-Scherbakova.pdf. Accessed 15 Oct.2020.
- 8. Dozier, D.M. «Image, Reputation and Mass Communication Effects». *Image und PR Kann Image Gegenstand einer Public Relations Wissenschaft sein*? 1993, pp. 227-250.
- 9. Dutton, J., Dukerich, J., and C. Harquail. «Organizational images and member identification». *Administrative Science Quarterly*, vol. 39, no.2,1994, pp. 239-263.
- 10. Fombrun, C., and M.Shanley. «What's in a name? Reputation building and corporate strategy». *Academy of Management Journal*, no. 33(2),1990, pp. 233-258.
- 11. Gray, E.R., and J.M. Ballmer. «Managing Corporate Image and Corporate Reputation». *Long Range Planning*, vol. 31, 1998, pp. 695-702.
- 12. Groenland, E. «Qualitative research to validate the RQ-dimensions». *Corporate Reputation Review*, 2002, № 4, pp. 308-315.
- 13. Hall, R. «The Strategic Analysis of Intangible Resources». *Strategic Management Journal*, vol. 13, 1992, pp. 135-144.
- 14. Reputation Institute, reputationinstitute.com/advisory-services/ reptrak. Accessed 15 Oct.2020.
- 15. RepuTex 2006 RepuTex Methodology, secure1.impactdata.com.au/reputex/. Accessed 15 Oct.2020.
- 16. Shamma, H.M., Hassan, S.S. «Customer and non-customer perspectives for examining corporate reputation». *Journal of Product & Brand Management*, no. 18(5), 2009, pp. 326-337.
- 17. The Financial Times, ft.com/capital-markets. Accessed 15 Oct.2020.
- 18. The Fortune, fortune.com/fortune500/. Accessed 12 Oct.2020.
- 19. The Harris Poll, theharrispoll.com. Accessed 15 Oct.2020.

## УДК 614:615.8-056.26

doi: 10.15330/apred.2.16.264-270

Кулаєць М.І. <sup>1</sup>, Кулаєць В.М. <sup>2</sup>, Кулаєць Н.М. <sup>3</sup>, Лапковський Е.Й. <sup>4</sup>, Михайлишин Л.І. <sup>5</sup>

## ПРИНЦИПИ МУЛЬТИДИСЦИПЛІНАРНОГО МЕНЕДЖМЕНТУ У ФІЗИЧНІЙ ТЕРАПІЇ

<sup>1</sup>Західноукраїнський національний університет, кафедра менеджменту, державного управління та персоналу,

Площа Перемоги, 3, Тернопіль, 46009, Україна,

тел :: (0352) 47-50-50 \* 13-314, e-mail: moip\_kaf@wunu.edu.ua

<sup>2</sup>Івано-Франківський національний медичний університет кафедра терапії та сімейної медицини, вул.Матейки, 22, Івано-Франківськ, 76018, Україна, тел .: (0342) 55-32-69, e-mail: therapiapo@gmail.com therapy\_fpo@ifnmu.edu.ua

<sup>&</sup>lt;sup>3</sup> Івано-Франківський національний медичний університет,

кафедра внутрішньої медицини №2 та медсестринства, вул. Гетьмана Мазепи, 114, Івано-Франківськ, 76018, Україна, тел.: (03422) 52-59-87, e-mail: therapy2@ifnmu.edu.ua

<sup>4</sup> Прикарпатський національний університет імені Василя Стефаника, Міністерство освіти і науки України, кафедра фізичної терапії, ерготерапії, Вул.Шевченка, 57, Івано-Франківськ, 76018, Україна,

тел .: (0342) 55-32-32,

e-mail: edlap@i.ua, eduard.lapkovskyi@pu.if.ua

<sup>5</sup> Прикарпатський національний університет імені Василя Стефаника, кафедра міжнародних економічних відносин, вул. Чорновола, 1, Івано-Франківськ, 76000, Україна,

тел .: (032) 275-20-27, e-mail: kaf\_mev@pnu.edu.ua

Анотація. Стаття присвячена обгрунтуванню запровадження принципів мультидисциплінарного менеджмену в процесах реабілітації та відновлення працездатності, як для осіб з інвалідністю, так і осіб, яким формально не встановлено групи інвалідності. Управлінський аспект в забезпеченні ефективної системи фізичної реабілітації визначено як один із заходів попередження зростання чисельності осіб інвалідністю в суспільстві і дієвий механізм відновлення життєдіяльності людини. Доведено, що при організації заходів фізичної реабілітації в вітчизняних закладах охорони здоров'я доцільно дотримуватись принципів світової практики, які регламентують своєчасність, якість, комплексність, системність надання реабілітаційних послуг, а фізичній терапії відводиться чільне місце в управлінських процесах з відновлення життєвих функцій населення.

В результаті дослідження, встановлено, що чинній реабілітаційній практиці України бракує комплексної системи оцінки потреб, міждисциплінарної роботи у наданні послуг та безпосередньої їх спрямованості на клієнта, узгодженої роботи мультидисциплінарної команди та застосування кейс-менеджменту з комплексу заходів планування, організації, координації, моніторингу та оцінки послуг та ресурсів для кожної конкретної особи, з метою вибору оптимальної стратегії та тактики реабілітації.

**Ключові слова:** охорона здоров'я, реабілітація, фізіотерапія, мільтидисциплінарний менеджмент, особи з інвалідністю, відновлення працездатності, попередження інвалідності, мультидисциплінарна команда, кейс менеджмент, заклади охорони здоров'я, стратегія і тактика реабілітації.

## Kulaets M. I. <sup>1</sup>, Kulaets V.M. <sup>2</sup>, Kulaets N.M. <sup>3</sup>, Lapkovsky E.Y. <sup>4</sup>, Mykhailyshyn L. I. <sup>5</sup> PRINCIPLES OF MULTIDISCIPLINARY MANAGEMENT IN PHYSICAL THERAPY

<sup>1</sup>Western Ukrainian National University, Department of Management, Public Administration and Personnel, Victory Square str., 3, Ternopil 46009, Ukraine,

tel.: (0352) 47-50-50\*13-314 e-mail: moip\_kaf@wunu.edu.ua

<sup>2</sup>Ivano-Frankivsk National Medical University Department of Therapy and Family Medicine Mateiku str., 22, Ivano-Frankivsk, 76018, Ukraine,

tel.: (0342) 55-32-69,

e-mail: therapiapo@gmail.com therapy\_fpo@ifnmu.edu.ua

<sup>3</sup>Ivano-Frankivsk National Medical University, Department of Internal Medicine №2 and Nursing, Getmana Mazepy str., 114, Ivano-Frankivsk, 76018, Ukraine,

tel.:(03422) 52-59-87,

e-mail: therapy2@ifnmu.edu.ua

<sup>4</sup>Vasyl Stefanyk Precarpathian National University, Ministry of Education and Science of Ukraine, Department of Physical Therapy, Occupational Therapy, Shevchenka str., 57, Ivano-Frankivsk, 76018, Ukraine, tel.: (0342) 55-32-32,

e-mail: edlap@i.ua, eduard.lapkovskyi@pu.if.ua

<sup>5</sup> Vasyl Stefanyk Prykarpathian National University, International Economic Relations Department, Chornovola Str., 1, Ivano-Frankivsk, 76000, Ukraine, tel.: (032) 275-20-27,

e-mail: kaf\_mev@pnu.edu.ua

**Abstract.** The article is devoted to the substantiation of the multidisciplinary management principles introduction in the processes of recovery and rehabilitation both for persons with disabilities and persons who are not formally established disability groups. The managerial aspect in ensuring an effective system of physical rehabilitation is defined as one of the measures to prevent the growth of the number of people with disabilities in society and an effective mechanism for restoring human life. It is proved that when organizing physical rehabilitation measures in domestic health care facilities it is advisable to follow the principles of world practice, which regulate the timeliness, quality, comprehensiveness, systematization of rehabilitation services, and physical therapy is given a prominent place in management processes to restore vital functions.

As a result of the study, it is established that the Ukraine's current rehabilitation practice lacks a comprehensive system of needs assessment, interdisciplinary work in providing services and their direct focus on the client, coordinated work of a multidisciplinary team and case management on a set of planning, organization, coordination, monitoring and evaluation services and resources for each individual, in order to choose the optimal rehabilitation strategy and tactics.

**Key words:** health care, rehabilitation, physiotherapy, multidisciplinary management, persons with disabilities, rehabilitation, disability prevention, multidisciplinary team, case management, health care institutions, rehabilitation strategy and tactics.

**Introduction.** In the wide range of negative consequences of the Russian aggression in the East of Ukraine, the growth in the general structure persons with disabilities belonging to the age group of early working capacity became especially tragic. The special socio-economic significance of these processes requires the development and implementation of immediate measures to restore capacity and prevent disability in the relevant social group, and the coordination of such measures should be formed not only financial instruments or psychological support, but also provide a range of physiotherapy rehabilitation services.

Declaring compliance with the ICF criteria for establishing disability and receiving rehabilitation aids and services for people with disabilities in the National Strategy for Human Rights is an important step in organizing an effective rehabilitation system, but its further development is hampered by more substantive negative factors. Thus, in Ukraine there is almost no interdepartmental coordination of health, education and social protection in the rehabilitation of people with disabilities, and the established rehabilitation system does not meet the needs of people with disabilities to receive services. The current rehabilitation industry lacks a comprehensive system of needs assessment, interdisciplinary work in the provision of services and their direct focus on the client. The situation with the provision of medical supplies is not better either. People with disabilities who need appropriate care but who are not formally identified as disability groups will not be able to count on government support to purchase them.

All the above assumptions indicate an understanding of the need to use world practice, where it is common to provide rehabilitation services to people with disabilities but no disability, however the practical implementation of this concept is constrained by a number of different problems, overcoming which requires the implementation of the principles of multidisciplinary management in the relevant field, which led to the relevance of the study

**Problem statement.** To determine the methodological bases and practical recommendations for the implementation of the multidisciplinary management principles in the functioning of the physical rehabilitation system.

**Results.** Physical rehabilitation has developed in Ukraine since the mid-90s of the last century as a separate educational and scientific specialty in the field of knowledge 0102 "Physical education, sports and human health" and science 24 "Physical education and sports". For two decades, the formation of the specialty took place under the auspices of the Ministry of Youth and Sports of Ukraine, which led to the formation of future rehabilitation specialists from the standpoint of physical education [2].

The activities of physical rehabilitation specialists were aimed at restoring lost or weakened functions after illness or injury. Since the change of physical capabilities in the necessary direction is a pedagogical process, the specialists of physical rehabilitation were considered primarily teachers in the field of restoration or correction of motor activity of disabled people [1, 13].

The next stage in the development of physical rehabilitation was the adoption in 2005 by the Cabinet of Ministers of Ukraine of the decision to include the specialty "Physical Rehabilitation" in the field of knowledge 22 "Health", the next 6 years this profession was called "physical therapist" [3].

he physical therapist is a leading specialist in the restoration, correction and maintenance of motor functions. He must have systematic knowledge in the field of human motor activity. Training of physical therapists in Ukraine is carried out in higher educational institutions of III-IV levels of accreditation in the specialty "physical therapy" and educational qualification level "master".

After obtaining a diploma, and if necessary, a license or other permission, a physical therapist can choose a specific area of work or type of practice. While most physical therapists perform a variety of activities, often related, there is a growing trend in specialized areas, ie development, improvement in one specific part of the profession. Specialized areas of clinical activity of a physical therapist can be in neurology, rheumatology, orthopedics, obstetrics, pediatrics, pulmonology, cardiology and sports rehabilitation or medicine.

Thus, the professional activity of a physical therapist requires in-depth knowledge of human age, anatomy, physiology, biomechanics and the basics of physics. In addition to understanding and knowledge about the development and functioning of the normal body, a physical therapist should study pathoanatomy, pathophysiology, pathokinesiology, physical and other factors that can be used to alleviate motor dysfunction. The physical therapist must be able to conduct a rehabilitation examination, analyze the collected data, determine the rehabilitation diagnosis, carry out rehabilitation measures and evaluate them. To establish cooperation with their patients / clients, a physical therapist must take a course in normal psychology or psychopathology. Effective practice also requires awareness of the principles of self-education, pedagogy, communication and counseling. The physical therapist is obliged to be acquainted with the activities and functioning of other specialists in the health care system and to be able to work harmoniously with them. Rehabilitation activities also require awareness and understanding of management principles and research methods [12].

In November 2015, the Ministry of Health of Ukraine held a working meeting on amendments to the Handbook of Qualifications for Occupations. At the Ministry of Health, during a working meeting, representatives of the Ministry of Health, the Ministry of Education and Science and the Ministry of Social Policy of Ukraine, scientists and members of the public considered changes to the Classification of Occupations. They discussed the list of specialists of the disciplinary brigade, which will help, in particular, the anti-terrorist operation fighters to return to normal life. It was decided that Ukraine should introduce new specialties into the Classification of Occupations: physical therapist, occupational therapist and physician of physical and rehabilitation medicine [7].

Also, in 2015, NGOs "Ukrainian Society of Physical and Rehabilitation Medicine", "Ukrainian Society of Neurorehabilitation", "Ukrainian Association of Physical Therapy" signed a memorandum of cooperation, which gave a strong impetus to the team approach and systematic involvement of international educational and scientific practical resources for the development of the specialty "Physical Therapy".

The formation of the need to work in a team for the effective implementation of their professional responsibilities combined with the need to acquire knowledge in many disciplines are key positions today that determine the successful functioning of physical therapists. Under such conditions, there is a need to consider the functioning of the industry and its management from the standpoint of multidisciplinarity. The modern term "multidisciplinary management" is one or more areas of disciplines that work together to achieve one goal. It includes several professionals of different professions, with different levels of knowledge, skills and qualifications, which may work or exist in isolation from each other [6].

It is known that the term "management" is borrowed from the English language ("manage") and literally translates as "management, administration, organization". This term is applied to business organizations (firms, enterprises) that operate in market conditions. However, the main purpose of management is to obtain the desired results from the concerted actions of many people, management - is primarily the activities of a group of people or team, "business management through filigree work with people" who carry out economic activities in the market. Thus, management is a system of measures for effective management of an organization, firm, enterprise or process in modern conditions and on a scientific basis [5, 11].

Physical therapy management should not be seen as an instantaneous action, but as a series of continuously related actions. Each management function is also a process because it consists of a series of interrelated actions. The management process, according to this approach, is the sum of all functions. Different authors, specialists in the field of management consider different lists of functions. A review of modern literature reveals the following functions: planning, organization, command, motivation, leadership, coordination, control, communication, research, evaluation, decision making, etc. [6].

With regard to physical therapy, given the need for multidisciplinarity, it is most appropriate to apply a situational approach that considers the specific situation of the environment is an important factor at the moment, which influences the effectiveness of all activities. That is, the main factor of this approach is the situation - a set of specific circumstances that have an impact at a given time. The situational approach requires from the leader the skills of "situational thinking", which helps to better identify the techniques that in specific conditions will be most favorable for achieving the goal of the organization [10].

Given the above, a multidisciplinary team can be considered as an organized, functionally distinct group of specialists who are united by common goals of the rehabilitation process and conduct high-intensity rehabilitation in inpatient and outpatient health care facilities in acute, subacute and long-term. A multidisciplinary team working in a rehabilitation institution may provide rehabilitation assistance both in the rehabilitation department (unit) and in other non-rehabilitation departments (units) of the same institution in a mobile mode.

From the standpoint of effective management, a multidisciplinary team should be led by a physical and rehabilitation physician or mental health professional who has a specialization in rehabilitation, who is responsible for organizing the team, implementing an individual rehabilitation program and other tasks assigned to the team [9].

The professional and quantitative composition of the team depends on the peculiarities of limiting the life of the person who needs rehabilitation, as well as on the specifics of the rehabilitation institution, department, unit.

The most effective form of work of a multidisciplinary team can be considered a meeting, where the results of the rehabilitation examination are discussed, the individual rehabilitation program is determined, the results of monitoring and evaluation of the program implementation are considered and adjusted. The individual rehabilitation program and changes to it are approved by a rehabilitation specialist who leads the team [7].

Based on the available methodological, legislative and normative literature, it is possible to formulate the main tasks of a multidisciplinary team in the field of physical therapy:

- conducting a rehabilitation examination of the person;
- determination of rehabilitation potential and prognosis, rehabilitation goals, drawing up an individual rehabilitation program;
- rehabilitation in accordance with the individual rehabilitation program;
- monitoring and evaluating the implementation of the rehabilitation program;
- making changes to individual rehabilitation programs and discussing the state of implementation of such programs;
- planning the patient's discharge and its subsequent rehabilitation route.

Today in the scientific literature the term "case management" in rehabilitation is more and more common. Experts define case management as a set of measures for planning, organizing, coordinating, monitoring and evaluating services and resources for each individual, in order to select the optimal rehabilitation strategy and tactics [8].

As part of case management, it is proposed to coordinate rehabilitation assistance, which is actually provided to a person with disabilities. The main tasks of case management

are considered to be the coordination of actions of a multidisciplinary team (internal management) and coordination at the level of institutions that directly provide or provide the organization of rehabilitation assistance (external management).

The functions of case managers are defined as the responsibility for providing quality and economically sound services. Case managers are suggested to be nurses of a multidisciplinary team or social workers [4].

Conclusion. A multidisciplinary approach to the process of managing the effectiveness of physiotherapy treatment has made it possible to systematize the problems of improving the efficiency of both individual specialists and the industry as a whole. For example, the current high cost of quality rehabilitation services competes negatively with its availability. It is the availability of rehabilitation that should not reduce its quality, volume and duration. The material and technical base in terms of physical therapy and physiotherapy is outdated and lagging behind global trends and needs significant changes and content. Today, many types of technical means of rehabilitation and prosthetic devices of domestic production can successfully compete with imported ones and provide the necessary assistance to a large number of disabled people. An important condition for the proper organization of the system of physical rehabilitation at all stages of rehabilitation in all regions of Ukraine is complicated by the lack of structural units of rehabilitation. Also, full-time employees of public health facilities cannot provide the required composition of interdisciplinary teams and need significant transformations. One of the main prerequisites for the implementation of a multidisciplinary approach in the field of physical therapy is the approval of a new educational and methodological framework, approved unified (according to world standards) textbooks, manuals, various forms of knowledge control for the pedagogical process.

## References

- 1. Vovkanych, A.S. "From the experience of developing a curriculum for the specialty "Physical Rehabilitation". New views on the problems of epidemiology, etiopathogenesis, diagnosis and treatment of multiple sclerosis and the possibility of its rehabilitation: Materials All-Ukr. Science. practice. Conf., 1998, pp. 63—65.
- 2. Hertsyk, A.M. "To the problem of management of the rehabilitation process." *Vrachebnoe delo*, no.1-2, 2016, pp. 142–147.
- 3. Gertsyk, A. M. "On the question of building a rehabilitation process and control over its effectiveness." *Physical education of students of creative specialties: collection of articles. scientific*, no.5, 2007, pp. 55–62.
- 4. Horodinska, I.V. Management of physical culture and sports. Kherson: KSU Publishing House, 2010.
- 5. Zhdanova, O. M.,and L. Ya. Chekhov. *Management of the physical education and sports sphere*. Drogobich, Kolo, 2009.
- 6. Kuzmin, O. Ye. Modern management: a textbook. Lviv, Center of Europe, 1995.
- 7. Malakhov, V. O. "Physical and rehabilitation medicine in Ukraine: problems and prospects." kurort., kurort.gov.ua/index.php/uk/novini/95-fizichna-ta-reabilitatsijna-meditsina Accessed 09 Nov. 2020.
- 8. Michuda, Yu. P. Sphere of physical culture and sports in market conditions. Kyiv, Olympic Literature, 2007.
- 9. Organizational aspects of physical culture management and sports movement, ed. V. D. Fiskalova. Moscow, Soviet sport, 2013.
- 10. Pereverzin, I. I. Management of a sports organization, Moscow, Physical culture and sport, 2006.
- 11. Pochinkin, A. V. Management in the field of physical culture and sports. Moscow, Soviet sport, 2013.
- 12. "Sphere of activity of the physical therapist." Physrehab, physrehab.org.ua/wpcontent/uploads/docs/Sfera\_diyalnosti\_final\_web.pdf.
- 13. *Theory and methods of physical education*, ed. T.Yu. Krutsevych: In 2 vols. Vol. 1. Kyiv, Olympic literature, 2003.