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- Assessment of Physical Therapy Following Knee Arthroplasty
- Rehabilitation in Post Covid-19 Neurological Syndrome
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- The Range of Physical Rehabilitation Methods in Children with Cerebral Palsy
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State of Provision of Medical Rehabilitation to People with Disorders of the Musculoskeletal System at the Regional Level

Regionalna dostępność rehabilitacji medycznej dla osób z chorobami układu mięśniowo-szkieletowego

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SUMMARY

Aim: To analyse the state of medical rehabilitation services for musculoskeletal disorders under contracts of the National Health Service of Ukraine (NHSU) at the regional level and identify possible problems in terms of health care reform.

Materials and Methods: Normative documents regulating the provision of rehabilitation care in the health care system of Ukraine, and published by the NHSU information on concluded agreements on medical care under the Medical Guarantees Program were used as materials of the study. The research embraced methods of system analysis, structural-logical analysis, medical-statistical, graphic and bibliosemantic methods.

Conclusions: The analysis of NHSU contracts in 2021 revealed that funding for packages of medical rehabilitation services for musculoskeletal disorders involves the provision of services in 129,170 cases, which is only 0.8% of the 2019 need. It was established that in Transcarpathian region in 2021 the amount of contracting for medical rehabilitation for musculoskeletal disorders was 45.4% of the funds for all rehabilitation packages in the region. With the increase in the total funding of signed contracts in the region, the number of projected cases of rehabilitation care in this area decreased by 9.9%. The provision of medical rehabilitation services for musculoskeletal disorders in Ukraine is insufficient and does not cover the potential needs of the population. At the regional level, there is a decrease in the number of planned cases of such services, but an increase in the number of health care facilities that provide them.

Key words: rehabilitation, musculoskeletal system, disorders, injuries

Słowa kluczowe: rehabilitacja, układ mięśniowo-szkieletowy, zaburzenia, urazy

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INTRODUCTION

In 2017, «Rehabilitation 2030: a call for action» meeting hosted by the World Health Organization announced the huge need for rehabilitation services worldwide, especially in low- and middle-income countries [1]. The need for rehabilitation services is growing every year, as rehabilitation is a set of interventions needed by a person who experiences limitations in daily physical, mental and social functioning due to aging or health condition, including injuries [2]. According to a study of the Global Burden of Disease, it is known that worldwide in 2019, rehabilitation would be beneficial to a large number of people (2.41 billion people), of whom 71% are people with musculoskeletal disorders (1.71 billion people) [3]. According to the WHO (Rehabilitation Needs Assessment) in Ukraine in 2019 rehabilitation was needed in 21 million cases (47.3 per 100 thousand population), of which 17 million cases

are disorders of the musculoskeletal system (39.3 per 100 thousand population) [4]. In Ukraine, over the past 5 years, much has been done to develop the field of rehabilitation: the creation, training and employment of new rehabilitation specialists (physical medicine and rehabilitation physicians, physiotherapists, occupational therapists), the introduction of the International Classification of Functioning, Disability and Health, expanding knowledge about rehabilitation among Ukrainian communities and decision makers [5]. An important step was the adoption of the Law of Ukraine “On Rehabilitation in Health Care” on December 3, 2020, which improved and systematized the legislative regulation of rehabilitation in health care [6]. It is important that medical rehabilitation is recognized as a component of medical services in the Medical Guarantees Program in accordance with the Law of Ukraine № 2168-VIII “On State Financial Guarantees of Medical Care”

of 19.10.2017. And from April 1, 2020, as part of the provision of specialized medical care to the population, the National Health Service of Ukraine (NHSU) began contracting health care facilities for medical rehabilitation packages. But there are still many obstacles to ensuring the full rehabilitation of the population in need, especially at the regional level and in remote settlements.

AIM

The aim of this article is to analyse the state of medical rehabilitation services for musculoskeletal disorders under contracts of the National Health Service of Ukraine at the regional level and identify possible problems in terms of health care reform.

MATERIALS AND METHODS

Normative documents regulating the provision of rehabilitation care in the health care system of Ukraine, and published by the National Health Service of Ukraine (NHSU) information on concluded agreements on medical care under the Medical Guarantees Program were used as materials of the study [7]. The research embraced methods of system analysis, structural-logical analysis, medical-statistical, graphic and bibliosemantic methods.

REVIEW

According to the Law of Ukraine № 2168-VIII “On State Financial Guarantees of Medical Care” of 19.10.2017 medical rehabilitation is defined as one of the components of the *Medical Guarantees Program* [6]. As a result of the reform of the health care system of Ukraine, the algorithms for financing and providing medical services at all levels of medical care have been changed. In 2020, the Procedure for implementing this Program was approved by the Decree of the Cabinet of Ministers of Ukraine № 65 “Some issues of implementation of the program of state guarantees of medical care in 2020” dated 05.02.2020 [8]. As a result, since April 2020, for the first time, the implementation of medical rehabilitation services as specialized medical care has been introduced through funding from the National Health Service of Ukraine (NHSU). In 2021, the Procedure was approved by the Decree of the Cabinet of Ministers of Ukraine № 133 “Some issues of implementation of the program of state guarantees of medical care in the II-IV quarters of 2021” dated February 15, 2021. These documents allow for the provision of medical rehabilitation services in 3 packages: “Medical rehabilitation of infants born prematurely and/or ill during the first 3 years of life”, “Medical rehabilitation of adults and children over 3 years of age with musculoskeletal disorders”, “Medical rehabilitation of adults and children over 3 years of age with lesions of the nervous system”.

Therefore, people with musculoskeletal injuries, diseases of the musculoskeletal system in the subacute and recovery period can receive rehabilitation services under the package “Medical rehabilitation of adults and children over 3 years of age with musculoskeletal disorders.” The package includes an initial examination and consultation, rehabilitation diagnosis, prognosis, individual rehabilitation program and provision

of medical rehabilitation services [8, 9]. The tariff for medical services of this package is set as a global rate for readiness to provide such services and is calculated on the basis of the rate for the treated case, which in 2020 amounted to 6,554 UAH, and in 2021 increased by 18% to 7,729 UAH.

In total, in 2021, the National Health Service of Ukraine (NHSU) contracted health care facilities for all medical rehabilitation packages in the amount of 1,639,575,957 UAH. The package for the musculoskeletal system disorders was signed by 285 health care facilities for a total of 998,354,930 UAH which is 60.9% of the total amount for rehabilitation. Taking into account the tariffs of 2021, it can be determined that the provision of medical rehabilitation services is foreseen in 129,170 cases of musculoskeletal disorders. 97.5% of the total number of these health facilities are communally owned and only 2.5% are privately owned.

In Transcarpathian region in 2020, the total amount of all contracts of the National Health Insurance Fund for medical rehabilitation of persons with musculoskeletal disorders amounted to 7,703,244 UAH, and in 2021 it increased by 6.3% and amounted to 8,185,011 UAH. This is a very small share (0.8%) of the total in the whole country. A detailed analysis shows that the funds in 2021 for medical rehabilitation for musculoskeletal disorders amounted to 45.4% of the funds contracted for all three rehabilitation packages in the region. It should be noted that the contracted amounts of money allowed for the provision of services in 1172 cases of musculoskeletal disorders, and in 2021 accordingly in 1059 cases. Thus, with the increase in the total funding of signed agreements in the region, the number of projected cases of rehabilitation assistance in this area decreased by 9.9%.

It was determined that in 2020, 27% of the planned funding is intended for institutions that provide medical services only to children, 21% - for those that serve the adult population, and respectively 52% - for health facilities that provide services to all age groups (Figure 1). In 2021, the situation has changed - the share of funds allowed for the provision of rehabilitation services for musculoskeletal disorders for health care facilities that serve only children has increased to 40.8%. The share of funds for institutions that serve only the adult population also decreased by more than 2 times (up to 9.1%).

In Transcarpathian region only 7 health care facilities in 2020 and 9 facilities in 2021 concluded the agreements

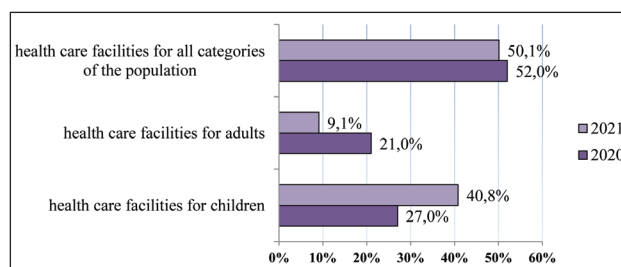


Figure 1. Comparison of financing of health care facilities under the package of medical rehabilitation to people with disorders of the musculoskeletal system in terms of the target group of services provision

with the NHSU under the package of medical rehabilitation services for musculoskeletal disorders. 4 health care facilities from those specified in 2020 were property of the Regional Council and served the population of the region, 2 facilities provided services to the population of two separate districts of the region (Mizhhirya and Mukachevo), and 1 health care facility - to the children's population of the regional center (Uzhhorod) (Figure 2).

The analysis showed that in 2021 the situation changed slightly, because one of the institutions was merged with another regional institution. There also appeared 3 more health care facilities in the region that have signed contracts that include medical rehabilitation for musculoskeletal disorders. These are 2 regional specialized health care institutions and one district facility. Thus, from April 2021 in Transcarpathian region, medical rehabilitation services for musculoskeletal disorders can be provided by 9 health care facilities: 5 institutions of the Regional Council (1 specialized institution, 3 general institutions and 1 rehabilitation institution for children), 3 facilities of District Councils (Mizhhirya, Mukachevo, Rakhiv) and 1 institution of the City Council (Uzhhorod) (Figure 3).

DISCUSSION

The current state of health care reform in Ukraine has expanded the possibilities of providing medical rehabilitation services by health care facilities [10]. But did it allow to receive the specified services to persons with diseases of the musculoskeletal system irrespective of a residence? It is known that 71% of all those who were in a condition in which rehabilitation would be useful needed such services in the world in 2019 [3]. In Ukraine, the share of cases with musculoskeletal disorders was 81% (17 million cases), of all those in need of rehabilitation in 2019 [4]. An analysis of NHSU contracts in 2021 revealed that funding for medical rehabilitation packages for musculoskeletal disorders involves the provision of services in 129,170 cases, which is only 0.8% of the 2019 need identified by the WHO Rehabilitation Need Estimator [4]. This is a very low level, although better than nothing at all.

In order to better understand this difference, we analysed the possibilities and dynamics of changes in the provision of medical rehabilitation services for musculoskeletal disorders at the level of one region of the country – Transcarpathian region. The analysis revealed that the provision of services can be assured territorially only to the population of the regional center and three districts of the region according to the old administrative division (Figure 3). It should be noted that in 2020 the services were available to the population of only 2 districts (Figure 2). The population of other districts can receive rehabilitation services for musculoskeletal disorders only in the institutions of regional subordination of the tertiary level of health care. Moreover, some of these institutions are highly specialized (Center for Neurosurgery and Neurology, Hospital for War Veterans, Children's Sanatorium). Thus, for the majority of the population of the region, medical rehabilitation services for musculoskeletal disorders are not yet available. What could this be related to? It can be assumed that this situation is related to several aspects. The first aspect is the inability to sign contracts for medical rehabilitation with the National Health Service of Ukraine due to insufficient provision of health care facilities in the regions with relevant specialists. After all, in the conditions of purchasing services under the package of medical rehabilitation, the need to ensure the work of a multidisciplinary team (physical medicine and rehabilitation physicians, physical therapist, occupational therapist and others) is clearly indicated [9]. Normative documents and a number of measures in Ukraine bring the potential provision of these specialists as close as possible [5]. But there are still very few such specialists in local health care facilities. This may also be due to low pay, which leads to the refusal of rehabilitation professionals to work in public (municipal) health care facilities. Another aspect is the low capacity of individual health care facilities to predict the number of services per year. This was reflected in a decrease in the total number of planned cases of medical rehabilitation package for musculoskeletal disorders in Transcarpathian region by 9.9% in 2021 compared to 2020. This situation arose due to a decrease in the projected cases for a third of

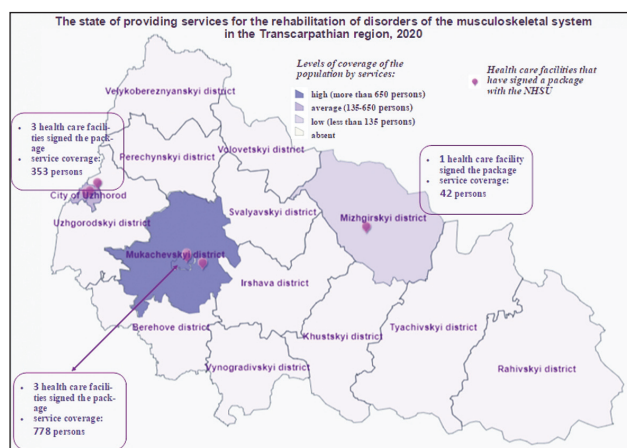


Figure 2. The state of providing services for the rehabilitation of disorders of the musculoskeletal system in the Transcarpathian region, 2020

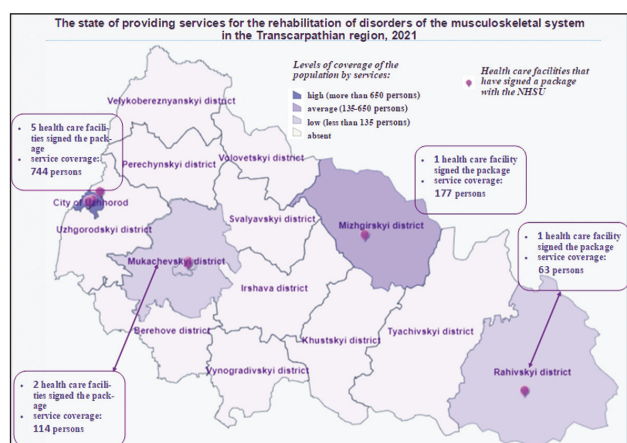


Figure 3. The state of providing services for the rehabilitation of disorders of the musculoskeletal system in the Transcarpathian region, 2021

contracted institutions by more than 50%. Another third of health care facilities were able to receive funding for more cases than in 2020. And 3 institutions were contracted for the first time under this package, so their capacity can be assessed by the results of 2021.

CONCLUSIONS

The provision of medical rehabilitation services for musculoskeletal disorders in Ukraine is insufficient and does not cover the potential needs of the population. At the level of Transcarpathian region, there is a decrease in the number of planned cases of providing services, but an increase in the number of health care facilities that provide such services. This allowed to expand the coverage of the population with medical rehabilitation services for musculoskeletal disorders. However, there is still a significant part of the region's population which has limited access to these services.

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A – Research concept and design, B – Collection and/or assembly of data, C – Data analysis and interpretation, D – Writing the article, E – Critical revision of the article, F – Final approval of article