

Recreational Aspects of Psychological Rehabilitation as a Medical Tourism Direction

Mariia Bieloborodova^{1,*}, Liudmyla Bezuhla², Valeria Baranova³, Olha Liubchuk⁴ and Svitlana Zakharova⁵

¹*Department of Tourism and Enterprise Economics, Dnipro University of Technology, 19 av. Dmytra Yavornytskoho, Dnipro, 49005, Ukraine.*

²*Department of Tourism and Enterprise Economics, Dnipro University of Technology, 19 av. Dmytra Yavornytskoho, Dnipro, 49005, Ukraine.*

³*Department of Travel Business and Regional Studies, V.N. Karazin Kharkiv National University, 4 Svobody Sq., Kharkiv, 61022, Ukraine.*

⁴*Department of Tourism, State Higher Educational Institution "Pryazovskyi State Technical University", 19 av. Dmytra Yavornytskoho, Dnipro, 49005, Ukraine.*

⁵*Department of International Tourism Hotel & Restaurant Business, Alfred Nobel University, Sicheslavska Naberezhna St. 18, Dnipro, 49000, Ukraine.*

Abstract: The objective of research is theoretical and methodological aspect and practical recommendations for the introduction of a psychological rehabilitation program based on medical and health facilities. The purpose of the study is to substantiate the scientific and methodological approaches to planning the development of medical tourism in Ukraine in the field of psychological rehabilitation. To achieve the set goal, the following tasks were solved: to investigate the demand in the field of psychological rehabilitation as a direction of medical tourism; to determine the current state and trends in the transformation of the material and technical base of medical and rehabilitation tourism in Ukraine; to propose measures for realization medical tourism potential based on the psychological rehabilitation program. During the research, the following methods were used: abstract-logical, systemic approach, method of structural-logical generalization, method of statistical and economic grouping, graphic method. The scientific novelty of the research consists in the substantiation of the theoretical and methodological support for the development of medical tourism in Ukraine in the field of psychological rehabilitation from the position of a new concept of psychological rehabilitation programs forming.

Keywords: Regional Development, Human Potential, Rehabilitation, Psychological Help, Health Protection, Recreation, Tourism.

JEL classification: L8, Z32.

1. INTRODUCTION

Fierce competition in the market of medical services forces countries participating in medical tourism to rapidly develop medicine at the expense of modern technologies and increase investments in this industry. Without support and assistance from the state, serious investments by both the state and private investors in the development of medical science, specialized education, technical base, medical infrastructure, and development of medical tourism are impossible. We must not forget about the economic component of medical tourism - the formation of a competitive price in the context

of the price-quality ratio. For most patients, the main factor in favor of going abroad is the cost of treatment (UNWTO, 2018).

It is quite natural that in connection with the full-scale military invasion of the Russian federation in Ukraine, the entire inbound tourism market, including the medical tourism market, almost completely ceased its activities. Today, Ukraine is dominated by outbound flows of medical tourists, including wounded military personnel who require complex surgical interventions, prosthetics, and various types of rehabilitation. Most of such tourists are financed by budget funds. However, the unique experience gained by Ukraine because of the need to provide rehabilitation services, including psychological direction, to a significant number of military personnel, can become a significant competitive advantage of our country in the relevant segment of the global medical tourism market.

*Address correspondence to this author at the Dnipro University of Technology, Department of Tourism and Enterprise Economics, Dmytra Yavornytskyi Av., 19, Dnipro, 49005, Ukraine.
E-mail: bieloborodova.m.v@nmu.one

Data from Shvets et al. (2021) and Radets'ka et al. (2020) indicate that every fifth combatant, even in the absence of physical trauma, suffers from neurotic disorders, and several months after returning to normal living conditions, he manifests other consequences - various psychosomatic diseases. Altered mental states that may occur in military personnel during hostilities include combat stress reaction (initial manifestation of adaptation disorders), combat fatigue and post-traumatic stress disorder, as well as reactive states as the most severe forms of combat psychiatric pathology. As a result of such a significant negative impact of combat factors, about 90% of servicemen need complex psychological rehabilitation.

A significant contribution to the study of the problems of the development of medical tourism was made by domestic and foreign scientists, in particular: Halasyuk (2023), Babov et al. (2019), Hal'kiv et al. (2020), Turski et al. (2021), Campa, et al. (2022), Haponenko et al. (2022) and others. Substantial practical results were obtained by Majeed S. and Gon Kim W. (2023) regarding consumer trends in health tourism. The results of this study show that tourists expect to combine wellness treatments with visits to tourist attractions, seeing it as part of the process of improving their health and well-being. The authors proposed a health tourism matrix that can help providers of health tourism services to understand the expectations of tourists regarding health procedures and tourist attractions. Research by Abdul-Rahman et al. (2023) is devoted to a similar topic, but here consumer trends in spa and wellness tourism are analyzed through the prism of perceived value. The development of medical tourism and the management of consumer behavior after the COVID-19 pandemic were studied in research by Pasięka et al. (2021), Aristizábal et al. (2022). The issue of clustering of various areas of tourist activity was also considered in the scientific literature (Marcolin et al., 2019). In particular, in the work by Haponenko et al. (2022), it is investigated the potential of tourist and recreational clusters in the European space, and the study by Biswas and Rai (2023) is devoted to cluster processes in the field of medical tourism in East India. Such Ukrainian scientists as Tkachuk and Saychuk (2019), as well as Zhelyuk and Matsik (2021) also highlighted the prospects of clustering medical tourism in the regions of Ukraine.

Environmental aspects that influence the processes of recreation and rehabilitation have also been widely studied in the scientific literature. In particular, Bezuhla et al. (2023) studied the impact of heavy metals that accumulate in urban park and recreation areas on the population. Ways of measuring the readiness of the population to strengthen environmental requirements at the consumer level were studied in the research by Bieloborodova et al. (2021). The authors proposed the use of the environmental Kuznets curve as an indicator of the population's readiness to accept more ecological forms of recreation.

The methodology of combining territories into a cluster was also studied in the work of Smiesova et al. (2019) and Bezuhla et al. (2022). The authors proposed a new methodological approach to clustering the countries of the world, which is based on Kohonen maps and allows processing a large amount of data, identifying systemic connections between them, visualizing the results, grouping the countries of the

world and comparing their economic and institutional capabilities in the realization of economic interests. However, this approach is based on a significant number of macroeconomic indicators, and it is quite difficult to apply it at the level of one country when analyzing regional clusters.

Medical tourism was also considered by scientists as area of product diversification for local territorial communities. In particular, in the study by Koshkalda et al. (2022) this direction is included in a well-founded set of measures that can meet the modern needs of the functioning and development of territorial communities. In addition, the study by Yong-Jin et al. (2019) have deepened the methodological foundations of the study of tourist clusters and their impact on the sustainable development of united territorial communities. The authors examined the relationships between tourism cluster specialization and community resilience using spatial regression across sixty-seven Florida counties. It was proven that instability in the field of art, entertainment and recreation led to a decrease in the level of community stability, and cluster processes in the tourism field positively affect the balanced development of territories.

However, despite the large number of scientific works on the outlined issues, we note that changes in the world economy caused by the pandemic, as well as the full-scale military invasion of the Russian federation in Ukraine, create a need for new research in the field of psychological rehabilitation as a field of medical tourism. All this determined the choice of the research topic, its purpose and task.

2. MATERIALS AND METHODOLOGY

The research used the following methods: abstract-logical (theoretical generalizations, formulation of conclusions), systematic approach, method of structural-logical generalization, statistical grouping, graphic methods. We have summarized open statistical information as of 2020 regarding:

- 1) the number of sanatoriums of private, collective, state and communal forms of ownership by region of Ukraine;
- 2) the number of active enterprises related to the sphere of art, entertainment and recreation by region of Ukraine.
- 3) distribution of Ukrainian regions by the number of organizations included in the Register of psychological rehabilitation services for war veterans and their families' providers.

Based on the summarized data, maps were created that reflect the concentration of the above three groups of enterprises by regions of Ukraine. The limitation of the study is the exclusion from the statistical analysis of health care facilities that refer to hospitals, outpatient polyclinic facilities, blood transfusion facilities, urgent and emergency medical care, despite the fact that they may be of some indirect interest to medical tourists.

In addition, we emphasize that the array of statistical data was analyzed as of 2020, before the full-scale military invasion of the Russian Federation into Ukraine. To date, part of the territories is in the war zone or under occupation, business activities are not carried out on them, and the material and technical base is significantly damaged.

The results of the research of the medical tourism market in Ukraine, in particular in the field of psychological rehabilitation, allows to conclude that there is a significant lack of institutions that provide this form of support in wartime conditions. Current expenditures on health care in Ukraine and their structure as of 2021 show that inpatient medical and rehabilitation care accounts for 34.19% of the total structure of current expenditures on health. Outpatient medical and rehabilitation care takes second place and accounts for 19.74% of current costs. Other medical and rehabilitation assistance amounts to 4.23%, day medical and rehabilitation care accounts for 1.45% of current health care costs. This indicates the need to develop rehabilitation services based on medical and health complexes, which will help relieve the burden on inpatient clinics and allow more effective redistribution of costs (Ukrstat, 2021).

3. RESULTS

Rehabilitation is an investment that brings economic benefits to both individuals and society. This can help avoid costly hospitalizations, shorten hospital stays, and prevent readmissions. As rehabilitation also enables people to participate or return to work and employment, or remain independent at home, it minimizes the need for financial or carer support.

The market of medical and medico-psychological rehabilitation in Ukraine is gaining special relevance today. It should be noted that our country already has some experience of participating in military rehabilitation projects. In particular, during 2020-2021, a medical rehabilitation project was implemented in Bulgaria for Ukrainian militaries and civilian personnel of the security and defense sector. This project is implemented in accordance with the Agreement between the Ministry of Social Policy (Ukraine) and the Ministry of Defense (Republic of Bulgaria). About 300 people were rehabilitated in just two years without involving financial costs from the Ukrainian side (Ministry of Social Policy of Ukraine, 2022).

Ukrainian Research Institute of Medical Rehabilitation and Spa Treatment of the Ministry of Health (2022) carried out a research task to develop a system of rehabilitation of military personnel with various injuries and diseases in sanatorium-resort conditions using natural healing factors (2020-2022). The main goal of the work is to develop standards for medico-psychological rehabilitation at the sanatorium-resort stage using natural healing resources and preformed means to ensure the most complete restoration of lost functions due to injuries, wounds, and trauma of militaries. In 2023, the Institute held a series of educational and methodological seminars, e.g., "Organizational, methodological and applied issues of providing rehabilitation assistance".

In 2017, WHO launched the "Rehabilitation 2030" project (World Health Organization, 2023). to highlight the need to strengthen health systems and call on all stakeholders worldwide to work together to: improve leadership and governance; develop a strong multidisciplinary rehabilitation workforce; expand rehabilitation funding; and improve data collection and research on rehabilitation. In addition, WHO established the World Rehabilitation Alliance (WRA) to support the implementation of the "Rehabilitation 2030" initiative through advocacy. WRA focuses on promoting

rehabilitation as an essential health service that is an integral part of general health care coverage.

Rehabilitation services should be integrated into the primary, secondary and tertiary levels of health care systems. The underdevelopment of rehabilitation in many countries and widespread misconceptions about rehabilitation as a luxury adjunct to mainstream care or only for people with significant disabilities have often resulted in services only being provided at selected levels of health care systems. However, rehabilitation is needed at all levels. Since different areas of rehabilitation require certain skills, the multidisciplinary of rehabilitators can significantly improve the quality of medical care. Rehabilitation in both hospital and community settings is essential to ensure timely intervention and access to services.

Regarding areas of psychological rehabilitation, it should be noted that the list of health care institutions included in the Register of providers of psychological rehabilitation services for war veterans and their family members as of January 3, 2023 does not include any institution from the Dnipropetrovsk region. In total, there are 48 of them throughout Ukraine, which undoubtedly does not satisfy the military's need for psychological recovery (Fig. 1).

It is observed a significant disparity in the regional distribution of institutions that provide psychological rehabilitation to veterans. Thus, 6 such institutions are located in Kyiv region (including the city of Kyiv) and Khmelnytskyi, 5 each in Odesa and Poltava regions, 4 in Lviv, 3 each in Kirovohrad and Poltava regions. Not a single institution is included in the registry in the Donetsk, Luhansk, and Kherson regions - which is quite understandable in the conditions of war, but the Dnipropetrovsk region does not have a single institution included in the Register either. Nevertheless, the region is near the war zone, provides a significant amount of medical care, so the need for institutions that provide psychological rehabilitation is significant.

The goal of introducing psychological rehabilitation services on the basis of medical and recreational complexes is to increase the level of accessibility, destigmatization and rapid increase in the volume of services provided. It is important that in Ukraine the need for psychological rehabilitation may increase by 50-100%. If according to the Ministry of Health during the years 2000-2013 psychological rehabilitation services were received by 10-20% of the population, with an annual growth rate of 0.3-05% annually, while significant underdiagnosis and limitation of the scope of services was observed, then starting from 2014 the growth rates significantly increased by 8-10% annually. The Covid pandemic also caused an exacerbation of negative trends, in 2021, according to various estimates, from 50 to 65% of the population sought psychological help at least once, while the number of diagnosed depressions increased by 25%, and general psychological disorders - by 14% (Ministry of Health of Ukraine and USAID, 2022).

It is predicted that during 2022-2030, 70-80% of the population of Ukraine will need various forms of psychological rehabilitation. According to experts, the number of severe psychological disorders will increase by 50%, distress will be diagnosed in 30-50% of the population, the number of

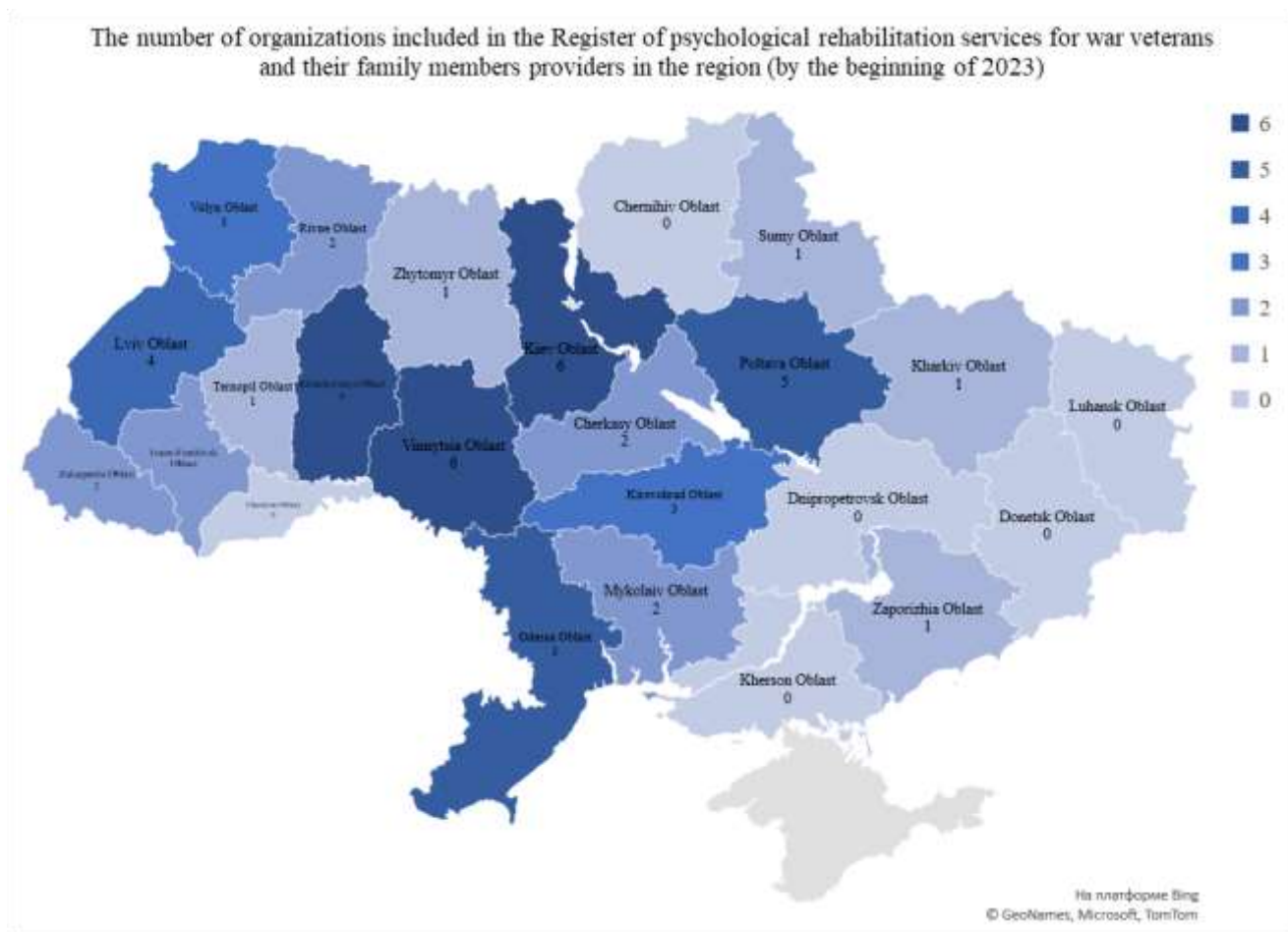


Fig. (1). Distribution of Ukrainian regions by the number of organizations included in the Register of psychological rehabilitation services for war veterans and their families providers by beginning of 2023.
 Source: compiled by the authors based on Ministry of Veterans Affairs of Ukraine (2023).

mild and moderate psychological disorders is also expected to increase by 50-100%. There is already an increase in the number of users of psychological rehabilitation services by 50-80%.

By 2022, 7% of citizens had direct experience of “touching” war, now - at least 50%. The following trends are observed (Sharko et al., 2023):

- a significant increase in the number of citizens with potentially traumatic experiences and the risk of mental disorders;
- 40-50% of the population of Ukraine will need psychological support of varying degrees of intensity.

The following problems are most common among the military:

- loss of identity and difficulties in adaptation (mobilized);
- loss of comrades, siblings;
- loss of usual social ties;
- personal problems;
- physical injuries and mutilations;
- emotional insensitivity, decreased empathy.

The most common disorders among this category are the following:

13% – anxiety disorder; 8% – depressive disorder, 7% – alcohol and drug abuse; PTSD - 2%. Moreover, only 8% of patients require specialized treatment, of which 3% require hospitalization (Ministry of Health of Ukraine and USAID, 2022).

Mild and moderate psychological rehabilitation and social adaptation for military personnel can be organized on the basis of medical and health facilities (sanatoria-prophylactics). The creation of effective cooperation in the provision of military psychological rehabilitation services will include the following stages:

- unification and integration of already existing services and services in the health care system;
- creation of a "bridge" between medical and social services - on the basis of medical and recreational complexes;
- key positions: network curator, case manager, clinical psychologist.

According to Article 11 of the Law of Ukraine “On Social and Legal Protection of Servicemen and Members of Their

Families” (Verkhovna Rada Ukrayiny, 1992), persons who are discharged or discharged from military service among war veterans have the right to free psychological assistance.

The grounds for providing psychological rehabilitation services are (Cabinet of Ministers of Ukraine, 2018):

1) referral of a doctor who provides primary medical care, or referral of a treating doctor;

2) personal appeal of the recipient of services.

It is proposed to create a specialized structural unit in the medical and health facilities that will be involved in the psychological rehabilitation of the military and will be contracted by the Ministry of Defense, which will ensure the implementation of psychological rehabilitation by multidisciplinary teams of psychologists based on case management, which meets the modern requirements for the organization of the rehabilitation process. The procedure for inclusion in the Register of entities that provide psychological rehabilitation services to military personnel in 2023 includes the submission of an appropriate application with accompanying documents, including: a license to carry out the relevant activity, information on the material and technical base, confirmation of the professional qualifications of personnel who will carry out psychological rehabilitation, a list of psychological rehabilitation services offered at the institution.

Psychological services will be provided taking into account an individual approach, based on the methodologically correct application of a set of measures with scientifically proven effectiveness and expediency in accordance with international scientifically based protocols and not only to inpatients, but also on an outpatient basis and/or remotely. The marginal cost of the service of one hour of supervision of specialists in the provision of psychological services is given in the Table 1.

Table 1. The price of the one hour supervision of psychological services in sanatorium complexes in Ukraine for militaries, 2023.

The Number of Persons in the Group	Price without VAT, USD	Price with VAT, USD
Individually	22.9	27.4
2	12.6	15.1
3	9.1	11.0
4	7.4	8.9
5	6.4	7.7
6	5.7	6.9
7	5.2	6.3
8	4.9	5.8
9	4.6	5.5
10	4.3	5.2

Source: Ministry of Veterans Affairs, 2023.

The number of psychological services that medical and health complexes will provide with state funds (according to the individual needs of the recipient of services) includes:

- conducting an initial psychodiagnostics examination by members of the multidisciplinary team;
- definition of a psychological problem or mental disorder, the level of psychosocial maladjustment, the possibility or necessity of the recipient of services to receive services on an inpatient, outpatient or remote basis;
- formation with the involvement of the recipient of services and/or his/her legal representative of an individual psychological rehabilitation plan (hereinafter referred to as an individual plan) using international standardized examination and assessment tools (scales/tests/questionnaires) specific to specific problems/disorders;
- determination of the rehabilitation prognosis by a multidisciplinary team based on the results of a psychodiagnostics examination to transfer the recipient of services to another level of psychological assistance;
- provision of inpatient psychological assistance to service recipients who are being treated in a health care facility, on an outpatient basis (at the request of the service recipient) in accordance with the prepared individual plan and ongoing monitoring of the condition of the service recipient;
- provision of psychological assistance to recipients of services remotely (using information and communication technologies);
- implementation of ongoing control over the implementation of the individual plan and its adjustment with the assessment of progress in achieving the defined goals and tasks of psychological rehabilitation based on the results of psychodiagnostics examination;
- psychological support of family members of the recipient of services, training in self-help techniques, informing, explaining about mental health problems and their impact, psychoeducation and other scientifically based methods of psychological support;
- conducting the necessary psychodiagnostics tests in dynamics;
- application of methods of psychological influence and psychotherapeutic interventions;
- determination of the recipient's need for pharmacotherapy, prescription of drug treatment and monitoring of compliance with the prescribed treatment, monitoring and correction if necessary;
- formation of a conclusion-prognosis of psychological rehabilitation, containing information about the provided psychological services and further recommendations;
- provision of timely emergency medical aid in the event of life-threatening conditions arising during the provision of psychological rehabilitation services to the recipient of services, as well as calling an emergency (urgent) medical aid team and providing emergency medical aid to the recipient of services before its arrival.

The number of active enterprises of sanatorium, recreation, arts and entertainment by regions, 2020

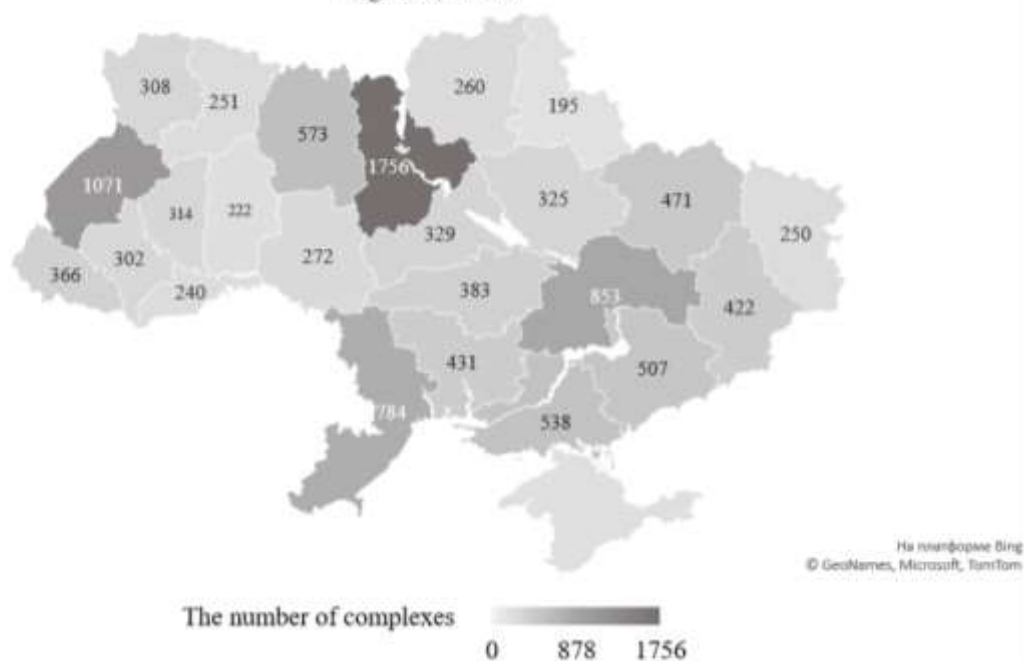


Fig. (2). Number of sanatorium-resort and health facilities, art, sports, entertainment, and recreation enterprises by region, 2020
Source: formed by the authors based on Ukrstat (2020); Ukrainian Research Institute. (2020).

The length of stay and the amount of rehabilitation support are determined individually based on an initial consultation with a multidisciplinary team. The rehabilitation program will be financed by state funds, monetary compensation for transport costs is offered in the amount of actual costs, confirmed by travel documents.

Therefore, Ukraine has a significant potential for providing medical services in the field of psychological rehabilitation, both at the national and international levels. The Odesa Center for Post-Burn Eye Pathology has no analogues in the world. During his work, he received thousands of foreign patients and helped restore sight to people from more than 50 countries. The Swedish-Ukrainian Angelholm Medical Center in Chernivtsi, which specializes in endoprosthesis of joints, treatment of backs and injuries, is widely known and accepts patients from Ukraine and all over the world. Ukraine is also famous for its health resorts due to its unique natural features, thermal springs, and mud. These are Transcarpathia, Truskavets, Myrhorod, Khmil'nyk, Morshyn; the resorts of Odesa, Mykolaiv, Zaporizhzhia and Kyiv region are also in demand (Bezuhla et al., 2022; Ignatieva et al., 2022).

The diversity of Ukraine's potential for the development of health and medical tourism makes it necessary to develop a unified approach that would allow fully identification and realization the potential of Ukraine as a comprehensive destination on the psychological rehabilitation tourism market. Clustering of health and medical tourism based on a spatial approach with a clear specialization of the regions of Ukraine can become a strategic planning tool in the process of post-war reconstruction of our country. In order to assess the prospects of clustering of health and medical tourism in

Ukraine on the basis of spatial modeling, it is important to assess the concentration of sanatorium-resort facilities, recreation complexes, art, sports, and entertainment enterprises in the regions of Ukraine based on the generalization of analytical and open statistical information (Fig. 2).

4. DISCUSSION

For Ukraine to reach the international level and attract foreign patients, the issue of obtaining a certificate of compliance with international standards - Joint Commission International (JCI), QHR, etc. - is a pressing issue. To date, JCI has accreditation in 39 countries. more than 300 public and private healthcare organizations, which dramatically increases their prestige. It acts as a guarantor of the highest quality of medical care, patient safety, and the use of correct treatment methods.

The issue of the development of information and communication tools for medical tourism is acute: this is the creation of an Internet platform with a list of all private and state medical institutions capable of providing medical services to foreign citizens; advertising in foreign mass media; promotion of exhibition activities, participation in congresses and conferences abroad. It is important to develop close cooperation with providers of medical services, who organize the selection of clinics and specialists, prepare and translate medical and financial documentation, resolve issues of accommodation and relocation, and organize transfers. For successful communication with clients, it is necessary to minimize the language barrier between the patient, his attending physician and the service staff, creating conditions for staff motivation to learn foreign languages. It is vitally

important to work with medical personnel, for whom the norm of behavior should be a respectful, benevolent attitude towards the patient and a high culture of communication and comfort in the ward, which contributes to the creation of conditions for psychological and physical comfort. Therefore, the need to introduce a high international standard of service into medical practice remains relevant.

Today, Ukraine is undergoing a series of transformational processes, which allows it to find a place in the world economic system and become competitive in all spheres of economic activity. The post-war restoration of human capital in the regions of Ukraine should be carried out using the tools of psychological rehabilitation, as well as necessarily on the basis of sustainable development. The rehabilitation direction of tourism which is aimed at restoring lost body functions as a result of injury, stroke, paralysis and other pathological processes, creates a promising sector of the tourism market in Ukraine nowadays. Medical tourists spend on average 5-10 times more than regular tourists, stay in the host country for 2-3 weeks in the case of inbound tourism, and are more likely to travel with companions or family, making the field of medical tourism extremely liquid and attractive for representatives of both private business and state institutions (Eurostat, 2022; Sharma et al., 2020).

It should be noted that, in accordance with the limitations of this study, certain types of health care facilities were not taken into account. Statistical data indicate a particularly dense concentration of sanatoriums, health resorts, as well as art, sports, entertainment and recreation enterprises in the regions with access to the seas (part of which is currently under occupation) - these are Odesa (784), Mykolaiv (431), Kherson (538), Donetsk (422) and Zaporizhzhya (507) regions, which also have significant reserves of natural health and wellness resources.

The issue of the development of information and communication tools for medical tourism is acute: this is the creation of an Internet platform with a list of all private and state medical institutions capable of providing medical services to foreign citizens; advertising in foreign mass media; promotion of exhibition activities, participation in congresses and conferences abroad.

The potential of Ukraine in the provision of high-quality health care and medical services is significant. There are all prerequisites for becoming an active participant at the relevant international level. To improve the management of the development of health and medical tourism, a clustering tool is proposed. The regions of Ukraine are divided into five groups according to the level of development of the resource and material and technical base of medical tourism and health tourism, each of which has a clear specialization and target group of tourists. All this will improve the strategic promotion of domestic tourist destinations at the international level, improve service and allow more effective cooperation with online platforms and aggregators of the relevant tourist destinations.

5. CONCLUSION

Psychological rehabilitation as a direction of medical tourism in today's conditions deserves special attention. Since,

for example, in the Dnipropetrovsk region, there is not a single institution included into the Register of entities providing psychological rehabilitation services for military, the feasibility of creating a corresponding program on the basis of medical and health complexes (e.g., sanatoriums) has been proven.

The amount of expenses for various types of medical and rehabilitation care in the health care system of Ukraine was studied. Inpatient medical and rehabilitation care accounts for 34.19% of the total structure of current health care expenditures. Outpatient medical and rehabilitation care takes second place and accounts for 19.74% of current costs. Other medical and rehabilitation assistance amounts to 4.23%, day medical and rehabilitation care accounts for 1.45% of current health care costs (Ukrstat, 2021).

The presence of a significant disparity in the regional distribution of institutions that provide psychological rehabilitation to veterans was determined. As of the beginning of 2023, not a single institution is included in the national register of such institutions in the Donetsk, Luhansk, Kherson, and Dnipropetrovsk regions. We consider it expedient and timely to create centers for the provision of psychological rehabilitation for veterans and their family members on the basis of medical and recreational complexes.

It was determined that for the development and tourism of the rehabilitation direction of medical tourism, it is necessary to proceed from the position of a new concept of the formation of psychological rehabilitation programs. They should provide not only inpatient medical and preventive measures, but also excursion and sports routes, entertainment programs, comfortable and client-oriented conditions. In other words, it is necessary to adapt the receiving of psychological rehabilitation services to the needs of the modern tourist, as this is successfully implemented throughout the world through public-private partnerships.

CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflict of interest

REFERENCES

- Abdul-Rahman, M. N., Hassan, T. H., Abdou, A. H., Abdelmoaty, M. A., Saleh, M. I., & Salem, A. E. (2023). Responding to tourists' intentions to revisit medical destinations in the post-COVID-19 era through the promotion of their clinical trust and well-being. *Sustainability (Switzerland)*, 15(3) doi: 10.3390/su15032399
- Aristizábal Torres, D., Barrera Rodríguez, A. M., & Echeverri Gutiérrez, P. A. (2022). COVID-19 in business, management, and economics: Research perspectives and bibliometric analysis. *Brazilian Administration Review*, 19(3), e220016. <https://doi.org/10.1590/1807-7692bar2022220016>
- Babov, K. D., Dmytriyeva, H. O., Tykhokhid, L. V., & Havlovs'kyi, O. D. (2019). Likuvál'no-ozdorovchyy turyzm – odyń iz suchasnykh napryamkiv pidvysychennya efektyvnosti diyal'nosti sanatorno-kurortnoyi sfery [Health tourism is one of the modern directions of increasing the effectiveness of sanatorium and resort activities]. *Medychna reabilitatsiya, kurortolohiya, fizioterapiya*, no.2, 5-9. DOI 10.32618/J19MRBPH25 [In Ukrainian]
- Bezuhla, L., Koshkaldá, I., Perevozova, I., Kasian, S., & Hrechanyk, N. (2022). Marketing Management of the Regional Ecotourism Infrastructure. *International Journal of Industrial Engineering and Production Research*, 33 (1) :129-139. Retrieved from: <http://ijiepr.iust.ac.ir/article-1-1370-en.html>

- Bezuhla, L., Bieloborodova, M., Bondarenko, L., & Herasymenko, T. (2023). Recreation Areas Optimisation and Nature Exploitation in Urban Ecosystems. *Studia Regionalne i Lokalne*, 2023 (3), 55-68. DOI: 10.7366/1509499539304
- Bieloborodova, M., Voloshin, V., Belopolsky, N., Bessonova, S., & Bondarenko, L. (2021). Testing the Environmental Kuznets Curve as an indicator for ecological tourism active development in Ukraine, 15th International Conference *Monitoring of Geological Processes and Ecological Condition of the Environment*, p. 1-5. DOI: 10.3997/2214-4609.20215K2010
- Biswas, T., & Rai, A. (2023). Analysis of spatial patterns and driving factors of domestic medical tourism demand in north East India. *GeoJournal*, 88(3), 3163-3181. doi:10.1007/s10708-022-10798-y
- Cabinet of Ministers of Ukraine. (2017). Postanova vid 27.12.2017 no. 1057 «Pro zatverdzhennya Poryadku provedennya psikhologichnykh reabilitatsiyi postrazhdalychk uchasnykiv Revolyutsiyi Hidnosti, uchasnykiv antyterrorystychnoyi operatsiyi ta osib, yaki zdiysnyvaly zakhody iz zabezpechennya natsional'noyi bezpeky i oborony, vidsichi i strymuvannya zbroynoyi ahresiyi Rosiy's'koyi Federatsiyi u Donets'kiy ta Luhans'kiy oblastiakh, chleniv yikh simy ta chleniv simy zahybylykh (pomerlykh) takykh osib» [“On approval of the Procedure for psychological rehabilitation of injured participants of the Revolution of Dignity, participants of the anti-terrorist operation and persons who carried out measures to ensure national security and defense, repulse and deter armed aggression of the Russian Federation in the Donetsk and Luhansk regions, their family members and family members of the dead (deceased) of such persons”]. Retrieved from: <https://zakon.rada.gov.ua/laws/show/497-2017-%D0%BF#Text> [In Ukrainian]
- Cabinet of Ministers of Ukraine. (2018). Postanova vid 05.12.2018 no. 1021 «Pro zatverdzhennya Derzhavnoyi tsil'ovoyi prohramy z medychnoyi, fizychnoyi reabilitatsiyi ta psykhosotsial'noyi readaptatsiyi postrazhdalychk uchasnykiv Revolyutsiyi Hidnosti, uchasnykiv antyterrorystychnoyi operatsiyi ta osib, yaki braly uchast' u zdiysnenni zakhodiv iz zabezpechennya natsional'noyi bezpeky i oborony, vidsichi i strymuvannya zbroynoyi ahresiyi rf v Donets'kiy ta Luhans'kiy oblastiakh, zabezpechenni yikh zdiysnennya, na period do 2023 roku» [“On the approval of the State target program for medical, physical rehabilitation and psychosocial readaptation of the injured participants of the Revolution of Dignity, participants of the anti-terrorist operation and persons who participated in the implementation of measures to ensure national security and defense, fight back and containment of armed aggression of the Russian Federation in the Donetsk and Luhansk regions, ensuring their implementation, for the period until 2023”]. Retrieved from: <https://zakon.rada.gov.ua/laws/show/1021-2018-%D0%BF#Text> [In Ukrainian]
- Campra, M., Riva, P., Oricchio, G., & Brescia, V. (2022). Bibliometric analysis of medical tourism, *Health Services Management Research*, no.35(3), 172-188. DOI: 10.1177/09514848211011738
- Department of the Nature Reserve Fund, Ministry of Environmental Protection and Natural Resources of Ukraine (2021). Analiz ploshch pryrodno-zapovidnoho fondu Ukrayiny v rozrizi administratyvno-terytorial'nykh odynits' za 2020 rik [Analysis of the areas of the nature conservation fund of Ukraine by administrative-territorial units for 2020]. Available at: <https://wownature.in.ua/wp-content/uploads/2021/05/Dovidka-PZF-2020-V3.0-.pdf> (in Ukrainian)
- Eurostat. (2022). Tourism trips of Europeans. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Tourism_trip-s_of_Europeans
- Halasyuk, S. (2023). Kontseptual'ni pidkhody do vyznachennya terminu «likuval'no-ozdorovchyyi turyzm» [Conceptual approaches to the definition of the term "medical and health tourism"], *Ekonomika ta suspil'stvo – Economics and Society*, no. 47. <https://doi.org/10.32782/2524-0072/2023-47-8> [In Ukrainian]
- Hal'kiv L., Shehuka H., & Mazuryk, E. (2020). Medychnyy turyzm v Pol'shchi: statystychnyy ta upravlins'kyy rakurs [Medical tourism in Poland: statistical and managerial perspective], *Visnyk Natsional'noho universytetu «Lviv's'ka politekhnika» - Bulletin of the Lviv Polytechnic National University*, no. 1 (4), 142–150. [In Ukrainian]
- Haponenko, H., Yevtushenko, O., & Shamara, I. (2022). Current trends and ways of further development of the medical tourism market in Ukraine. *The Journal of V. N. Karazin Kharkiv National University. Series: International Relations. Economics. Country Studies. Tourism*, (15), 81-92. <https://doi.org/10.26565/2310-9513-2022-15-09>
- Ignatieva, I., Serbenivska, A., Orel, A., Bieloborodova, M., & Bondarenko, L. (2022) Innovative Approaches in the System of Regional Development Strategizing. *Review of Economics and Finance*, vol. 20.2022, 605-611. Retrieved from: <https://refpress.org/ref-vol20-a69/> DOI: <https://doi.org/10.55365/1923.x2022.20.69>
- Koshkald, I., Anopriienko, T., Klochko, T., Bieloborodova, M., & Bessonova, A. (2022) The Comprehensive Plan of the Territory Spatial Development as a Prospective Plan of United Territorial Communities Development. *Review of Economics and Finance*, 20.2022, 617-622. available at: <https://refpress.org/ref-vol20-a71/> DOI: <https://doi.org/10.55365/1923.x2022.20.71>
- Majeed, S., & Gon Kim, W. (2023). Emerging trends in wellness tourism: A scoping review. *Journal of Hospitality and Tourism Insights*, 6(2), 853-873. <https://doi.org/10.1108/JHTI-02-2022-0046>
- Marcolin, C., Becker, J. L., Wild, F., Schiavi, G., & Behr, A. (2019). Business analytics in tourism: Uncovering knowledge from crowds. *Brazilian Administration Review*, 16(2), e180136. <https://doi.org/10.1590/1807-7692bar2019180136>
- Ministry of Health of Ukraine and USAID (2022). The needs of the population in mental health services and best practices in the provision of services in developed countries (Within the initiative of the First Lady of Ukraine Olena Zelenska to create a National Program of Mental Health and Psychosocial Support). Retrieved from: <http://surl.li/emudn> [In Ukrainian]
- Ministry of Social Policy of Ukraine (2022). Sanatorium-resort treatment of war veterans. Retrieved from: <http://surl.li/gshgj> [In Ukrainian]
- Ministry of Veterans Affairs of Ukraine (2023). Treatment and rehabilitation. Retrieved from: <https://mva.gov.ua/ua/veteranam/likuvannya-ta-reabilitaciya> [In Ukrainian]
- Pasieka, S., Kolokolchukova, I., Morozova, O. Krushynska, A., Krasnodied, T. & Popova, T. (2021). The potential of tourist and recreational clusters in European space. *Geojournal of Tourism and Geosites*, 39, 1488 – 1500. DOI: 10.30892/gtg.394sp120-793
- Radets'ka, L.V., Laba, I.O., Smachilo, A.I. et al. (2020). Osoblivosti proyaviv boyovikh stresovikh rozladiv u poranenikh viys'kovosluzhbovtziv Zbroynikh Sil Ukraïni – uchasnikiv boyovikh diy [Particularities of fighting stress disorders among wounded military servicemen of the Defense Forces of Ukraine - participants of fighting actions]. *Medsestrinstvo - Nursing*, (40), 23-26. [In Ukrainian]
- Sharma A., Vishraj B., Ahlawat J., Mittal T., & Mittal M. (2020). Impact of COVID-19 outbreak over medical tourism. *IOSR Journal of Dental and Medical Sciences*, 19(5), 56–58. <https://doi.org/10.9790/0853-1905145658>
- Sharko, O., Sharko, M., Liubchuk, O., Krapivina, G., Gonchar, O., Advokatova, N., & Zaitseva, O. (2023) Building an Intelligent System for Managing Emigration Labor Resources in Conditions of Uncertainty of Military Actions Based on Markov Chains, *CEUR Workshop Proceedings*, 3403, 375-386.
- Shvets, A. V., Horishna, O. V., Kikh, A. Y., Ivantzova, G. V., Gorshkov, O. O., & Richka, O. V. (2021). Peculiarities of the organization of psycho-medical rehabilitation of servicemen in NATO member countries and partnership for peace countries. *Ukrainian Journal of Military Medicine*, 2(4), 26-39. [https://doi.org/10.46847/ujmm.2021.4\(2\)-026](https://doi.org/10.46847/ujmm.2021.4(2)-026)
- Smiesova, V., Pylypenko, A., Ivanova, M., & Karpenko, R. (2019). Economic and institutional conditions for implementation of economic interests in the countries of the world. *Montenegrin Journal of Economics*, 15(4), 75-86. <https://doi.org/10.14254/1800-5845/2019.15-4.6>
- Tkachuk L., & Saychuk, V. (2019). Innovatsiyno-investytsiyna polityka yak instrument modernizatsiyi turystychno-rekreatsiynoho kompleksu Ukrayiny: perspektyvy rozvytku klasteriv medychnoho turyzmu [Innovation and investment policy as a tool for modernization of the tourism and recreation complex of Ukraine: prospects for the development of clusters of medical tourism]. *Naukovi zapysky Ternopil's'koho natsional'noho pedahohichnoho universytetu imeni*

- Volodymyra Hnatyuka. *Ser. Heohrafiya*, 2(47), 109–115. <https://doi.org/10.32782/2415-8801/2020-2.12> (in Ukrainian)
- Turski, I., Mashika, H., Tkachenko, T., Khmara, M., Komarnitskiy, I., & Oliinyk, M. (2021). Medical Tourism: Analysis of the State of International Tourism and Prospects for Domestic Development, *Universal Journal of Public Health*, vol. 9, no. 2, 27 – 34. DOI: 10.13189/ujph.2021.090201
- Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine. (2020). Map of sanatoriums and resorts in Ukraine. Available at: <https://kurort.gov.ua/category/derzhavna-forma-vlasnosti/> (in Ukrainian)
- Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine (2022). Official website. Retrieved from: <https://kurort.gov.ua/en/>
- Ukrstat (2020) Number of activ enterprises by region of Ukraine and by type of economic activity Available at: https://ukrstat.gov.ua/operativ/operativ2014/kap/kap_u/arh_kap_u.html
- Ukrstat (2021). Experimental healthcare account in Ukraine based on the international system of healthcare accounts (SHA 2011). Retrieved from: https://www.ukrstat.gov.ua/operativ/operativ2022/oz_rik/exp_r_oz_2020.xlsx
- UNWTO (2018). Exploring health tourism. Retrieved from: <https://www.unwto.org/global/publication/exploring-health-tourism>
- Verkhovna Rada Ukrayiny (1992). Law of Ukraine “On social and legal protection of military and their family members”. Retrieved from: <https://zakon.rada.gov.ua/laws/show/2011-12#Text> [In Ukrainian]
- World Health Organization (2023). Rehabilitation. Retrieved from: <https://www.who.int/news-room/fact-sheets/detail/rehabilitation>
- Yong-Jin A. L., Jinwon K., Seongsoo J. (2021). Intertemporal Tourism Clusters and Community Resilience. *The Professional Geographer*, 73(3), 567-572, DOI: 10.1080/00330124.2021.1871768
- Zhelyuk, T., & Matsyk, V. (2021). Medychnyy turizm, novi napryamy ta mozhlyvosti: makroekonomichni ta rehional'ni aspekty [Medical tourism, new directions and opportunities: macroeconomic and regional aspects.]. *Rehional'ni aspekty rozvytku produktyvnykh syl Ukrayiny*, 26, 17-27. <https://doi.org/10.35774/rarrrpsu2021.26.017> (in Ukrainian)

Received: Feb 02, 2024

Revised: Feb 09, 2024

Accepted: Feb 15, 2024

Copyright © 2024– All Rights Reserved

This is an open-access article.