



Faculty of Economics, University of Niš
18 October 2018

49th International Scientific Conference
QUANTITATIVE AND QUALITATIVE
ANALYSIS IN ECONOMICS

THERMOMINERAL SOURCES IN THE FUNCTION OF HEALTHCARE TOURISM IN SOUTHERN SERBIA

Jovica Mojić, PhD*

Vukašin Šušić, PhD•

Abstract: South Serbia is distinguished by the richness of thermomineral waters. Sources of thermomineral waters, their temperature and mineral properties are the basis of the development of health, and recently, they have also become the basis of wellness-tourism. The physical characteristics of these sources indicate that the waters are mostly clear, colorless and tasty, with temperatures ranging from 22-92°C, and can be classified as hypo, homeo and hyperthermal waters. The significance of these waters is multifunctional from the point of view of the development of health tourism in the thermal areas of South Serbia, basically for the development of balneotherapy, as a special, complex therapeutic discipline that acts for many factors stimulating to organism and wellness programs in order to preserve the health, mind, abilities and recreation. These are nine localities in the area of South Serbia (Bujanovacka Banja spa, Vranjska Banja spa, Kuršumlijska Banja spa, Niška Banja spa, Prolom Banja spa, Sijarinska Banja spa, Lukovska Banja spa, Tularska Banja spa and Topilo Banja spa), with sources of medicinal water and peloids, located in an ecologically healthy environment. For the present and future comprehensively considering the needs of the population in terms of vacation, recreation, prevention, treatment and rehabilitation, the prospect of development of balneo-climatic sites in South Serbia has been gradually opening. Basically, the selective product of health tourism of the spa of South Serbia includes two components, components of health and wellness components. Health tourism in the narrow sense, in addition to the basic natural factors (mineral waters, peloids, clays and climates), implies the use of other factors that improve the state of the body as a whole. Contemporary balneological treatments include factors such as change of the environment, dietetic regimes, active and passive psycho-physical rest. If necessary, during balneotherapy, other forms of therapy such as medication and physiotherapy are used. So, the basic goal of health (and wellness) tourism is, on the one hand, improving the physical health, and on the other hand, improving and maintaining mental, psychological and emotional well-being.

Key words: health tourism, balneotherapy, wellness, spa, rehabilitation.

* Business School of Vocational Studies, Niš, Serbia; ✉ jmojic17@gmail.com

• Faculty of Economics, University of Niš, Serbia; ✉ vukasin.susic@eknfak.ni.ac.rs

Introduction

The South Serbia area is located in the middle of the southern Balkans, between the former Yugoslav Republic of Macedonia (FYROM) in the south, Pirot district in the east, the districts of Rasina, Pomoravlje, and Zaječar in the north, and the districts of Kosovo - Mitrovica, and Kosovo - Pomoravlje in the west. The area covers an area of 11,308 km², which consists of the districts of Niš, Prokuplje, Leskovac and Vranje.

The entire region is dominated by the South Morava River, which is 295 km long and runs mainly south-north from the Macedonian border towards central Serbia. The stream of South Moravia is a composite valley. It makes an alternation of the valleys and basins. The first is the basin of Vranje, followed by Grdelica gorge, Leskovac basin, Pečenjece narrowing, the basin of Brestovac, the narrowing of Korvingrad, which continues to the Niš basin. After the narrowing, follow Aleksinac valley and Stalać gorge, where South Morava joins West Morava and together they form Great Morava. [7, p. 145].

In order for such a spatial unit to be attractive to tourism, it must have attractive, communicative factors, and receptive or acceptance factors as well.

The importance of thermomineral waters is multifunctional for the development of tourism, basically for the development of balneotherapy as a form of treatment. The basis of balneotherapy is mineral water, mud and climate. Modern balneotherapy is a complex therapeutic discipline that affects many factors of the body as a whole, and in its entirety includes changing the environment, dieting regime, active and passive psycho-physical rest.

The importance of thermomineral waters is multifunctional for the development of spa tourism, basically for the development of balneotherapy as a form of treatment. The basis of balneotherapy is mineral water, mud and climate. Modern balneotherapy is a complex therapeutic discipline that affects the body as a whole and generally implies a change in the environment, a diet regime, an active and passive psychological break [5, p. 14]. Spa therapies have been present since the ancient times through various forms depending on the cultural, social and political milieu they have existed in. These therapies are now rediscovered, integrated and branded to create a new global industry that uses a wide range of elements of other industries. This includes beauty, massage, tourism, architecture, sustainable development, landscaping, fashion, the food and beverage industry, fitness and complementary, conventional and traditional medicine. [1, p. 4]

In the nine thermal sites in South Serbia (Bujanovacka Banja spa, Vranjska Banja spa, Kuršumlijska Banja spa, Niška Banja spa, Prolom Banja spa, Sijarinska Banja spa, Lukovska Banja spa, Tularska Banja spa and Topilo Banja spa), in which the old Romans enjoyed, the adapted spa therapies are treating a wide range of health disorders or illnesses. The highest temperature has sources in Vranjska Banja spa (96°C), Kuršumlijska Banja spa (68°C), Niška Banja spa (37°C), etc. The thermal sources from the limestone of Mesozoic era are the prevalent ones, followed by thermal springs in the granitoid and volcanic soil of tertiary age.

Under the common name "Health tourism", in time, they were created, conditionally speaking, two groups of tourist consumers who have the same or similar way of meeting their health needs. One group of health tourism consumers is considered in the narrow sense (traditional thermalism or health resort tourism), while the second group includes health tourism consumers in a wider sense who, besides the natural healing factors, want

Thermomineral Sources in the Function of Healthcare Tourism in Southern Serbia

other types of activities, offers, programs, where preservation and improvement of health are only few of several tourists' needs.

The resource base of health tourism in the narrow sense consists of natural healing factors (thermo-mineral therapeutical properties, medicinal mud-peloids, medical infrastructure, professional personnel), while health tourism in the broader sense implies the use of all tourist attractions, which, during their stay, weekly or annually, can meet individual needs for treatment and recovery, but also for improving health and recreation.

Although the concept of wellness/spa is at least a dozen years old and is described by many as a cultural trend in the world of today's highly stressed society, especially in more developed countries, we can emphasize that wellness/spa is a continuation of thousands of years old culture of social bathing (spa, *thermae*) and other water-related activities for the preservation and improvement of human health and general inner satisfaction, in order to achieve harmony of body and mind. *Thermae*, health resort and spa, along with their services offer medical wellness / spa facilities with expert supervision, medical staff and physiotherapists. They are suitable for the rehabilitation and certain medical disorders. Besides these, wellness / spa treatments are also recommended as an efficent combination of "rejuvenation", stress relief and pleasure.

Corbin and Pangrazi (2001) [2. p. 42] define wellness as a "multidimensional state of describing the existence of positive health in an individual, such as an example of quality of life and a sense of well-being." Another definition of Muller and Kaufmann (2000) suggests that goodness is a state of health with the harmony of body, mind and spirit with self-esteem, physical fitness / beauty, healthy eating / nutrition, relaxation / meditation, mental activity / education and environment sensitivity / social contacts as basic elements.

Wellness in spas can imply different activities, and in this context, wellness means taking time for yourself outside of everyday stress and satisfying the needs of the body, spirit and soul. In addition to physical and spiritual activities, balanced nutrition and relaxation are also needed to be fully represented. Although a wellness holiday can be carried out in a health institution, it is necessary to make a clear distinction between wellness and healing, especially from the point of health policy. Therefore, it should be assumed that wellness implies "healthy" people, with the prevention as its primary goal. In addition, wellness should be distinguished with its basic package of services from disease prevention. The wellness beneficiaries can receive tretments very similar to those intended for "regular users of health services", but with the motive of preserving or improving their own health, which is not the same as for those who come for medical treatments.

The question is whether health tourism is part a of wellness tourism or vice versa. The answer is not simple. However, starting from the fact that one cannot talk about health tourism without talking about a natural healing factor or medical infrastructure, but for wellness tourism it does not have to be the case. One might conclude that wellness tourism is a broader area, but it does not include curative treatments and rehabilitation, unlike health tourism. Therefore, the opinion is that these are two different but complementary forms of tourism whose contents interweave, i.e. health tourism can and should increasingly introduce elements of wellness content into its offer, and at the destination level, as the concept of a new approach to maintenance of human health, in order to find new solutions for creating a broad competitive offer of health tourism in the wider sense.

In the spas of South Serbia, besides the classic forms of health tourism, it is possible to develop wellness / spa tourism. The introduction of new wellness / spa facilities and services implies the reconstruction of existing capacities. Also, it is necessary to separate the treatment capacities and those intended for the provision of wellness / spa services. In doing so, new wellness / spa capacities and concepts in the spas of South Serbia should be based on the rich tradition of thermal waters' healing properties.

Today, wellness / spa services are provided by the "Sense" center at Radon - Niška Banja spa and the wellness / spa center at Radan - Prolom Banja spa Hotel, while the level of services in other spas and towns are also very popular, often referred to as wellness /spa treatments.

1. Spas - climate cities

Spas are settlements that possess a series of specificities derived from the site with thermal and mineral resources and the efforts to use the sources for treatment and recreation [9, p. 24]. Functional orientation in the development of spas refers primarily to the development of healthcare and spa tourism. Regardless of this type of tourism, which is considered to be the most important, in many spas because of the existing receptive infrastructure and suprastructures, and the richness of natural and anthropogenic environmental values, other types of tourism have developed over time as excursion tourism, transit tourism, cultural tourism and more

For the development of tourism in the spas of South Serbia, natural tourist values, or thermomineral sources, are of particular importance, while the receptive capacities, due to long absence, are relatively outdated and neglected. It is, therefore, necessary to rehabilitate and reconstruct the tourist reception, infrastructure and suprastructure. That is why certain financial resources are needed, which can only be provided by accelerated privatization and fresh capital. [3. p. 24]

In addition, in spatial plans, it is necessary to isolate the spa from the recreational function. It not only does it allow for their more efficient functioning, more desirable and complete satisfaction of the demand of visitors, but it also provides the possibility to solve the problems of modernization, reconstruction of objects, forming the appropriate supplies in a more efficient and rational way, so that the success of realization of health function does not depend only on the therapeutic effect of the healing factors, but also the compliance of the entire spa environment with the demands of the sick person.

The development of a spa, as a functional-spatial entity, largely depends on the quality of their primary values and the function they have. The basic primary values of the spas of South Serbia are thermomineral sources and the basic spa environment. Thermomineral sources, its unique wealth and functions are interconnected and conditioned. They are of particular social interest, which in the further development should provide permanent protection of thermo-mineral waters and the spa environment, as a resource and as a natural good with rational use, that is harmonious and sustainable, taking into account economic interests, ecological performance and socio-cultural goals.

Due to the variety of thermo-mineral resources, in the spas of South Serbia, each of them is unique and not in competition with each other, i.e. each spa environment is unrepeatable and original. In further development, this uniqueness of the spa has to be strictly observed, with the current activities directed towards potential spa sites and complexes, with

Thermomineral Sources in the Function of Healthcare Tourism in Southern Serbia

the goal of transforming into eco-parks to preserve their ecologically healthy environment. Development programs for spa and spa complexes should be realized as soon as possible, because the pollution and urbanization of the environment brought to the accelerated process of environmental degradation, so we should preserve what is still possible to preserve. In order to achieve this, it is necessary that the future development of the spa be based on the postulates of the concept of sustainable tourism development with the aim of preserving and protecting thermal mineral resources which are, in our opinion, the following:

- Constant research of thermo-mineral resources in the direction of estimating the potentials and reserves of each available resource, as well as monitoring its exploitation;
- Optimal use of resources with the aim of ensuring its long-term exploitation and prevention of environmental degradation;
- Long-term planning, research and use of resources;
- Monitoring the use of resource at all stages of research;
- Recycling by application of heat pumps and construction of rejection systems for the exploitation of thermo-mineral resources;
- The choice of energy management - maximum savings and realization of the planned benefits,
- Education of personnel and population in the field of ecology and protection of environment and resources from accidents and other dangers.

The spas of South Serbia were created in the places of natural occurrence of thermomineral waters. That initiated the unplanned urbanization of the spa towns, whereby the protection of the spa ambient values was not taken into consideration sufficiently, and a dual problem arose, first, how to fit the modern urbanization requirements with the inherited urbanization, and the second, if there is not enough attention paid to the spa and its resources, there is a threat of great danger of uncontrolled urbanization or hyperurbanization. Previous cases, when it comes to the spa of South Serbia, are present at Niška Spa, which has a long tradition, while in other spas, Spatial and Urban Development Plans should be made, especially Prolom Spa.

Therefore, in the new programs and urban plans, the ultimate goal should be that each of the spa of South Serbia become an oasis of peace, tranquility, purity, richness of ecological health and the abundance of greenery. This can be achieved by a new business philosophy of harmonized, sustainable development, and a new and modernised approach to nature. The new urbanization, in our opinion, should include new policies and guidelines that are ecologically relevant, resulting from the new global environmental management standard ISO 14001. The application of these standards and the postulates of sustainable development in the urbanization of the spa environment, in accordance with the available and spatially distributed thermo-mineral resources, should relate to the following:

- Medical facilities should be separated from the recreational ones;
- Recreational facilities should be specially designed for a specific segment of tourists with excellent service and comfort, swimming pools and bathrooms with thermo-mineral water;
- Swimming pools and bathrooms should be architecturally and aesthetically designed with different styles and ways of using thermal mineral water, such as Turkish, Japanese, modern and similar;

- In addition to facilities using thermo-mineral water, other facilities for entertainment and recreation should be located;
- The ultimate goal in creating a spa environment, without neglecting the balneological function, is consumer satisfaction and the benefit of the domicile population, and more.

In order to develop these basic functions (healthcare and recreation), spas would have to fulfill many demands and tasks. The first requirement is to provide protection and rational use of the basic and specific phenomenon - termomineral sources, which represent the primary value and natural rarity, with the individuality as the main feature and the central point in the spatial organization of spa resorts. The second, specific requirement is the protection and improvement of the spa environment, which is the condition for maintaining their health and recreational role. The third requirement is the planned establishment of a coherent spatial balance between the building-architectural structures and the natural landscape (vegetation and park greenery), with the aim of achieving a unique and individually recognizable spa environment, i.e. visual spatial identity, which should be the image of every spa. [10, p. 145].

2. Characteristics of the spas of South Serbia

Spa tourism serves as a prevention of various diseases, but it is also directed towards recreation, sports activities, hiking and rest in nature. Spa and climatic sites in South Serbia have a long tradition, and they have always been the favorite places for rest. Most of the spas are located at the foot of the mountains, surrounded by forests, protected from strong winds, having mild climate and representing ecologically clean environments. Below are the characteristics of the spas on the territory of South Serbia:

Bujanovačka Banja Spa is located in the south of Serbia, next to the road and railway Belgrade - Skopje, 2,5 km from Bujanovac. It is 360 km from Belgrade and 14 km from Vranje. This part of the basin of Vranje is located in the upper course of South Morava, at an altitude of 400 m [4, p. 222].

The exceptional results in treatment are achieved by combining state-of-the-art medical methods with healing natural factors - thermomineral waters, medicinal mud - peloids and natural gas. Thermomineral water belongs to the category of sodium - hydro - carbonate, fluoride, sulfide and carbon - acid hyperthermia. The water temperature at the source is 43 ° C. The mud is of volcanic origin and is considered one of the best in the world. During the treatment, it has three effects, mechanical, thermal and pharmacological. Bujanovačka Banja spa is the only spa in Serbia that uses the most modern methods of exploitation of natural gas carbon dioxide in the treatment of diseases.

Vranjska Banjas Spa is located 10 km from Vranje, and 6 km from Belgrade - Skopje highway. It lies at an altitude of 380 m.

The warm mineral water of several springs in the riverbed is mixed with river water, and is thus lost for the treatment. Among the warm springs of this health resort is the "Big fountain", with a riverbed. It produces about 35 liters of water per minute, which is poorly sulfuric, alkaline-saline at a temperature of 92 °C. As cold, this water is suitable for drinking. The sump spring gives about 5.5 liters of water per minute at a temperature of 84 °C. This source supplies water with a sap water swimming pool. The iron source gives

Thermomineral Sources in the Function of Healthcare Tourism in Southern Serbia

about 7 liters of water at a temperature of 63 °C per minute. The mixed source gives the water a more complex composition and temperature of 72 °C. Its capacity exceeds 4 liters of water per minute, which supplies a mixed pool. A hot spring, whose temperature is 82 °C, comes out of the ditch in the wall, and its capacity is about 60 liters per minute. The warm springs of Vranjska Banja spa are, however, underused.

Kuršumlijska Banja spa is located on the southeastern slopes of Kopaonik. The altitude is 432-448 m. It is 11 km from Kuršumlija, 301 km from Belgrade and 81 km from Niš. The spa is reached by the main Belgrade - Niš – Priština route.

The Kuršumlijska Banja spa has several types of medicinal water: sulfuric, carbonic, alkaline and iron, temperature 14-67 °C. In the treatment, the most commonly used are sodium hydrocarbon, fluoride and sulfide hyperthermia, temperature 67 °C. Kuršumlijska Banja spa is also known for medicinal mud - peloid). With moderate climate, a natural ambience consisting of forests, attractive streams of pure water, clean air (surrounded with no industry), Kuršumlijska Banja spa is classified as a "climate hospital".

Niška Banja spa is not far located from the main road Niš - Sofia. It lies at the foot of Koritnik, the part of Suva planina, at an altitude of 248 m. It is 10 km from Niš and 250 km from Belgrade.

Natural medicinal factors in Niška Banja are mild, moderate - continental climate, thermomineral waters and natural mineral mud. Medicinal waters, originating from five sources (the "Glavno vrelo", "Suva Banja", "Školska česma", "Banjica" and "Pasjača") belong to the group of alkaline radioactive homeotherms (36-38 °C), slightly mineralized, with a capacity of 56 liters per second. The source of the "School Fountain" source is among the most radioactive in the Republic of Serbia [4, p.132].

Prolom Banja spa is located at the foot of Radan, at an altitude of 550-668 m. It is 23 km far from Kuršumlija, 290 km from Belgrade, and 82 km from Niš. The natural sources of Prolom Banja spa give water the temperature of 26.4 °C which belongs to the hydrocarbon type and has a base reaction, values of 9.0 rN, which is a real rarity in our country. There are several hydrogeological wells of depth of 160-350 m. For the treatment of digestive and kidney diseases, water is used for drinking and bathing. In Prolom Banja spa there are two hot water springs, about 950 m. The eastern or main source is in the center of the spa settlement and consists of six wells with a yield of 4.5 l /sec. of water and a temperature of 30 to 33.8 °C. The western spring or "Pupavci" is in the valley of the Deep stream, in the surroundings of Vuković village, on the outskirts of Veliko Pupavce, and it is a well B-5, with a yield of about 6.5 l /sec. of water and the temperature of 30.5 °C. The thermal waters of both sources are similar in the chemical and gas composition, since they originate from a common tank at a great depth. These are nitrogenous, medium alkaline (rN 8.4), low mineralized (337-441 mg/l), sodium hydrocarbonate, silicone hypothermia. The main balneological ingredients are: nitrogen, silicic acid and alkalinity; the role of hydrogen sulphide is negligible, while a small fraction of fluorine (below 0.2 mg/l) allows drinking water in unlimited quantities; all the waters of this type in the world contain strictly dosed quantities of fluorine, if they are allowed for drinking. The medicinal waters of Prolom Banja spa belong to the rare waters of high balneological values, which provide opportunities for very wide indications.

Sijarinska Banja spa is located on the banks of the Jablanica River and at the foot of Mount Goljak, at an altitude of 520 m. It is 50 km far from Leskovac and 330 km from

Belgrade. The natural healing factor lies in the water temperature from 32 °C to 72 °C, which springs into 18 wells at a length of 800 m, all of which are of different physical and chemical composition and temperature. There is also a radioactive-sump mud. There are two hot water geysers in the bath, one of which reaches a height of 8 m and an occasional geyser that throws water every 10 minutes [4, p. 241].

The medicinal sources of Sijarinska Banja spa are among the warmest sources in Serbia (along with Vranjska and Jošanička Banja spas). The springs are rich in thermal-mineral water that springs from crystalline shales along the northwest-southeast direction, 800 m long. The therapeutic value has 18 sources, and the entire source consists of 26 mineral resources. They run along the cracks which magma used to penetrate the surface. Many of the eruptive wires are formed from magma, and they represent the on of most favorable ways for the movement of ascendent and descendent waters. Cracks are deep and have great significance for the collection and circulation of groundwater. Due to great depths, thermomineral water is under high pressure, which enables its ascent. This explains the emergence of numerous thermal mineral resources and geysers.

All thermal-mineral waters of Sijarinska Banja spa are characterized by ions of sodium and hydrocarbons. Some have larger amounts of free carbon dioxide, and some of sulfur hydrogen. The physico-chemical analysis of water in the bathroom number four, temperature 42°C, shows that one liter of cation has the highest amount of calcium, sodium, potassium and magnesium, while one liter of anion has the highest concentration of bicarbonate, sulphate and chlorine, then silicon dioxide, aluminum and iron dioxide, free acid carbon and free sulfur hydrogen. Sijarinska Banja spa has five swimming pools, three swimming pools with mud and one with mineral water. Two basins are raised over a spring with a water temperature of 32 °C to 36 °C, while others are filled with water from the main source.

Lukovska Banja spa is located at the foothill of Kopaonik, at an altitude of 681 m. With this altitude, it is also favorable a climatic location [4, p. 278]. Warm and mineral waters appear in a scattered spring, in a narrow zone, at a length of about 400 m, on both sides of the river Štava, as well as in the river bed, which makes it difficult to sew and measure. There are two groups of springs: the western (upper spa) with 20 natural sources and two wells, and the eastern (bottom spa), with 13 natural sources and two wells. Their amount is so great that they raise the temperature in the river by 1.5 °C, and it is estimated that over 100 l/sec. of water is on all sources. Lukovska Banja spa springs differ in temperature (22-65 °C), yield, content of gases, etc. The main carriers of healing properties are carbon dioxide and hydrogen sulphide, so the action of these properties is the most efficient at the source. The warmest waters are of a similar chemical composition. The sources of the upper spa are characterized by larger amounts of free carbon dioxide and hydrogen sulphide, and have slightly less mineralization than the sources of the bottom spa.

Tularska Banja spa is located in the area of Gornja Jablanica in the western part of south Pomoravlje. Tularska Banja spa is located in a green basin surrounded by forests. Tular is at the place where the Medevac and Brajin rivers meet, forming the Tular river. It is located at an altitude above 550 m. Unlike mineral springs Sijarinska Banja spa, springs and waters around Tular have not yet gained their place and importance in the tourist-balneological offer of municipalities. They consist of two groups of sources: with alkaline-acidic waters (the source of "Kisela voda" with five smaller sources) and with salty water ("Salty water" with several smaller sources).

Thermomineral Sources in the Function of Healthcare Tourism in Southern Serbia

Topilo Banja spa is located 25 km north of Niš in the Toponica river valley at 630 m above sea level. Although this is a relatively small and new Serbian spa, it quickly recalled her medicinal properties. The warm, mineral water springs (34 °C) from about 18 sources, with a power of 10 m/sec.

3. Development of health tourism

Health tourism implies a temporary change of place of residence for the purpose of preventive health care, rehabilitation, the use of various types of cosmetic services, as well as the most complex medical procedures. According to the level of services within health tourism, those that stand out as specific aspects of this type of tourism are: medical, traditional spa tourism (tourism of thermo-mineral springs), spa and wellness tourism. Traditional spa tourism is becoming increasingly intertwined with other aspects of health tourism, especially wellness. Modern spas, through the provision of treatment and other professional services, are increasingly promoting wellness, so today, the spa industry is considered to be a part of the wellness sector. Wellness is one of the new trends, not only in health tourism, but also in modern tourism. It is defined as a state of complete physical, mental and social well-being, and includes attitudes and actions that prevent disease, improve health and quality of life and lead to physical and mental balance. [11, p. 241].

The selective offer of health tourism in South Serbia depends on the overall development of the spa towns themselves, above all from the conditions of successful organization of spa treatment, that is, wellness, spa and recreational tourism, and is conditioned by the existence of a large number of thermomineral, radioactive and gaseous waters, but it depends on the consciousness itself and responsibility for the health of potential beneficiaries. The selective and complex tourist offer of a spa requires a more comprehensive and versatile approach to current and future users, defined as wellbeing, which includes the renewal of the mind, body and soul, which essentially makes the orientation of European spas, and a special market segment. The successful development of spa tourism and better structured integral and complex tourist offer, should be based on such economic bases that will encompass several market segments. In that sense, and from the standpoint of designing an integrated and complex tourism product, it is necessary to define several priorities for the development of these sites, based on comparative advantages, namely:

- Specialist orientation of wellness spa and health spa offerings, based on healing, natural and health factors with long-standing tradition and highly educated staff;
- Possibility of organizing combined spa-mountain and spa-lake tourism, in the immediate vicinity, including the rich cultural, historical and ethnographic heritage;
- Program enrichment of spa sites, combining traditional with modern, throughout the year;
- Favorable geographical position with an environmentally sound environment and a specific homemade gastronomy;
- Relatively low cost of therapeutic and other programs;
- Environmental protection, i.e. general requirements for the regulation and maintenance of the environmental quality of the spa town;

In other words, it is about the possibilities of harmonizing, above all, two basic segments of selective tourist offer of spa sites, health and recreational functions. Think of the variety of Niška Banja spa tourism offer, as the first tourist spa in South Serbia, which has

both health and recreational facilities and facilities, as well as Prolom Banja. On the other hand, Sijarinska Banja still needs to build health and tourist facilities according to the requirements of the modern tourist market. The antagonism and contradiction between these two functions of spa tourism, which is also evident in Niška Banja, should be resolved by precisely defining the responsibilities of the health and recreational function on the basis of the Law on spas, which should be changed and, perhaps, there should be brought a new one to regulate this matter.

The direction of the health supply of the spa towns of South Serbia in the coming period should be based on the previous analyses of natural potentials. The availability of diversified, environmentally qualitative and functionally high developmental bases, should provide a high quality product and a high level of market competitiveness, primarily Niška Banja, in the form of available resources and the existing tourist infrastructure and suprastructures.

Wellness as an upgrade of "salus per aquam" - SPA, or "water treatment", according to the International SPA Association's forecasts and demographic characteristics of Europe, in the following period should have the highest rate of growth in the field of medical programs, which include physical therapy and water therapy.

Spa wellness in the spas of South Serbia, in the future will be based on four segments, of which the following activities are significant:

- Destination spa - in addition to standard spa services, uses fitness and wellness elements within the entire tourist destination,
- Medical spa - services of holistic medicine with elements of health and wellness components, including classical and special treatments and therapies,
- Mineral springs spa - offer of natural, mineral and thermal springs,
- Resort-Hotel spa - spa in hotel services, a "resort" with combined fitness, wellness and other professional services.

In the case of spa tourism products, a distinction must be made between marketing classification for wellness, and a health resort destination. In this regard, in the future, an emphasis should be placed on the nature and the holistic way of treatment, the offer of various packages (management package, weekend tours, relaxation, etc.), as well as the secondary motives of coming to the health center, such as culture, ethnography, attraction. In order for the spa area in the territory of South Serbia to become a wellness destination, it must meet the following criteria:

- Certain number of wellness facilities;
- Sports and recreational facilities and other sports infrastructure;
- High quality and developed road infrastructure;
- Health facilities with specialist services and therapeutic services;
- Beauty salon;
- Green areas for recreation;
- Nature and cultural offer for mental development;
- Organized animation and the like.

The spas near the major cities in South Serbia has the possibility of organizing wider forms of tourist offer. First of all, it refers to those forms of spa tourist offers, which as a supplement participate in enriching the formation of a complementary, heterogeneous and integral tourist product chosen by the market, which sublimates anthropogenic, ie cultural,

Thermomineral Sources in the Function of Healthcare Tourism in Southern Serbia

tourist motives. In addition, cultural, entertainment and sports programs and events and other supplementary production activities enrich the spa offer and are of great importance for the popularization, presentation and offer of spa tourism. They have a significant influence on the selective formation of a complementary and integral spa tourism product, bearing in mind the possibility of combining the available tourist motives in the South Serbia area with the goal of enriching and extending the tourist season, increasing tourist spending and strengthening competitiveness.

Conclusion

In order to attract the interest of the international demand for the health tourism product in South Serbia, it is necessary to reposition the market of today's spa / health resort market. It is, therefore, clear that this product is not yet ready for the international commercialization, but it needs to be developed in the next period. Therefore, the focus strategy must be chosen. Especially important are the markets of European countries (Germany, Italy, France, Austria and Scandinavia) which, due to the liberalization of health services within the European Union, the strong positions of private health insurance in these countries and the particularly high costs of medical treatment in these countries, will move to the market to other eligible countries. This model, especially in its opening phase to the world market, was applied by Hungary, not only in post-traumatic rehabilitation, but also in treatments in other areas.

Due to the increasing importance of the spa centers, South Serbia should work on the valorization of these important areas. The intention is to improve or increase the so-called *degree of traffic connection* of spa centers, then accommodation capacities, as well as greater orientation towards foreign guests with adequate propaganda actions and successful connection of the health spa function of the spa complex with sports and recreational, cultural, congress and tourist manifestation activities.

The destination of health tourism should have an original offer, which must have comparative advantages, and be competitive in relation to similar tourist destinations. In this sense, the management of the tourist destination must at all levels develop and optimally combine all elements of the tourist offer, i.e. manage the destination as a competitive unit, which should be strategically guided in order to ensure and maintain a competitive advantage.

Based on the established target group, the suppliers of the South Serbian tourist destinations should be connected within the association, which would have the function of monitoring of the quality of the offer in the foreign market, joint marketing, the appearance of offers with the programs of the wellness tourism in foreign markets, informing the public and potential beneficiaries of the profits wellness as life philosophy, counseling and vocational training.

References

- Cohen M., Bodeker G. (2008): *Understanding the Global Spa Industry: Spa Management*, Butterworth-Heinemann, Elsevier, Amsterdam.
- Corbin, C. B., & Pangrazi, R. P. (2001): *Toward a Uniform Definition of Wellness: A Commentary*. President's Council on Physical Fitness and Sports Research Digest, Series 3, 15, 1-3.

- Grupa autora, (2002): *Održivi turizam*, Ministarstvo za zaštitu životne sredine Republike Srbije, Beograd.
- Janjić, M, i dr. (2008): *Lekovite banje i vode Srbije*, Elit.Medica, Beograd.
- Marić, S. (1988): *Turistička valorizacija banja istočne Srbije*, Doktorska disertacija, Geografski institut, Novi Sad.
- Mojić, J. (2016): *Valorizacija ekonomsko geografskih resursa Južne Srbije u funkciji turističkog razvoja*, Doktorska disertacija, Ekonomski fakultet, Niš.
- Mojić, J. (2012): *Pozicioniranje prostora Južne Srbije u cilju turističkog razvoja*, Zbornik radova Departmana za geografiju, turizam i hotelijerstvo 41/2012, str.139-151, Originalni naučni rad, Prirodno-matematički fakultet, Univerzitet Novi Sad. ISSN 1452-1033, ISSN 2334-7074 (online).
- Mihajlović, D. (1995): *Savremeno stanje banjskih i klimatskog lečenja, problemi, perspektiva razvoja*, Zbornik radova, Banjska i klimatska mesta Jugoslavije, Vrnjačka banja.
- Nikolić, S. (1988): *Priroda i turizam Srbije*, Eko centar, Beograd.
- Stanković, S. (2002): *Rehabilitacioni centri i banjski turizam uže Srbije*, Turizam Srbije, SGD, Beograd.
- Šušić, V., Dimitrijević, D. (2015): *Wellness Spa - Specific Form of Health Tourism*, Facta Universitatis, Series: Economics and Organization, Vol. 15, N°1, Univerzitet u Nišu, Niš.

TERMOMINERALNI IZVORI U FUNKCIJI ZDRAVSTVENOG TURIZMA U JUŽNOJ SRBIJI

Rezime: Južna Srbija se odlikuje bogatstvom termomineralnih voda. Izvori termomineralnih voda, njihova temperatura i mineralna svojstva predstavljaju osnovu razvoja zdravstvenog, a poslednjih godina i wellness turizma. Fizičke karakteristike ovih izvorišta ukazuju da su vode većinom bistre, bez boje mirisa i ukusa, sa temperaturama koje se kreću od 22-92°C, te se mogu svrstati u hipo, homeo i hipertermalne vode. Značaj ovih voda je višefunkcionalan sa stanovišta razvoja zdravstvenog turizma u termalnim lokalitetima na prostoru Južne Srbije, u osnovi za razvoj balneoterapije, kao posebne, kompleksne terapijske discipline koja mnogim faktorima deluje stimulatивно na organizam, i wellness programima sa ciljem očuvanja zdravlja, uma, duhovne i mentalne sposobnosti i rekreacije. Reč je o devet lokaliteta na prostoru Južne Srbije (Bujanovačka banja, Vranjska banja, Kuršumlijska banja, Niška banja, Prolom banja, Sijarinska banja, Lukovska banja, Tularska banja i Banja Topilo), sa izvorima lekovite vode i peloidima, lociranim u ekološki zdravim sredinama. Za sadašnje i buduće svestrano sagledavanje potreba stanovništva na planu odmora, rekreacije, prevencije, lečenja i rehabilitacije, otvara se perspektiva razvoja balneo-klimatskih mesta u Južnoj Srbiji. Uglavnom, selektivni proizvod zdravstvenog turizma banja Južne Srbije uključuje dve komponente, komponente zdravlja i komponente wellnessa. Zdravstveni turizam u užem smislu, pored osnovnih prirodnih faktora (mineralne vode, peloida, gline i klime), podrazumeva korišćenje i drugih činioca koji poboljšavaju stanje organizma u celini. U savremene balneološke tretmane spadaju i činioci kao što su promena sredine, dijetetski režimi, aktivan i pasivan psihofizički odmor. Po potrebi, za vreme balneoterapije, koriste se i drugi oblici terapije kao što su medikamentozna i fizioterapija. Znači osnovni cilj zdravstvenog (i wellness) turizma je, sa jedne strane, poboljšanje fizičkog zdravlja, a sa druge strane, popravljavanje i održavanje mentalnog, psihičkog i emocionalnog blagostanja.

Ključne reči: zdravstveni turizam, balneoterapija, wellness, banje, rehabilitacija.