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## DEVELOPMENT OF PHYSICAL AND REHABILITATION MEDICINE IN UKRAINE DURING THE PERIOD OF MARTIAL STATUS

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### Summary

*The necessity to reform the health care system is inevitable due to an increased number of the wounded, injured and patients with functional disorders. The share of internally displaced persons (IDPs) has increased as well. Under the influence of stressful situations, they develop exacerbation of chronic diseases or occurrence of acute ones requiring rehabilitation measures. With severe combined injuries, restoration of lost or disturbed functions of the victims requires a specialized approach for rehabilitation, expensive equipment, availability of rehabilitation specialists, and current rehabilitation programs and protocols. The Ministry of Health of Ukraine carries out direct management of rehabilitation activities. It provides legal regulation on rehabilitation in health care, develops and approves legal acts, approves and implements protocol on giving rehabilitation aid in Ukraine. The Ministry monitors and evaluates the quality of rehabilitation performance at the rehabilitation institutions, participates in ensuring quality control over rehabilitation technical means, provides organization of rehabilitation aid at health care institutions, participates in international cooperation, ensures cooperation with rehabilitation institutions abroad. Its purpose is establishment and development an effective rehabilitation system in Ukraine, implementation of international protocols on giving rehabilitation aid, realization of rights of individuals with limited everyday functioning. The National Health Service in Ukraine (NHSU) has become a central executive body in the rehabilitation area. The NHSU implements the state policy in the field of medical care of the population ensured by the program of medical guarantees. The NHSU concludes contracts with health care institutions and purchases public medical services from them, monitors compliance with the terms of contracts and pays directly to institutions for rehabilitation services provided.*

**Key words:** *Rehabilitation; Physical and Rehabilitation Medicine; Multidisciplinary Team; Legislative Acts; European Integration.*

The necessity to reform the health care system is inevitable due to an increased number of the wounded, injured and patients with functional disorders. The share of internally displaced persons (IDPs) has increased as well. Under the influence of stressful situations, they develop exacerbation of chronic diseases or occurrence of acute ones requiring rehabilitation measures [1].

With severe combined injuries, restoration of lost or disturbed functions of the victims requires a specialized approach for rehabilitation, expensive equipment, availability of rehabilitation specialists, and current rehabilitation programs and protocols.

Rehabilitation aid is provided by rehabilitation specialists employed by health institutions, scientific and teaching staff of higher educational (postgraduate) education, who have the right to provide medical aid, medical professional involved in rehabilitation as volunteers, and individuals possessing an appropriate license. It is important to admit that according to the law, rehabilitation aid can be provided outside the place of medical practice activity. The persons providing medical and rehabilitation aid are supposed to meet educational and professional qualification requirements. They must have relevant documents confirming their education and appropriate professional qualification [2,3]. Medical workers and rehabilitation specialists can participate in providing rehabilitation aid by means of telemedicine in case they are registered in the information-communication system ensuring provision of rehabilitation services.

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performance at the rehabilitation institutions, participates in ensuring quality control over rehabilitation technical means, provides organization of rehabilitation aid at health care institutions, participates in international cooperation, ensures cooperation with rehabilitation institutions abroad. Its purpose is establishment and development an effective rehabilitation system in Ukraine, implementation of international protocols on giving rehabilitation aid, realization of rights of individuals with limited everyday functioning [4].

The National Health Service in Ukraine (NHSU) has become a central executive body in the rehabilitation area. The NHSU implements the state policy in the field of medical care of the population ensured by the program of medical guarantees. The NHSU concludes contracts with health care institutions and purchases public medical services from them, monitors compliance with the terms of contracts and pays directly to institutions for rehabilitation services provided [5,6].

Within the scope of its powers, the NHSU ensures:

- 1) ordering and paying for rehabilitation services under the program of medical guarantees;
- 2) implementation of state target programs for the development of the rehabilitation system;
- 3) organization of rehabilitation at rehabilitation institutions and units based on the protocols of providing rehabilitation aid;
- 4) creation of conditions for providing individuals with limitations in everyday functioning with technical rehabilitation means, medical products and rehabilitation services during the whole period of rehabilitation;
- 5) providing individuals with limitations in life activity with conditions essential for their optimal level of functioning, providing access to social services.

Local executive bodies and local governments coordinate rehabilitation branch on a local level and among territorial communities. They ensure compliance with rehabilitation legislation on the territory of the community, promote formation of an adequate network of rehabilitation institutions and units, manage rehabilitation institutions, and organize their material-technical and financial supply. They approve target programs for the development of the rehabilitation system, create conditions for providing individuals with limitations in everyday functioning with rehabilitation services, technical rehabilitation means during the whole period of rehabilitation.

Rehabilitation is carried out by the multidisciplinary rehabilitation team (MDRT) united by a common goal and tasks of rehabilitation. The MDRT members provide rehabilitation aid at inpatient and outpatient departments during acute period, after it, and during longer rehabilitation terms [3]. The doctor specializing in physical medicine and rehabilitation (physiatrist) manages the MDRT. He is responsible for the organization of the teamwork and implementation of an individual rehabilitation plan. The team staff depends on limitations in everyday functioning of an individual requiring rehabilitation. The MDRT includes physical medicine and rehabilitation (PM&R) physician, physical therapist, occupational therapist, social worker, rehabilitation nurse, prosthetist-orthotist, speech therapist, and psychologist. The MDRT work includes drawing up an individual rehabilitation plan (IRP) and control over the implementation of rehabilitation measures. The MDRT can meet both off-line and on-line using information technologies ensuring observance of medical confidentiality. The MDRT approves IRP after every team member performed rehabilitation examination of an individual. They consider disorders available, limitations in everyday functioning, individual requirements and needs. They determine the rehabilitation prognosis and the place for carrying out rehabilitation measures. The plan should contain general purpose and tasks of rehabilitation, define the list of essential rehabilitation measures, quantitative needs for rehabilitation specialists, and needs for rehabilitation equipment.

The main tasks of the MDRT are:

- 1) ensuring the availability of rehabilitation at the first need;
- 2) determination of the rehabilitation prognosis, purpose and tasks of rehabilitation, drawing up an individual rehabilitation plan;
- 3) ensuring a comprehensive approach in providing rehabilitation aid;
- 4) ensuring a consistent and timely involvement of necessary specialists in the rehabilitation process;
- 5) making changes in the individual rehabilitation plan and discussion of patient's condition.

The rehabilitation specialist is obliged to provide an individual receiving rehabilitation aid with information about his health in an accessible form, limitations in everyday functioning available and other information, which provides the basis for drawing up the individual rehabilitation plan [4].

Rehabilitation measures in the field of health care involve pharmacological assistance within the competence of a physical medicine and rehabilitation physician,

physical therapy, occupational therapy, speech therapy, provision of prosthetics and orthotics, technical and other rehabilitation means according to the World Health Organization Recommendations. Rehabilitation in health care is financially provided at the expense of the state budget and local budgets, funds of legal entities and individuals, as well as other sources not prohibited by law [4].

Financing of rehabilitation aid is also carried out at the expense of introducing paid services in accordance with the list legally approved, under contracts with business entities, insurance organizations, target insurance funds, founders of rehabilitation institutions, charity funds donations, voluntary donations and other sources.

Medical, pharmaceutical workers and rehabilitation specialists are trained, retrained and take advanced training at relevant pre-higher and higher educational institutions, Internship, Medical Residency, Clinical Residency, Postgraduate and Doctorate studies in accordance with the legislation on education.

According to its international legal obligations, the state participates in the implementation of international programs on health care, exchanges ecological, medical and rehabilitation information, promotes professional and scientific contacts between health care workers, rehabilitation specialists, exchange of advanced methods and technologies, organizes joint training of specialists. Health care institutions, rehabilitation institutions and citizens have the right to conclude contracts with foreign legal entities and individuals.

Therefore, development and establishment of physical rehabilitation in Ukraine is going at a fast pace according to current requirements considering international experience. Rehabilitation institutions, depending on the scope of rehabilitation measures, are of the following types: rehabilitation in health care, medical-social rehabilitation, social rehabilitation, psychological-behavioral rehabilitation, vocational rehabilitation, occupational rehabilitation, physical-sports rehabilitation.

At the same time, there are a number of issues to be solved as soon as possible. First of all, it is training specialists through their specialization, thematic advanced training courses, training abroad. Development of national protocols, guidelines, methodological recommendations, algorithms to provide rehabilitation aid, improvement of the material and technical base for modern rehabilitation departments are necessary.

Conclusions. The war promoted the development and establishment of rehabilitation medicine in Ukraine. Development of rehabilitation medicine in Ukraine keeps pace with European integration considering the peculiarities of the wartime. The experience in its organization and comprehensive assessment of the results of implementation of rehabilitation medicine in Ukraine may be useful for the countries of the European Community, which have not yet faced such challenges.

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## References:

1. Zakon Ukrainy pro reabilitatsiiu u sferi okhorony zdorov'ia [The Law of Ukraine on Rehabilitation in Healthcare]. Vidomosti Verkhovnoi Rady Ukrainy vid 2021r. № 8, st.59 [Internet]. 2021 [onovleno 2023 Ver 7; tsytovano 2024 Sich 1]. Dostupno: <https://zakon.rada.gov.ua/laws/show/1053-20#Text> (in Ukrainian)
2. Kabinet Ministriv Ukrainy Kabinet Ministriv Ukrainy. Pytannia orhanizatsii reabilitatsii u sferi okhorony zdorov'ia [The organization of rehabilitation in the healthcare sector]. Postanova Kabinetu Ministriv Ukrainy vid 03.11.2021r. № 1268 [Internet]. Kyiv; 2021 [onovleno 2024 Kvi 6; tsytovano 2024 Kvi 10]. Dostupno: <https://zakon.rada.gov.ua/laws/show/1268-2021-%D0%BF#Text> (in Ukrainian)
3. Bila Knyha z Fizychnoi ta Reabilitatsiinoi Medytsyny v Yevropi [White Paper on Physical and Rehabilitation Medicine in Europe]. Ukrainyskiy zhurnal fizychnoi ta reabilitatsiinoi medytsyny. 2018;2(Dodatok):113-44. Dostupno: <http://www.whitebookprm.eu/wp-content/uploads/2019/03/WB-2018-3rd-Edition-UA-fin.pdf> (in Ukrainian)
4. Kabinet Ministriv Ukrainy. Deiaki pytannia orhanizatsii reabilitatsii u sferi okhorony zdorov'ia [Some issues of organizing rehabilitation in the healthcare sector]. Postanova Kabinetu Ministriv Ukrainy vid 16.12.2022r. № 1462 [Internet]. Kyiv; 2022 [onovleno 2023 Hru 12; tsytovano 2024 Sich 7]. Dostupno: <https://zakon.rada.gov.ua/laws/show/1462-2022-%D0%BF#Text> (in Ukrainian)
5. Kabinet Ministriv Ukrainy. Poriadok realizatsii derzhavnykh harantii medychnoho obsluhovuvannia naseleння u 2023 rotsi [The procedure for implementing state guarantees of medical care for the population in 2023]. Postanova Kabinetu Ministriv Ukrainy vid 27 hrudnia 2022r. № 1464 [Internet]. Kyiv; 2022 [onovleno 2023 Lys 4; tsytovano 2024 Sich 7]. Dostupno: <https://zakon.rada.gov.ua/laws/show/1464-2022-%D0%BF#Text> (in Ukrainian)
6. Kabinet Ministriv Ukrainy. Deiaki pytannia realizatsii prohramy derzhavnykh harantii medychnoho obsluhovuvannia naseleння u 2024 rotsi [Some issues of implementation of the program of state guarantees of medical care for the population in 2024]. Postanova Kabinetu Ministriv Ukrainy vid 22.12.2023r. № 1394 [Internet]. Kyiv; 2023 [tsytovano 2024 Sich 7]. Dostupno: <https://www.kmu.gov.ua/npas/deiaki-pytannia-realizatsii-prohramy-derzhavnykh-harantii-medychnoho-obsluhovuvannia-naseleння-u-2024-rotsi-i221223-1394> (in Ukrainian)
7. Ministerstvo Okhorony Zdorov'ia. Pro zatverdzhennia Nomenklatury spetsialnostei profesionaliv u haluzi okhorony zdorov'ia u zakladakh okhorony zdorov'ia, Pereliku tsyklyv spetsializatsii ta tematychnoho udoskonalennia za spetsialnostiamy profesionaliv u haluzi okhorony zdorov'ia u zakladakh okhorony zdorov'ia ta profesionaliv z vyshchoiu nemedychnoiu osvitoiu [On Approval of the Nomenclature of Specialties of Healthcare Professionals in Healthcare Institutions, the List of Specialization Cycles and Thematic Improvement in the Specialties of Healthcare Professionals in Healthcare Institutions and Professionals with Higher Non-Medical Education]. Nakaz MOZ vid 23.01.2024r. № 112 [Internet]. Kyiv; 2024 [tsytovano 2024 Ber 7]. Dostupno: <https://zakon.rada.gov.ua/laws/show/z0159-24#Text> (in Ukrainian)
8. Polianska OS, Polianskyi Iu, Hulaha OI, Moskaliuk II. Pidhotovka likariv fizychnoi ta reabilitatsiinoi medytsyny pid chas voiennoho stanu [Training of doctors of physical and rehabilitation medicine during martial law]. V: Materialy III Naukovo-praktychnoi internet-konferentsii Rozvytok pryrodnychkh nauk yak osnova novitnykh dosiahnen u medytsyni [Internet]; 2023 Cher 21; Chernivtsi. Chernivtsi; 2023 [tsytovano 2024 Liut 8], s.410-1. Dostupno: <http://dspace.bsmu.edu.ua:8080/handle/123456789/24341> (in Ukrainian)

## ФІЗИЧНА ТА РЕАБІЛІТАЦІЙНА МЕДИЦИНА В УКРАЇНІ: РОЗВИТОК ТА ДОСЯГНЕННЯ

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### Резюме.

На теперішній час відповідна служба здоров'я України, яка обслуговує населення за програмою медичних гарантій, підписує співпрацю з закладами охорони здоров'я та надає реабілітаційні послуги, контролює виконану роботу та фінансує реабілітаційні заклади за проведені медичні інтервенції.

**Мета дослідження.** Здійснення аналізу щодо розвитку та досягнень фізичної та реабілітаційної медицини в Україні.

**Матеріал та методи дослідження.** Аналіз нормативних документів та відповідної літератури щодо надання реабілітаційних послуг в Україні.

**Результати.** Реабілітаційна допомога населенню проводиться шляхом надання реабілітаційних послуг стаціонарно та амбулаторно. Національна служба здоров'я України впроваджує державні цільові програми для підвищення рівня реабілітації з використанням протоколів надання реабілітаційної допомоги із забезпеченням осіб з порушенням функціонування асистивними технічними засобами реабілітації та соціальними послугами. Територіальні громади сприяють формуванню оптимальної мережі реабілітаційних закладів, організують їх матеріально-технічне та фінансове забезпечення, затверджують цільові програми розвитку реабілітаційних послуг, допомагають пацієнтам з особливими потребами, у тому числі, забезпеченням допоміжними засобами реабілітації. Реабілітаційна допомога надається мультидисциплінарною реабілітаційною командою, що об'єднана спільною метою та завданнями реабілітації і надає реабілітаційні послуги стаціонарно та амбулаторно у гострому, післягострому та довготривалому періодах. При використанні телемедицини можуть залучатися фахівці з реабілітації через телеконсультування у режимі реального часу або відкладеного часу, теледіагностики, спостереження у вигляді віддаленого моніторингу з обов'язковим заповненням облікових форм.. Телеконсультування пацієнта з наявними порушеннями функціонування проводиться за допомогою комп'ютеру, спеціального програмного забезпечення для виконання вправ, електромеханічного або електронного тренажера чи пристроїв взаємодії. Система радіотелемоніторингу дає змогу одночасного контролю електрокардіограми та артеріального тиску при проведенні фізичного навантаження.

**Висновки.** Розвиток та становлення фізичної реабілітації в Україні йде швидкими темпами у відповідності до вимог сьогодення і з урахуванням міжнародного досвіду.

**Ключові слова:** медична реабілітація; фізична та реабілітаційна медицина; мультидисциплінарна команда; фахівці з реабілітації.

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