

NEW TRENDS IN HEALTH TOURISM DEVELOPMENT OF IVANO-FRANKIVSK REGION IN UKRAINE

Oleksandr Hladkyi*, Tetiana Tkachenko**, Tetiana Shparaga*** & Volodymyr Kulivnuk****

Abstract

The article discusses essence and new trends of health tourism development in Ivano-Frankivsk region of Ukraine. Literature review is based on comprehensive analysis of Ukrainian and European scientific investigations connected with problems of health treatment, medical and rehabilitation studies as well as with health improvement via tourism. The different types of health tourism as well as the difference between wellness tourism and medical tourism are disclosed. The wide characteristic of health tourism potential in Ivano-Frankivsk region of Ukraine is proposed. The comprehensive analysis of health tourism development in Ivano-Frankivsk region is highlighted. The dynamics of tourism attendance in Ivano-Frankivsk region as well as the number of tourists served by tour operators and travel agents in this region are defined. The dynamics of tourist tax revenues in Ivano-Frankivsk region and different types of tourist activities in the Ivano-Frankivsk region are explored. The number of tourists who visited the Ivano-Frankivsk region for health tourism is calculated. The number of sanatoriums, health resorts, medical and health facilities of Ivano-Frankivsk region are revealed.

Keywords: Health Tourism; Development Strategy; Ukraine; Ivano-Frankivsk Region.

NOVAS TENDÊNCIAS NO DESENVOLVIMENTO DO TURISMO DE SAÚDE DA REGIÃO DE IVANO-FRANKIVSK NA UCRÂNIA**Resumo**

O artigo discute a essência e as novas tendências do desenvolvimento do turismo de saúde na região de Ivano-Frankivsk na Ucrânia. A revisão bibliográfica baseia-se numa análise abrangente das investigações científicas ucranianas e europeias relacionadas com problemas de tratamento de saúde, estudos médicos e de reabilitação, bem como com a melhoria da saúde através do turismo. Os diferentes tipos de turismo de saúde, bem como a diferença entre turismo de bem-estar e turismo médico, são divulgados. Propõe-se o reconhecimento do amplo potencial do turismo de saúde na região de Ivano-Frankivsk na Ucrânia. Destaca-se a análise abrangente do desenvolvimento do turismo de saúde na região de Ivano-Frankivsk. São definidas e analisadas a dinâmica da assistência turística na região de Ivano-Frankivsk, bem como o número de turistas servidos por operadores turísticos e agentes de viagens nesta região. Na sequência, são exploradas a dinâmica das receitas fiscais do turismo, em seus diferentes tipos de atividades turísticas da região, bem como é calculado o número de turistas que visitaram a região de Ivano-Frankivsk para turismo de saúde. Por último, é revelado o número de sanatórios, estâncias de saúde, instalações médicas e de saúde da região de Ivano-Frankivsk.

Palavras-chave: Turismo de Saúde; Estratégia de Desenvolvimento; Ucrânia; Região de Ivano-Frankivsk.

NUEVAS TENDENCIAS EN EL DESARROLLO DEL TURISMO DE SALUD DE LA REGIÓN DE IVANO-FRANKIVSK EN UCRANIA**Resumen**

El artículo analiza la esencia y las nuevas tendencias del desarrollo del turismo de salud en la región ucraniana de Ivano-Frankivsk. La revisión de la literatura se basa en un análisis exhaustivo de las investigaciones científicas ucranianas y europeas relacionadas con los problemas del tratamiento de la salud, los estudios médicos y de rehabilitación, así como con la mejora de la salud a través del turismo. Se revelan los diferentes tipos de turismo de salud, así como la diferencia entre el turismo de bienestar y el turismo médico. Se propone la amplia característica del potencial del turismo de salud en la región de Ivano-Frankivsk de Ucrania. Se destaca el análisis exhaustivo del desarrollo del turismo de salud en la región de Ivano-Frankivsk. Se define la dinámica de la asistencia turística en la región de Ivano-Frankivsk, así como el número de turistas atendidos por los operadores turísticos y las agencias de viajes en esta región. Se explora la dinámica de los ingresos fiscales por turismo en la región de Ivano-Frankivsk y los diferentes tipos de actividades turísticas en la región de Ivano-Frankivsk. Se calcula el número de turistas que visitaron la región de Ivano-Frankivsk para hacer turismo de salud. Por fin, se revela el número de sanatorios, balnearios, instalaciones médicas y sanitarias de la región de Ivano-Frankivsk.

Palabras clave: Turismo de Salud; Estrategia de Desarrollo; Ucrania; Región de Ivano-Frankivsk.



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1 INTRODUCTION

Every year the popularity of health tourism is growing, and more and more people around the world are discovering new opportunities for this type of tourism (Hladkyi, 2019; 2020). Therefore, health tourism performs all important social functions related to treatment, disease prevention and various activities aimed at protecting the health of the population as Kilivnuk et al. (2021).

From an economic point of view, the introduction of this type of tourism for the state is what allows you to enter new markets for tourism services and, thus, to receive more income according to Bordun and Malskaya (2018).

Yet, the health tourism segment is still not well defined as Volkova et al. (2018) said, with differences based on geographical and linguistic characteristics and the large and wide variety of related cultural traditions according to Rutinsky and Stetsyuk (2010). Furthermore, data is fragmented and limited as Hladkyi O. et al. (2021).

Health tourism is considered nowadays to be an emerging, global, complex and rapidly changing segment (its service volumes rises 5-7% each year) that needs to be comprehended to a greater extent in order to leverage opportunities and better address challenges according to Tkachenko and Hladkyi (2019).

This investigation is devoted to market of health tourism in Ivano-Frankivsk region of Ukraine, as one of the new alternative types of tourism, as well as entities operating on it according to Lyubitseva, et al. (2007) and Perederko (2018).

This study will investigate specific objectives of health tourism development in Ivano-Frankivsk region of Ukraine with deep precisions research of dynamics of tourism attendance and tourist tax revenues as well as with advanced research of number of tourists served by tour operators and travel agents, number of tourists who visited the Ivano-Frankivsk region for health tourism. The different types of tourist activities in the Ivano-Frankivsk region as well as different medical and health facilities, sanatoriums and health resorts will run through deep precisions analysis also.

2 THEORETICAL REVIEW

2.1 The Relevance of Health Tourism Development in an Expert Community

Health tourism is one of the most promising types of tourism at the present stage. It is developing due to significant resources: the seacoast, hot, warm and cold mineral springs, medicinal estuarine deposits of mud

and forests. Interest in health tourism is constantly growing, which is largely due to demographic trends.

According to Volkova et al. (2018), health tourism is one of the leading places in the tourism industry, as a significant increase in income of economically developed countries, the development of transport, environmental pollution due to industrial development and active promotion of healthy lifestyles makes many seek health and recreation in others, environmentally friendly favorable regions.

In recent years, due to the globalization process, which has resulted in the blurring of borders between countries, a special tourist flow has formed in the world people who go for treatment abroad and every year this flow is growing. Currently, the cost of certain health services in different countries is not the same, which is quite logical, given the state of development of national economies, demographic and social situation in the country and so on.

The rising cost of treatment in developed countries has stimulated the emergence of additional requirements: quality treatment at low prices and vivid impressions of visiting a new country. The high cost of health care in the developed world has become a serious problem not only for patients but also for their employers, social funds, insurance systems and countries.

At the same time, according to Didenko and Zhuchenko (2016), Ukraine, having a reputation as a provider of health services with good value for money, can become a promising area of health tourism in Europe and the world, so the study of this issue is of great interest in academia.

Studies by tourism experts have shown that health tourism has a special place in the system of global relations. Today, the market for travel services is the most valued opportunity to restore health during exciting tourist trips.

From the end of the 19th to the beginning of the 20th century, there was intensive development of commercial activity in the field of medical services, so-called cross-border trips "for health" appeared, which became a new direction of tourist activity. According to Bordun and Malskaya (2018), the fast pace of life, many stressful situations, increasing the flow of information, the unfavorable environmental situation in most countries encourage people to turn to health tourism.

Hladkyi (2020) adds that health tourism includes tourist trips, where the main motivating factor for tourists is the desire to maintain and improve the state, which is defined by the complex concept of "health". It should be noted that the term "health" in the modern interpretation is much broader than the generally

accepted notion of health as a state of the body free from disease, physical defects and dysfunctions.

The World Health Organization charter defines the term “health” as “not the absence of disease as such or of physical disabilities, but of a state of complete physical, mental and social well-being”. Achieving the highest level of health is one of the basic rights of everyone, regardless of race, religion, political beliefs, economic or social status.

According to Kiliivnuk et al. (2021), the term “health-related tourism” is used to describe the direction of health-oriented tourism. In addition, a large number of terms are used to define the activities covered by the concept of “health-related tourism”.

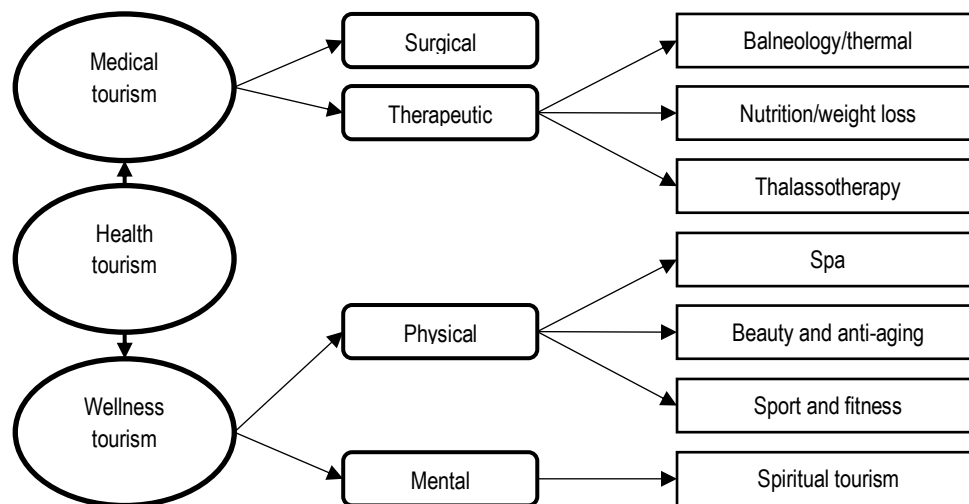
Among them are both widespread health tourism, medical tourism, and relatively new, sometimes exotic:

holistic tourism, wellness tourism, spa tourism. Although these terms are sometimes interchangeable, in most cases each of these terms has different concepts.

Babkin (2008) defines health tourism as an activity characterized by the movement of residents and non-residents within or outside the state borders for a period of not less than 20 hours and not more than 6 months for health purposes, in order to prevent various diseases of the human body.

Health tourism covers those types of tourism which have as a primary motivation, the contribution to physical, mental and/or spiritual health through medical and wellness-based activities which increase the capacity of individuals to satisfy their own needs and function better as individuals in their environment and society (Figure 1).

Figure 1. Types of health tourism.



Source: Hladkyi et al. (2019).

Health tourism is the umbrella term for the subtypes: wellness tourism and medical tourism. Medical tourism is often compared to wellness. In particular, some scientists do not clearly distinguish between new types of tourism activities related to treatment and rehabilitation. It is still clear that these concepts are not identical (table 1).

According to Nagirnyak (2006), wellness tourism is a type of tourism activity which aims to improve and balance all of the main domains of human life including physical, mental, emotional, occupational, intellectual and spiritual enhancing activities such as fitness, healthy eating, relaxation, pampering and healing treatments. Wellness is more of a psychological than a physical state.

According to Hladkyi (2021), medical tourism is a type of tourism activity which involves the use of evidence-based medical healing resources and services. This may include diagnosis, treatment, cure, prevention and rehabilitation.

Vedmid (2013) investigated the 3 main features of health tourism. There are:

- length of stay, which must be at least three weeks, regardless of the type of resort and illness;
- high cost of accommodation and treatment – the usual treatment at the resorts is expensive, so this type of tourism is designed for wealthy clients;
- age – according to statistics, the resorts are most often visited by people of older age, although the rest of the resorts recently also chosen by middle-aged people suffering from the disease. The choice is made between resorts that specialize in the treatment of a particular disease, and resorts of mixed type.

According to Tkachenko et al. (2021), the supply of health tourism is already very wide from hotels with spas facilities, to wellness hotels and thermal baths to specialized hospitals and clinics. Depending on the purpose of the trip, tourists visit various health facilities.

Table 1. Understanding the difference between wellness tourism and medical tourism.

Reactive	Proactive
Medical tourism	Wellness tourism
Travel to receive treatment for a diagnosed disease, ailment or condition or to seek enhancement.	Travel to maintain, manage or improve health and wellbeing.
Motivated by a desire for lower cost of care, higher quality care, better access to care, and/or care not available at home.	Motivated by a desire for healthy living, disease prevention, stress reduction, management of poor lifestyle habits, and/or authentic experiences.
Activities are reactive to illnesses, medically necessary, invasive and/or overseen by a doctor.	Activities are proactive, voluntary, noninvasive and nonmedical in nature.

Source: Own elaboration.

Medical tourism is understood as a type of activity aimed at providing services for diagnosis, treatment and prevention of diseases outside the country of residence. This type of tourism involves visiting hospitals, treatment and diagnostic centers and other medical institutions.

According to Vedmid (2012), health tourism involves traveling and visiting sanatoriums and other facilities (spa, wellness hotels, thermal baths) that offer mostly health services, which include a wide range from therapeutic to a variety of fitness and relaxation programs.

Health tourism is very important for people. First, it is not only entertaining, but also cognitive activity (change of environment involves the study of new culture, new traditions, history). Secondly, it is the treatment and prevention of health, visiting various water sources, mud treatments, sports and other health-improving activities. Favorable natural and climatic conditions accompany the recovery of the human body. To do this, it is necessary to protect pristine areas of nature that are valuable for science, economics and culture.

3 METHODOLOGY

This paper is a case study which deals with the theoretical review of health tourism conceptualities as well as with making a proposal of systematization directions and methods for health tourism deep precisions investigation within the frames of Ivano-Frankivsk region of Ukraine.

The article presents comprehensive investigation of theoretical and practical aspects of the organization of health tourism in Ivano-Frankivsk region and the strategy of its development.

The purpose of the investigation is a theoretical analysis of the features of the functioning of health tourism in the international tourism market, world trends in the development of health tourism, methodology and methods of health tourism investigations.

Analysis of the current state of tourism development in Ivano-Frankivsk region, identification of problems, opportunities and prospects for the development of the region in this direction.

The methodological basis of this study is a general scientific dialectical method. The main research methods are: the method of literary, illustrative, descriptive, analytical and scientific synthesis.

The experience of health tourism development in particular region of Ukraine can be used in the practice of other regions, cities and areas of Ukraine as well as can be used for further organization of health treatment, medical, preventive care and rehabilitation tourism.

The scientific novelty of this article consists in the attempts of the first comprehensive analysis of advantages and disadvantages in organization of health tourism development in different regions, sanatoriums, rest homes and other medical and health facilities of general profile in Ukraine.

4 RESULTS AND DISCUSSION

4.1 Characteristic of Health Tourism Potential in Ivano-Frankivsk Region

Ivano-Frankivsk region is located in the southwest of Ukraine. It borders Lviv region in the north, Chernivtsi region in the south, Ternopil region in the east and Zakarpattia region in the west. In the extreme south of Ivano-Frankivsk region is the state border of Ukraine with Romania.

The area of the region is 13.9 thousand sq. Km, which is 2.4% of the territory of Ukraine. In addition, it is one of the two highest regions of Ukraine (along with Transcarpathians), as a third of its territory is occupied by the Eastern Carpathians.

Rutinsky and Stetsyuk (2010) declared, that Ivano-Frankivsk region is divided into 14 administrative districts, has 15 cities, of which 5 – regional subordination: Ivano-Frankivsk, Bolekhiv, Kolomyia,

Yaremche, Kalush. As of 2020, the population was 1,368,000. The region is characterized by a significant population density – 97 people per 1 sq.km. The most populated is Tysmenytsia district, the least populated is Verkhovyna district.

Ivano-Frankivsk region is relatively small in territory, but by the nature of the relief it is one of the most picturesque in Ukraine. One third of the territory is occupied by the Carpathian Mountains, and two thirds – the foothills and plains. The plain zone is located in the northeast and adjoins the Dniester. Here is the regional center – the city of Ivano-Frankivsk (255 m above sea level). The mountainous part of the region is occupied by the Eastern Carpathians, which are divided into massifs *Gorgany, Chornohora, Pokutsko-Bukovynsky Carpathians, Hrynyavy, Chyvchyny*.

On the Chornohirsky ridge, on the border with Transcarpathia rises the highest mountain in Ukraine Hoverla (2061 m). Climatic conditions – mild winters with an average temperature of -5°C and warm summers (+18°C) – contribute to the organization of year-round recreation and treatment. Snow on the slopes of the Carpathians lies for several months, which is important for the development of skiing.

Danilchuk et al. (2003) said, that water resources of the region are surface and groundwater, mineral water sources. The region ranks third in the country in terms of water reserves. In Ivano-Frankivsk region flows more than 8.3 thousand rivers and streams, here are the main runoff of such large rivers as the Dniester and Prut.

There are many lakes of different origins in the region (the largest are Lake Nesamovite and Lake Maricheika). Lakes, rivers, and picturesque waterfalls (on the rivers Prut, Rostocha, Zhenets, etc.) are attractive for tourism and recreation. An important recreational resource is mineral waters – iodobromine and sulfide (Gorodenkivsky, Rohatyn districts), calcium-sodium and sodium chloride (Kosiv, Kalush, Dolyna, Verkhovyna and Rozhnyativ districts) carbon dioxide (Kosiv district).

Mineral waters are not used at full capacity; the level of development is much less than their potential. A significant range of therapeutic characteristics of mineral waters, as well as the presence in the field of thermal waters and peloids (Rohatyn district) allow to treat and rehabilitate in the region more than 80 thousand people a year.

According to Lyubitseva et al. (2007), Ivano-Frankivsk region is also rich in forest resources (forest cover – 39.6%, and in some places the figure reaches 60-65%), they are the basis for many types of recreation and tourism. About 13.4% of the region's territory is protected, 438 territories and objects of the NPF are objects of recreation and tourism.

Taking into account the norms of ecologically permissible loads on landscapes, in the Ivano-Frankivsk region it is established that the average permissible load on the territory is 36 people/ha. The highest capacity of recreational tourist areas is in Halych district (19 persons/ha), Nadvirna (18 persons/ha), Dolyna (17 persons/ha), Kosiv (16 persons/ha), and Verkhovyna (15 persons/ha) districts.

Bayev et al. (2021) said, there are 5 recreational and tourist areas in Ivano-Frankivsk region, which outline the types of recreation and tourism for which there are the most favorable conditions for development. The territory of the region is extremely favorable for the successful development of ecological, cognitive, green and sports tourism, and the mountainous part opens up opportunities for caving, mountaineering and others.

As Malskaya and Antonyuk (2008) said, Ivano-Frankivsk region is also rich in numerous social and cultural-historical tourist resources, in particular:

- more than 3.5 thousand cultural and historical monuments
- ancient castles and unique churches and other outstanding monuments;
- 5 ancient cities, where there are entire complexes of monuments, such as cities such as Halych, Kolomyia, as well as Tysmenytsia, Snyatyn and Tlumach;
- biosocial resources related to the activities and birth of prominent people in national history and culture;
- places where outstanding historical events took place;
- holding various festivals in the region (Kolomyia, Sheshory, etc.);
- centers of traditional crafts (wood carving, carpet weaving, Easter painting, pottery, etc.), such settlements as Kolomyia, Kutly, Sheshory, Kosiv, Yavoriv.

All the above resources are a powerful basis for the development of many types of recreation and tourism, in particular, cognitive, sentimental, and importantly – not only local but also national and international importance. Consider in more detail the tourist potential of the region in terms of tourist and recreational areas:

North. A wide variety of tourist resources are found in large numbers in the Northern tourist area. This district includes Halytsky, Rohatynsky and part of Kalush district. Here is the Galician National Nature Park, where there are many rare and unique species of flora and fauna.

Extremely favorable conditions for opportunities for the development of health and recreation. In the Rohatyn region there are sources of mineral waters saturated with hydrogen sulfide, as well as deposits of

therapeutic peat mud. In Halychyna there are deposits of iodine-bromine waters (Pidmykhailivske mineral deposit in the villages of Pukiv, Cherche and Bukachivtsi).

Northeast district. This is the second district in terms of tourist opportunities, which includes Tlumach, Horodenka and part of Tysmenytsia districts. The Dniester Valley is an extremely attractive recreational resource here. In Tysmenytsia district there is an object of NRF "Kozakova dolyna tract" – it is a landscape reserve.

There is also a botanical monument "Masok Tract" in Horodenkivshchyna. The recreational complex of the region is based on hydrogen sulfide and boron sources of mineral waters, located in Horodenka district. The North-Eastern recreational area has all the prerequisites for the development, primarily of water, as well as cognitive, health, as well as recreational tourism as Perederko (2018) said.

South-Eastern district. This district occupies the entire territory of Kosiv district, as well as parts of Sniatyn and Kolomyia districts. Climatic conditions here are comfortable. The recreational complex of the district is represented by mineral water sources, which are ferrous and iodo-bromine in composition, as well as there are waters rich in organic matter, their deposits are located in Kosiv district. In the Kolomyia region there are deposits of hydrocarbonate mineral waters. The cultural and historical resources of the North-Eastern region include a large number of archeological and architectural monuments of local and national importance.

South. This resource area is also interesting for tourism. The territory of the Southern Resource District almost coincides with the administrative boundaries of the Verkhovyna District. The area is rich in deposits of hydrogen sulfide mineral waters, and there are springs with high content of organic matter.

Cultural and historical resources include a large number of architectural monuments of local and national importance. The village of Kryvorivnya is known for the Ivan Franko Museum. Here it is advisable to develop ski, extreme, ecological and cognitive types of tourism will also be successful (Perederko, 2018).

South-Western district. It covers part of Nadvirna, Bohorodchany and part of Rozhnyativ districts. There are various types of recreational resources for the development of many types of recreation and tourism. The area is located on the territory of Gorgan and covers part of the Pokutsko-Bukovynian Carpathians. The climate here belongs to the cool and cold zones. The recreational complex was developed on the basis of mineral water deposits, which are represented by the following types: hydrogen sulfide, iodine-bromine, bicarbonate, and with a high content of organic matter.

The South-Western region has all the prerequisites for the development of recreational, cognitive, skiing and ecological tourism as Perederko (2018) said.

Western district. Occupies part of Dolyna and Rozhnyativ districts. The climatic zones of the district are cool and cold. The area also has a source of mineral water with a high content of organic matter. Valuable for tourism is the town of Magura (1365m). There are 175 monuments in the district. Today the sanatorium "Dzherelo Prykarpattya" and the sanatorium complex "Pearl of the Carpathians" work here.

Also, in the area there is a recreation center "High Pass", where there are all the conditions for skiing and in general for winter tourism. Horseback riding or sleigh rides are offered as entertainment for tourists in the Dovbush Rocks area. The western region can successfully develop cognitive, sacred, as well as health tourism.

Central district. It occupies parts of Kolomyia, Tysmenytsia, Bohorodchany, Kalush, Rozhnyativ and Nadvirna districts. Tourism is relatively the least developed here. The climate has three zones: comfortable, warm and cool. Here is a source of mineral water with a bicarbonate composition.

The main river is Limnytsia, and the real decoration of the district is the forests, which occupy 28% of the territory. According to Tkachenko and Hladkyi (2019), the territory has significant prospects for the successful development of health and recreation, ecological, sacred, as well as cognitive and ski tourism.

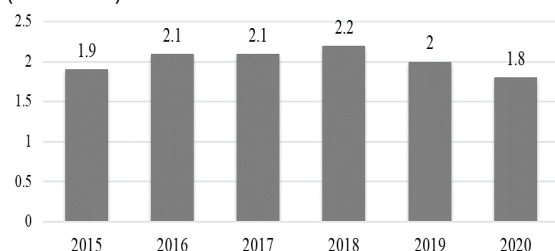
The huge number of tourist and recreational resources in Ivano-Frankivsk region determines the development of many types of tourism. The tourist potential of geomorphological resources contributes to the development of ski and speleological tourism, climatic and balneal resources – the development of health and recreation, landscape resources – green and ecological tourism, also cultural tourism.

3.2 Analysis of Health Tourism Development in Ivano-Frankivsk Region

Ivano-Frankivsk region has long held the championship among the most attractive regions of Ukraine. Today, many types of tourism are developing here, and therefore a developed network of enterprises serving the tourism industry. Strong tourist potential proves that the development of the tourism industry is one of the highest priorities of the region's economy.

According to official data of regional council, in 2020 Ivano-Frankivsk region was visited by 1.8 million tourists and excursionists, which is 10% less than in 2019 (Fig. 2). The fall is due to the COVID-19 pandemic forecasted by Perederko (2018).

Figure 2. Dynamics of tourism attendance in Ivano-Frankivsk region, million people (2015-2017) and forecasting (2019-2020)



Source: Perederko (2018).

According to the Main Department of Statistics in Ivano-Frankivsk region, in 2020 the number of tourists served by tour operators and travel agents is 62479, which is 2% less than in 2019 (table 2).

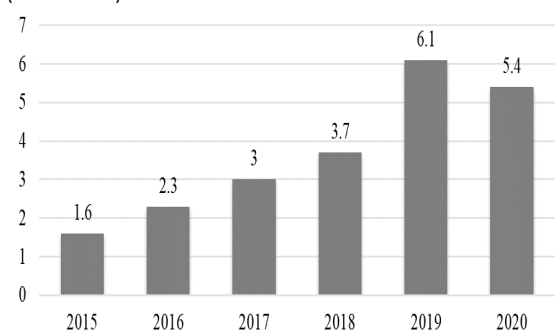
In 2020, the tourist tax of the region reached UAH 5,4 million which is 12% less than the previous year (Figure 3). The leaders of the collection are Yaremche (3.8 million), Ivano-Frankivsk (1.3 million), as well as Kosiv (172 thousand) and Bohorodchany (110 thousand), Kolomyia OTG collected 113 thousand UAH.

Table 2. Number of tourists served by tour operators and travel agents (2000-2017) and forecasting (2019-2020)

	Number of tourists served by tour operators and travel agents, in total	Including		
		incoming (foreign) tourists	outbound tourists	domestic tourists
2000	30104	3401	1820	24883
2001	30443	3094	1984	25365
2002	44406	3490	3848	37068
2003	54099	4270	3013	46816
2004	58378	2559	3661	52158
2005	169890	20089	6789	143012
2006	326276	8621	5775	311880
2007	1268923	1072	8752	1259099
2008	595031	1739	9719	583573
2009	511397	2222	8135	501040
2010	53333	4528	8509	40296
2011	59327	3256	8816	47255
2012	110162	3171	9681	97310
2013	77666	5750	12025	59891
2014	63848	567	7609	55672
2015	65885	1324	6853	57708
2016	79973	2473	8588	68912
2017	73309	3190	14340	55779
2018*	55781	3393	18816	33572
2019*	63545	2295	25146	36104
2020*	62479	1569	10430	50480

Source: *Collected and forecasted by Perederko (2018).

Figure 3. Dynamics of tourist tax revenues in Ivano-Frankivsk region, UAH million (2015-2017) and forecasting (2019-2020)



Source: Perederko (2018).

Faisal and Dhusia (2021) said as a result of the introduction of comprehensive quarantine in the first half of 2020, there was a decrease in business activity, restrictions on passenger traffic, the closure of the hotel and restaurant industry, and so on.

The losses of the tourism sector of Ukraine due to the coronavirus were estimated at \$1.5 billion. Due to the unfavorable epidemiological situation caused by the spread of COVID-19 in Ukraine, the tourism industry of Ivano-Frankivsk region also suffered losses.

As a result of the introduction of quarantine, the resumption of the industry began only in mid-summer 2020. The development of tourism was negatively affected by the large-scale June flood and the lack of a full-fledged railway connection with other regions of the country as Kulivnuk et al. (2019).

In 2020, the pandemic of COVID-19, led to a global collapse of international and domestic tourism as

In 2018, a large-scale sociological survey was conducted in the field of tourism in Ivano-Frankivsk region in order to study domestic and foreign tourist flows of Prykarpattia, determine the competitive advantages of the region, identify demand for tourist services and forecast future requests for tourist infrastructure.

Social portrait of a tourist of Ivano-Frankivsk region based on investigations of Britchenko, Romanchenko and Hladkyi (2019) is:

- 88% of tourists and excursionists of Ivano-Frankivsk region are citizens of Ukraine. Most guests came from Kyiv (22.5%), Lviv (10.2%) and Dnipropetrovsk (6.4%) regions, while the share of residents of Prykarpattia who chose Ivano-Frankivsk for recreation is 6.9%.

- The share of foreigners is 10%. Most visitors are recorded from the following countries – Poland, Lithuania, Moldova, Germany, Italy, Czech Republic, Romania.

- 55% of guests of Ivano-Frankivsk region – tourists, 45% – excursionists.

- 49% – young people (aged 18-35 years), 55% traveled as a couple, and 63% – married couples. 43% – employees, 29% entrepreneurs or business owners.

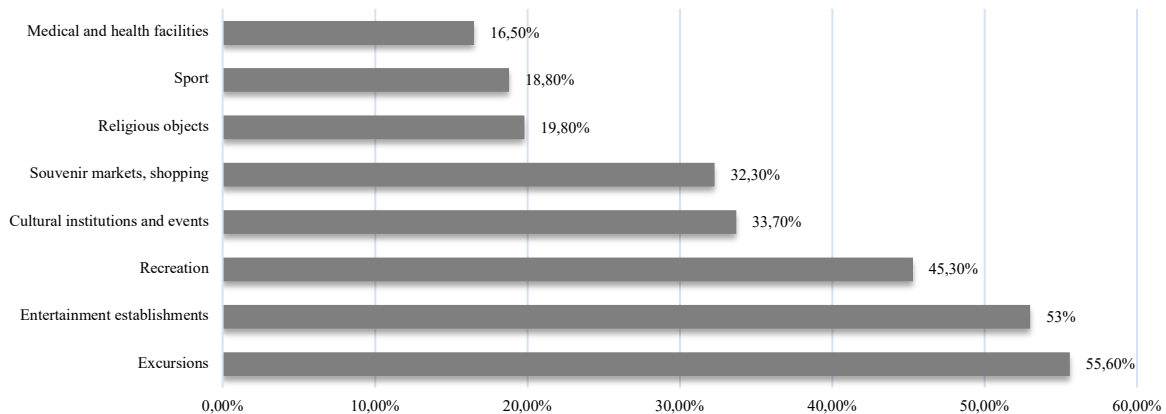
- Mostly in the Ivano-Frankivsk region, tourists rested for 3-4 days (35%). 17% of guests – 7 or more days, 16% – 5 days, 12% – two days.

- The average daily cost of a visitor is 1260 hryvnias. The average daily expenses of an excursionist – 1100 hryvnias, a tourist – 1400 hryvnias. Ukrainian citizens spent an average of UAH 1,200 per day, while foreigners spent UAH 2,200.

Ivano-Frankivsk region is a destination of recreational (spa and wellness) tourism. At the same time, most often among the types of tourism respondents mentioned cultural and cognitive (39%), skiing and mountain tourism (34%).

Respondents named excursions (56%), visits to entertainment establishments (53%) and active recreation (45%) as the most common types of leisure, 16.5% named health tourism (Figure 4).

Figure 4. Types of tourist activities in the Ivano-Frankivsk region

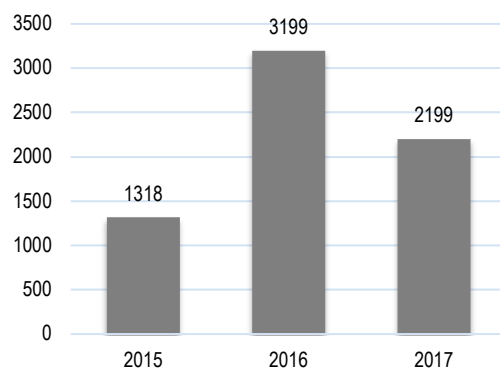


Source: Hladkyi Oleksandr et al. (2021).

The latest statistics on the number of tourists who visited the Ivano-Frankivsk region for health tourism dates back to 2017 (Figure 5). The indicators shown in Fig. 5, quite disappointing, given the high resort potential of this region.

According to Gladkey and Mirzodaeva (2018), it can be stated that the development of the tourism industry of Ivano-Frankivsk region in recent years has been characterized by positive and sustainable dynamics, as a result of which this industry plays an increasingly important role in socio-economic development of the region, but in 2020-2021 the development of tourism was negatively affected by the COVID-19 pandemic. Tourism in Ivano-Frankivsk region is becoming one of the most important parts of the regional economy. with which you can improve the economic development of the region.

Figure 5. Number of tourists who visited the Ivano-Frankivsk region for health tourism.



Source: authors investigations based on Kravets O.M., Ryabev A.A. (2017).

3.3 The Current State of Health Tourism Infrastructure in Ivano-Frankivsk Region

According to Perederko (2018), there are more than 500 tourist and recreational establishments with 20,000 places in the region, accommodation services are also provided by more than 800 farmsteads of rural tourism. More than 200 tourism entities are registered, of which 37 have a tour operator license. There are 9 tourist information centers.

According to Rutinsky and Stetsyuk (2010), the development of tourism in the region is facilitated by the functioning of collective accommodation facilities. In 2020, 50 collective accommodation facilities (legal entities and their separate subdivisions) were provided in the area of temporary accommodation, of which 70% were hotels and similar accommodation facilities, 26% were accommodation facilities for vacation and other temporary accommodation and 4 % - other means of accommodation.

During the period 2015-2018, the number of collective accommodation establishments increased

from 230 to 274, or by 19%; including the number of hotels increased from 200 to 244, or 22%. The number of registered natural persons-entrepreneurs in the field of rural tourism increased from 179 to 306, or by 71%.

During 2020, 123.9 thousand people were in collective accommodation facilities, of which 4.8 thousand (3.9% of the total number) were foreign citizens. The vast majority of visitors (96.5%) preferred hotels and similar accommodation.

Most tourists stayed in the collective accommodation facilities of Yaremche (57% of their total number) and Ivano-Frankivsk (36.5%) as 16. Perederko (2018) said.

The health sphere of the region is represented by sanatoriums, boarding houses with treatment, medical and health centers. In Ivano-Frankivsk region there are ten resorts, 30 sanatoriums of general and specialized profile with 3.6 thousand places. Climatic treatment, mineral baths, therapeutic muds are used for resort therapy, on the basis of which it is possible to develop balneological and spa tourism (table 3).

Table 3. Sanatoriums and health resorts of Ivano-Frankivsk region

	Sanatoriums and boarding houses with treatment		Sanatoriums-dispensaries		Holiday homes and pensions		Bases and other recreation facilities	
	total	number of beds, thousand	total	number of beds, thousand	total	number of beds, thousand	total	number of beds, thousand
2010	15	2,3	6	0,5	3	0,2	12	0,8
2011	15	2,4	6	0,5	2	0,1	12	0,9
2012	14	2,0	3	0,2	3	0,3	13	1,1
2013	15	2,3	3	0,2	2	0,1	12	1,1
2014	14	2,3	3	0,2	2	0,1	12	1,1
2015	15	2,3	1	0,1	2	0,1	12	1,1
2016	15	2,3	1	0,0	2	0,1	12	1,2
2017	15	2,3	1	0,0	2	0,1	12	1,2

Source: Perederko V.P. (2018).

According to Kravets & Ryabev (2017) there are ten resorts in the region. Climatic treatment and mineral baths are used for spa therapy. Among the resorts are the low-mountain Tatariv, Yaremche and Mykulychyn of the Yaremche City Council, Myslivka and Novy Mizun of the Dolyna District, Sheshory of the Kosiv District and Kosiv, the highlands of Vorokhta and Yablunytzia of the Yaremche City Council and the balneo-mud foothill of the Cherche Rohatyn district (table 4).

Yaremche is a famous climatic resort located in the Carpathian National Nature Park. The resort includes the following settlements: Yaremche, town. Vorokhta, village Mikulichin, village Tatariv, village Polyanytsia. The famous ski resort "Bukovel" is located 35 kilometers from Yaremche. Yaremche has more than 40 tourist and recreational facilities and sanatoriums, more than 50 green tourism facilities. Climatic treatment, mineral baths, etc. are used for spa therapy.

Vorokhta is a climatic resort located in the Carpathian National National Park. Reduced atmospheric pressure, high intensity of solar radiation with sufficient ultraviolet rays, clean air contributes to the treatment of respiratory diseases. Yablunytzia is a high-altitude ski and climatic resort of the Carpathians, which is also located in the Carpathian National National Park as Lyubitseva, Pankova and Stafyichuk (2007) said.

Mykulychyn is a low-altitude climatic resort located in the Prut River valley. The longest village in Ukraine, the total length is 44 km. The village developed as a recreation center with numerous recreation facilities, as well as a health resort. In particular, the village was famous for the treatment of sheep serum. During the independence of Ukraine, a number of boarding houses were built that meet the highest recreational requirements.

Table 4. Medical and health facilities of Ivano-Frankivsk region

Institution	Location	Profile
Sanatorium "Prykarpatsky"	Yaremche	treatment of respiratory diseases
Sanatoriý "Snizhynka"	Yaremche	pulmonological profile.
Sanatorium "Berehynia"	Yaremche	climatic, balneological
Hutsulshchyna Medical and Health Complex	Yaremche	climatic, balneological
Sanatorium "Vodospad"	Yaremche	climatic, balneological
Sanatorium-dispensary "Yaremche"	Yaremche	climatic, balneological, mud
Medical and health complex "Mountain"	Yablunytsya village	climatic, balneological
Sanatorium "Kremintsi"	Tatariv village	treatment of diseases of the broncho-pulmonary, nervous systems, upper respiratory tract.
Sanatorium "Mountain air"	Vorokhta village	pulmonological profile. treatment of tuberculosis.
Sanatorium "Smerichka"	Vorokhta village	pulmonological profile.
Medical and health complex "Carpathian dawns"	Kosiv	treatment of pulmonary, cardiovascular, neurological diseases.
Sanatorium "Kosiv"	Smodna village, Kosiv district	treatment of upper respiratory tract and lung diseases
Sanatorium "Sheshory"	Sheshory village, Kosiv district	treatment of gastrointestinal diseases and respiratory system
Boarding house "Sinogora"	Guta village, Bohorodchany district	climatic, balneological
Sanatorium "Cherche"	Cherche village, Rohatyn district	diseases and inflammatory processes of the spine, joints, disorders of the nervous system;
Sanatorium-dispensary "Mizun"	Novy Mizun village, Dolyna district	balneological (mineral water "Goryanka"), dental office, massage, sauna, pool, sports ground
Sanatorium-dispensary "Naftovyk"	Dolyna	climatic

Source: authors investigation based on: Kravets and Ryabev (2017).

Balneo-mud foothill resort of Cherche in the village of Cherche of Rohatyn district. In Opiel, the balneological and mud resort of Cherche uses hydrogen sulfide, sulphate-hydrocarbonate-calcium and sulphate-calcium healing waters, which are used for drinking and baths, as well as combined with local peat mud. It treats diseases of the musculoskeletal system, peripheral nervous system, including various types of polyarthritis, radiculitis, neuritis, as well as gynecological diseases according to Kilivnuk et al. (2021).

Myslivka is a low-altitude climatic resort. In the village of Novy Mizun, Dolyna district, there is a sanatorium "Dzherelo Prykarpattya". In the village there is one of the best sources of mineral water in Ivano-Frankivsk region – Mizunske spring. The water from the source is considered to be identical in composition to Naftus.

Guta of Bohorodchany district is the starting point of many tourist routes. In addition, it is a place for a very quiet and peaceful holiday. For winter holidays in the boarding house "Sinogora" there is a ski lift. Sinogora Hotel and Wellness Complex is located near the presidential residence in the village of Stara Guta.

Tourist resort "Bukovel" is a ski and balneological resort with modern equipment. Bukovel treats and heals people with problems of the musculoskeletal system, gastrointestinal tract and urinary tract. The institution is equipped with modern medical and diagnostic equipment. It is in the institution that the most modern X-ray equipment, ultrasound, all types of

massage, chiropractic, acupuncture, balneological treatment are used. Ski and SPA-resort "Bukovel" has the following components: recreation complex "VODA club", "Bath on firewood", SPA-center "4 seasons", SPA-center "Oasis", "Bukovel vats" according to Lyubitseva et al. (2007).

In winter, "VODA club" works in the format of a SPA-complex. The closed recreation area can accommodate about 500 visitors. The services of the complex are as follows: all-season warm pool, jacuzzi, relaxation area, spa treatments.

"Firewood bath" is located in the heart of the resort. The procedures are: warming up the feet with the help of bath brooms, aromatherapy, foot bath with sea salt, phyto-room, bath massage with brooms, contrast procedures, hot soap-birch washing, etc, according to Lyubitseva, Pankova and Stafiyuchuk (2007).

SPA-center "4 seasons" offers the following types of services: a complex of baths (classical, Finnish, Roman, hammam, hay), outdoor jacuzzi, massage technology, mud therapy and more.

SPA-center "Oasis" offers unique programs of relaxation, healing and figure correction. Services offered by SPA-center "Oasis" are: Turkish bath (hammam), Moroccan spa program, Finnish sauna, Jacuzzi for two, aromatized, phyto-salt bath, massage technology, mineral healing, treatment programs, mud treatment etc.

“Bukovel vats” have a positive effect on the functional state of the cardiovascular system, improve immunological reactivity and improve the condition of the body as a whole.

Sanatorium “Kosiv” is based on the healing salt waters of Lake Bansko in Kosovo. The specialized (special) sanatorium “Kosiv” of the Ministry of Health of Ukraine is a treatment-and-prophylactic institution that offers medical treatment of diseases of the upper respiratory tract according to Kravets and Ryabev (2017).

Sheshory Resort is located on the territory of the Hutsulshchyna National Nature Reserve, 150 m from the mineral spring.

Ivano-Frankivsk region, having great tourist potential, currently has a relatively underdeveloped tourist infrastructure, which does not allow to increase the development of foreign tourism and attract tourists from other regions of Ukraine.

The material base of tourism needs reconstruction, a significant expansion of the network of tourist facilities and services is needed. Equally important is the fact that the criterion of price-service does not correspond to reality. Another disadvantage of the service sector is that the owners of establishments that specialize in tourist services are focused on the rich consumer.

There are a large number of sanatoriums in the region. For their successful operation, they must compete with similar institutions in Romania, Germany and France. To do this, they need to invest heavily, equip with modern medical equipment and conduct marketing activities according to Kulivnuk at al. (2019).

Recently, there has been a significant revival of the hotel industry in Ivano-Frankivsk region. This is primarily due to the geographical location. The hotel industry is especially growing in such settlements of the region as Yaremche, Kolomyia, Kosiv, Sheshory and others.

However, today the hotel industry of the region does not meet all the global requirements, quality rooms are only a few dozens, while others want to be better equipped and have a larger area. This area requires more investment and assistance from the state.

There are a number of significant problems and obstacles to the effective development of tourism in Ivano-Frankivsk region, the solution of which in turn will contribute to the development of tourism infrastructure in the region, strengthening its economy and attractiveness of both domestic and foreign citizens, but recently in Ivano-Frankivsk region considerable attention is paid to improving the condition and development of recreational and tourist resources.

Table 5. The main results and their correlation with the theory.

N	The main results	Their correlation with the theory
1	Ivano-Frankivsk region is rich in natural, historical, social and economic and infrastructure resources for health tourism development	Regions with plenty of natural, historical, social and economic and infrastructure resources has huge development of sanatoriums and other health tourism facilities (spa, wellness hotels, thermal baths) that offer mostly health services, which include a wide range from therapeutic to a variety of fitness and relaxation programs.
2	Dynamics of tourism attendance as well as dynamics of tourist tax revenues in Ivano-Frankivsk region is positive and growth steadily (except of COVID-19 pandemic years). There are average 1.8 million tourists and excursionists are visited this regions last time and their tourist tax revenues was more than 6,000 UAH million	These figures show us some declining of health tourism development indices during COVID-19 pandemic years. But right now we can see extreme arising interest to health tourism services in this region due to post-COVID period of time and difficulties with economic&social situation in Ukraine
3	Ivano-Frankivsk region has more than 30000 number of tourists served by tour operators and travel agents last time	Ivano-Frankivsk region can serve more than 100000 number of tourists. It's tourist capacity is not come to a close due to wide range of different resources.
4	16.50% of total types of tourist activities in the Ivano-Frankivsk region belongs to medical and health facilities	These figures show us the role of health tourism development in Ivano-Frankivsk region among other types of tourist activities. We have a low level of tourist activities in medical and health facilities right now. But we have a possibility to arise it using some additional parts of tourist activities in sport, recreation, entertainment establishments (active ones), excursions (constitutional walk) and other types of activities.
5	Ivano-Frankivsk region has more than 15 sanatoriums and boarding houses with treatment, 1 sanatorium-dispensary, 2 holiday homes and pensions and 12 bases and other recreation facilities	Ivano-Frankivsk region has a huge development of health tourism facilities that offer unique health treatment services
6	Medical and health facilities of Ivano-Frankivsk region are ready for treatment of respiratory, pulmonological diseases using climatic, balneological, mud procedures etc., as well as of nervous systems, cardiovascular, neurological and gastrointestinal diseases mostly	Medical and health facilities of Ivano-Frankivsk are specialized on climatic therapy, balneology as well as on treatment of heart and nervous deceases, gastroenterology, pulmonology, inflammatory processes of the spine and joints, etc.

Source: own elaboration.

4 CONCLUSIONS

The tourism industry is one of the most promising in the development of Ivano-Frankivsk region in the near future. Ivano-Frankivsk region is one of the most attractive and popular tourist and recreational regions of Ukraine. The development of tourism and recreation is facilitated by a variety of natural factors, mild climate, many recreational areas, historical and cultural monuments, nature reserves.

Determining natural recreational and tourist resources of the region are the mountain climate and landscape, as well as the presence of areas with a relatively favorable ecological situation. The location of the region in the Center of Europe and close proximity to the countries of the European Union promotes the development of border and international tourism.

In Ivano-Frankivsk region there are ten resorts, there are 30 sanatoriums of general and specialized profile for 3.6 thousand places. Climatic treatment and mineral baths are used for spa therapy.

The main resorts are the lowland Tatariv, Yaremche and Mykulychyn of the Yaremche City Council, Myslivka and Novy Mizun of the Dolyna District, Kosiv and Sheshory of the Kosiv District, the highlands of Vorokhta and Yablunytsia of the Yaremche City Council and the balneo-mud foothill resort of the Cherkasy district. Among the mineral springs of the region, the most famous is the source of water "Goryanka", similar in action to Truskavets "Naftus", in the village. New Mizun of Dolyna district. The healing properties of the source "Burkut" (Verkhovyna district) for the treatment of internal organs were known in the XIX century.

There are a number of significant problems and obstacles to the effective development of tourism in Ivano-Frankivsk region, the solution of which in turn will contribute to the development of tourism infrastructure in the region, strengthening its economy and attractiveness of both domestic and foreign citizens, but recently in Ivano-Frankivsk region considerable attention is paid to improving the condition and development of recreational and tourist resources.

REFERENCES

Babkin, A.V. (2008). *Spetsyal'nye vydy turyzma. [Special types of tourism]*. Rostov-on-Don: Phoenix. (in Rus.).
Bayev, V. V., Bakhov, I. S., Bezpala, O. V., Veres, K. O., & Mirzodaieva, T. V. (2021). The concept of a multilevel model of Ukraine's capacity as a place of medical tourism: development factors and prospects. *Revista Turismo Estudos e Práticas - RTEP/UERN*; 1, 1-13.
Bordun, O.Yu., & Malskaya, M.P. (2018). *Medychnyy turyzm: teoriya ta praktyka [Medical tourism: Theory and*

practice]. Kyiv: Center for Educational Literature. (in Ukr.).
Bitchenko, I., Romanchenko, T. T., & Hladkyi, O. V. (2019). Potential of sustainable regional development in view of smart specialization. *Economic Studies journal. Bulgarian Academy of Sciences*, 28(6), 88- 109.
Danilchuk, V.F., Aleinikova, G.M., & Bovsunovskaya, A.Ya. (2003). *Metodolohiya otsinky rekreatsinykh terytoriy [Methodology of assessment of recreational areas]*. Donetsk: Donetsk Insitute of Tourism Business. (in Ukr.).
Didenko, K.D., & Zhuchenko, V.G. (2016). Medychnyy turyzm v Ukrayini: suchasnyy stan ta perspektyvy rozvytku [Medical tourism in Ukraine: current status and prospects]. *Naukovyy visnyk Kherson's'koho derzhavnoho universytetu [Scientific Bulletin of Kherson State University]*, 16(4), 101–105. (in Ukr.).
Faisal, M., & Dhusia, D. K. (2021). Impacto da Pandemia (Covid-19) no Setor Turístico da Índia. *Anais Brasileiros de Estudos Turísticos - ABET*, 11, Single Iss.
Gladkey, A., & Mirzodaeva, T. (2018). The development of recreation sciences as the main theoretical fundamentals of tourism investigations: *Dniprop. Univer. bulletin: Geology, geography*, 26(1), 33-40.
Hladkyi, O. V. (2019). Health tourism as a brand-new sector of tourism business development in Ukraine. Turystychnyy ta hotel'no-restorannyi biznes v Ukrayini: problemy rozvytku ta rehulyuvannya [Tourism and Hotel and Restaurant Business in Ukraine: Problems of Development and Regulation]: *Proceedings of the X International Scientific and Practical Conference*, 1, 14-17. (in Ukrainian).
Hladkyi, O.V. (2020). Osnovni peredumovy ta pryorityety rozvytku Wellness i SPA turyzmu Ukrayini [The main prerequisites and priorities for the development of Wellness and SPA tourism in Ukraine]. *Perspektyvy rozvytku turyzmu v Ukrayini ta v sviti: upravlinnya, tekhnolohiyi, modeli [Prospects for tourism development in Ukraine and in the world: management, technologies, models]*: *Lutsk: Lutsk National Technical Univesity*, 127-141. (in Ukr.).
Hladkyi, O., Postovitenko, K., Rudyi, Y., Marchuk, O., & Kulivnuk, V. (2019). The development of health tourism destination in Vinnytsia region of Ukraine. Medical sciences: history, the present time, the future, EU experience. *Proceedings of the International scientific and practical conference. Wloclawek: Izdevnieciba Baltija Publ.*, 183-186.
Hladkyi, O., Sakhno, S., Khadzhyanova, O., Dakal, A., & Kapranova, L. (2021). The Essence and Basic Product Selling Strategies in Recreation and Health Tourism. *Proceedings of International Conference on Sustainable, Circular Management and Environmental Engineering (ISCMEE 2021)*. Odesa: E3S Web of Conferences, 255. P. 01033.
Kulivnuk, V.S., Hladkyi, O.V., Golyachenko, A.O., Rudy, Yu. Y., & Ruda, I.V. (2021). Kurortolohiya: istorychni, orhanizatsiyni ta klinichni aspekty [Balneology: historical, organizational and clinical aspects]. *Kyiv: Center for Educational Literature*. (in Ukr.).

- Kulivnuk, V., Rudyk, S., Hladkyi, O., & Tkachenko, T. (2019). Use of information technologies for clinical decision-making in medical rehabilitation. *Proceedings of 2019 International Scientific-Practical Conference Problems of Infocommunications. Science and Technology PIC S&T'2019*, 2, 520-523.
- Kravets, O.M., & Ryabev, A.A. (2017). *Kurortolohiya. [Balneology]*. Kharkiv: Beketov Kharkiv National University of Municipal Economy. (in Ukr.).
- Lyubitseva, O.O., Pankova, E.V., & Stafyichuk, V.I. (2007). *Turystychni resursy Ukrainy [Tourist resources of Ukraine]*. Kyiv: Alterpress. (in Ukr.).
- Malskaya, M.P., & Antonyuk, N.V. (2008). *Mizhnarodnyy turyzm i sfera posluh. [International tourism and services]*. Kyiv: Znannya. (in Ukr.).
- Nagimyak, Z. (2006). *Turyzm - tse piznannya svitu i biznes [Tourism is knowledge of the world and business]. Turystychnyy biznes v Ukraini. Shlyakh peremohy. [Tourism business in Ukraine. The way to victory]*. Kyiv, 10-12. (in Ukr.).
- Perederko, V.P. (2018). Analiz potokiv vnutrishn'oho turyzmu v Ivano-Frankivs'kiy oblasti u 2016–2017 rr. za danyymi mobil'noho zv'yazku. [Analysis of domestic tourism flows in Ivano-Frankivsk region in 2016-2017 according to cellular phone data]. *Visnyk Odes'koho natsional'noho universytetu. Seriya Ekonomika [Bulletin of Odessa National University. Economics series]*, 23(6/71), 36-47. (in Ukr.).
- Rutinsky, M.Y., & Stetsyuk, O.V. (2010). *Turystychnyy kompleks Karpat's'koho rehionu Ukrainy [Tourist complex of the Carpathian region of Ukraine]*. Chernivtsi: Knyhi-XXI. (in Ukr.).
- Tkachenko, T. I., & Hladkyi, O. V. (2019). Features of the international market of Health tourism system services and the role of Ukraine in its development and functioning. *Ukraine and the World: the Tourism System*. Prague: Nemoros s.r.o., 110-125.
- Tkachenko, T. I., Hladkyi, O. V., & Zhuchenko, V. G. (2021). Theoretical principles of formation and selling the product of recreational and health tourism. *National Health as Determinant of Sustainable Development of Society. School of Economics and Management in Public Administration in Bratislava*, 598-615.
- Vedmid, N.I. (2012). *Klasyfikatsiya sanatorno-kurortnykh i ozdorovchykh pidpryemstv. [Classification of sanatoriums and health resorts]. Culture of the peoples of the Black Sea coast [Kul'tura narodiv Prychornomor'ya]*, 238, 9–13. (in Ukr.).
- Vedmid, N.I. (2013). *Sanatorno-kurortnyy kompleks: servisne upravlinnya [Sanatorium-resort complex: service management]*. Kyiv: Kyiv National University of Trade and Economics. (in Ukr.).
- Volkova, I.I., Parfinenko, A. Yu., & Shcherbina, V.I. (2018). *Problemy ta perspektyvy rozvytku likuval'no-ozdorovchoho turyzmu v Ukraini (u porivnyanni z krayinamy Tsentral'noyi Yevropy) [Problems and prospects of development of medical and health tourism in Ukraine (in comparison with the countries of Central Europe)]*. *Visnyk Kharkivs'koho natsional'noho universytetu imeni V. N. Karazina [Bulletin of Karazin Kharkiv National University]*, 130–135. (in Ukr.).

Table 1. CRediT author statement.

Term	Definition	Author 1	Author 2	Author 3	Author 4
Conceptualization	Ideas; formulation or evolution of overarching research goals and aims	40	10	10	40
Methodology	Development or design of methodology; creation of models	30	30	20	20
Software	Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components	0	0	0	0
Validation	Verification, whether as a part of the activity or separate, of the overall replication/ reproducibility of results/experiments and other research outputs	10	10	40	40
Formal analysis	Application of statistical, mathematical, computational, or other formal techniques to analyze or synthesize study data	50	0	0	30
Investigation	Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection	20	30	30	20
Resources	Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools	0	0	0	100
Data Curation	Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later reuse	40	40	40	0
Writing - Original Draft	Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation)	25	25	25	25
Writing - Review & Editing	Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision – including pre- or post-publication stages	25	25	25	25
Visualization	Preparation, creation and/or presentation of the published work, specifically visualization/ data presentation	25	25	25	25
Supervision	Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team	0	100	0	0

Term	Definition	Author 1	Author 2	Author 3	Author 4
Project administration	Management and coordination responsibility for the research activity planning and execution	25	25	25	25
Funding acquisition	Acquisition of the financial support for the project leading to this publication	0	0	0	0

Source: adapted from Elsevier (2022, s/p), based upon Brand et al. (2015).

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