

ID 1627 | ANALYZE OF SOUTH GEORGIAN HEALTHCARE TOURISM CLUSTER COMPARING WITH GERMAN AND HUNGARIAN EXAMPLES OF THE REGIONAL PLANNING OF RESORT CITIES

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ABSTRACT: The article discusses importance issues of medical tourism and resort medicine for the case of Southern Georgian resorts, especially resorts in Samtskhe-Javakheti Region Akhaltsikhe, Borjomi and Abastumani. Cluster analysis principle is applied and the central role of health-care tourism and resort medicine in Tourism and Recreation Cluster of Samtskhe-Javakheti is defined. Historical experience of Georgia in health-care tourism and resort medicine is highlighted. Renewed development of health-care tourism and resort medicine should be related to the Sustainable Urban Development of these settlements, therefore, future policy should be determined. In this regard, complex activities in following issues were offered: education improvement in the field of resort medicine, considering appropriate resort treatment in insurance packages, urban planning solutions and Smart city management, environmental and protective planting issues, rehabilitation of resort infrastructure. We offer to create health-care tourism cluster for Georgia considering contemporary trends, and for this were defined successful examples of developed countries, in particular, German and Hungarian cases. The direct contribution of Travel and Tourism to GDP was 6.5% in 2015 in Hungary. The raising part of tourism is medical tourism in Hungary and the most popular area situated near to the Austrian border. All over the country there are many type of baths and the therapeutic use of them is common. The good examples of them could be helpful to create a brand new touristic destination in Georgia. Also a good example for Georgian healthcare Tourism Cluster development is a managed system of German resorts named Deutscher Heilbäderverband. Resorts of Germany have united functional system, with interactive map and comprehensive information, resorts profile and category classification, affordable health-care activities, etc. In tourism and recreation cluster of Samtskhe-Javakheti are considered Akhaltsikhe, Borjomi and Abastumani, like resorts, determining main profile of the region. Also potential thermal resorts of South Georgia should be considered for future development. In this regard climatic and geographic characteristics, also balneology resources potential of above mentioned resort cities were shown. Sustainable urban development recommendations for the rehabilitation and further development of the health-care tourism and resort medicine field were worked out.

KEYWORDS: Medical tourism, Resort medicine, Sustainable urban development, Regional Development

1 INTRODUCTION

Georgia in 20th century was well known as health-care center of former Soviet Union. Huge resort industry have been the major sector of the country economy. According to the data of 1981, 2 million guests, between them for the health-care purposes, came to Georgia annually (Encyclopedic Dictionary, 1983). Many mountain and sea resorts are presented on the whole territory of Georgia. In this paper we focus our attention on the South Georgian tourism and recreation geographic cluster of Samtskhe-Javakheti region, where are concentrated the most outstanding climatic and balneology resorts.

Objectives: main objective of this research is to prove that the development of the health-care direction of the tourism is most important for the sustainable development of South Georgian resorts Borjomi, Akhaltsikhe and Abastumani, which are most remarkable cities in Samtskhe-Javakheti Region; major tasks are: to define ways, to develop concepts for the activation and revitalization of these resorts. Based on great experience in near past, to find and suggest appropriate foreign examples for significant results whenever possible.

METHODS

Comparative research of foreign examples, cluster analysis, SWOT-Analysis, review of regional development strategies and contemporary sources were used in this paper.

2 RESULTS AND DISCUSSION

2.1 GEORGIA

Historical preconditions: history of medical tourism in Georgia begins in ancient times. “At the beginning of 20th century on the territory of Borjomi mineral springs, during captive works, at the depth of seven meters the remains of stone built baths were discovered, which were considered by archeologists as buildings of 1st century. (Amiredjibi et al., General Plan of Land Use of Borjomi, Development Vision, 2007 p 6.)



Figure 1. Georgia. Map of Resorts in 18th century (Koniashvili, Ushveridze e.al. Atlas of Resorts and Resort Resources, 1989).

In 18th Century Prince Vakhushli Bagrationi declares about the usage of thermal water springs in medieval Georgia: “On the mountain slope there is a spring, huge, hot and boiling, named Otskhe. Above is the bath, and many are bathing there, because it has a healing power of diseases”. (Bagrationi, Geography of Georgia, Samtskhe, 1892, redaction of 1999). During medieval wars the territory of Samtskhe-Javakheti, named to that times Samtskhe, Tori and Javakheti have been abandoned and population migrated to safe places. New development begun in 30th of 19th century, with attempts of Russian Kingdom. There was almost good health-care infrastructure for that time. Several resort places and towns performed to popular resorts.



Figure 2. Composition of Historic Photos. 1. Borjomi water source. 2. Romanov's Palace. Photos of Sergei Prokudin-Gorskii, appr. 1912. (Prokudin Gorskii Collection)

Balneology potential of Borjomi, Akhaltsikhe and Abastumani were investigated at the same time. Romanov's time was the time of rapid development, and resort development was one of the successful commercial projects of Russian Empire. (Borjomi, 2015). Although, many important steps and activities were performed to develop this area: Mineral water bottling and glass production factories were founded; 300 MW power plant was built; several hotels and summer houses of beautiful architecture mostly for nobles were arranged.



Figure 3. Composition of Historic Photos. 1. Borjomi water processing. 2. Borjomi water source. Photos of Sergei Prokudin-Gorskii, appr. 1912. (Prokudin Gorskii Collection)

Borjomi and Abastumani became most beloved places for Georgian and Russian intelligence and also for guests from other countries. For example, Persian prince built adorable small palace at the entrance of Mineral water Park, named "Firuse" because of its turquoise blue color. Akhaltsikhe played another role – communication hub and bordering city was not significantly comfortable for the rest, although in its surroundings a lot of thermal springs were located.

After Revolution of 1917 conditions changed, but resort development continued soon. In soviet times, until 90's of 20th century, in Borjomi 12 sanatoriums, and in Abastumani 10 sanatoriums with strong health-care facilities functioned. They were almost fully loaded. Up to 4000 guests at the same time could have rest in that facilities in small resort city Borjomi, with appr. 15000 inhabitants. For example, Likani sanatorium have hosted 1070 guests, Hotel "Borjomi" – 750, Sanatorium "Kechkhobi" – 700, "Mtis kheoba" – 500, "Plato" – 300, "Poly-clinical union" – 200, "Firuse" – 180, "Bakhtrioni" – 120, etc. (According to the interview with former employee of Resort management department of Borjomi).

In 90's of 20th century due to social and political crisis, resort facilities have stopped functioning. Most of them were ruined and degraded. As a result, unemployment led to environmental problems like illegal logging of forests. Different negative influences could cause unchangeable processes and dangerous threats to the main climatic conditions of resorts.



Figure 3. Samtskhe-Javakheti, Map of Resorts in 20th century. (Koniashvili, Ushveridze e.al. Atlas of Resorts and Resort Ressources, 1989) Importance of resorts according to red circle size.

Nowadays the condition of resort development becomes better. Tourism, especially health-care tourism, wellness and spa are the most prospective branches. It is not possible to develop any other industry for recreation regions. Medical tourism becomes one of the major directions in tourism diversification. Although, tourism development strategy 2025 doesn't consider the great importance of medical tourism development for the degraded regions of Georgia (World Bank 2015, Tourism Strategy 2025).

Climatic conditions of above mentioned resort cities are the following:

Borjomi is a famous resort, located between the slopes of Meskheti and Trialeti ranges, in the valley of river Mtkvari and its tributaries, Borjomula and Gujareti water. Inhabitants: 10,5 thousand (Census 2014). Height above sea level- 800-1000 m. Peculiarities of Borjomi climate are conditioned by the locaton of the resort in moderate climate, low mountain forested zone. The average January temperature is -2,8 ° C. The average temperature in July, is the same as in August, 19°C. The average annual temperature is 8,3°C. Relative humidity is 77%. The average annual rainfall 658,6 mm. The amount of precipitation is more in the warm period (April-September (356,6 mm)), and less - in cold period of the year (October-March (302 mm)). The sunshine duration is 1350-1400 hours per year. (N. Saakashvili, I. Tarkhan-Mouravi e. al., Resort Borjomi). In the city there are several mineral water springs, between them thermal, which are located mainly in the historical Mineral water park of Borjomi.

Akhalsikhe is an administrative center of the Samtskhe-Javakheti region. Inhabitants – 17,9 thousand (census 2014), The city has status of resort, but resort infrastructure is less developed, probably due to its border position and less forest coverage. “Geographic location – southern slope of Meskheti (Adjara-imereti) mountains, gorge of river Potskhovi Tskali. Height above sea level - 980 m. The terrain - hilly, climate - moderately dry, low mountain. Winter cold, with little snow. Average temperature in January - 3,8°C. Summer is warm, moderately dry. August's average temperature is 20,4°C. The yearly rainfall - 400-600 mm. The average annual relative humidity - 69%. Duration of sunshine a year - 2000-2100 hours. Natural healing factors: the low mountain climate and thermal (38 ° C), carbonate, hydrocarbonate, magnesium-sodium waters with the total mineralization of 9 g/dm3. Types of treatment: mineral water intake (to drink), mineral water baths, passive climate therapy” (N. Saakashvili, I. Tarkhan-Mouravi e. al., Curortography and Resort Therapy of Georgia). City is a communication and tourism hub; recently old fortress named “Rabati” became popular touristic attraction. Akhalsikhe and its surroundings are rich on thermal springs, but totally without any infrastructure or facilities.

Abastumani is a small resort town in Adigeni municipality with excellent climatic and balneology healing features. Inhabitants – 750, during touristic season – 2000 (Census 2014). Abastumani characteristics: “The climate - the middle mountains lower zone, winter - cold, snowy. Average temperature of January: - 6°C. Summer - moderately warm, 16°C average temperature in August. Relative annual humidity is 77%,

average annual rainfall number - 688 mm. Duration of sunshine per year - 1967 hours.” (N. Saakashvili, I. Tarkhan-Mouravi e. al., Curortography and Resort Therapy of Georgia). Abastumani shows unique results in the treatment of lung diseases. Also here are thermal hot water springs with different healing features. Abastumani is outstanding also with its cultural heritage buildings – up to 122 houses of 19th and 20th centuries were recognized as cultural heritage buildings. Also astrophysical observatory (built in 1936) gives interesting prospects to the resort development.

Borjomi, Akhaltsikhe and Abastumani could be considered as key points for the regional planning and development of the tourism and recreation cluster of Samtskhe-Javakheti region. Therefore we developed SWOT-Analysis for these three resorts.

2.2 TABLES

SWOT ANALYSE - STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

BORJOMI, AKHALTSIKHE, ABASTUMANI

Strengths	Weaknesses	Opportunities	Threats
established and well known brand	Weakness of the logistical connections and of the long-distance as well city transport network, lack of decision-making skills locally	Increase of the role of Borjomi as international recreational resort, improvement of resort infrastructure, arrangement of exhibition- and concert halls	Loss of connection between governance and society, creating of false wellbeing picture
Traditionally developed resort, emergence of	Balneology system disfunction, lack of	Strengthening of resort medicine, education and	Difficulties of medical equipment and
governmental interest in the resort medicine revival issue; increase of the role of education and science	qualified personal, expensiveness of the branch, lack of conference infrastructure	healthcare sector, development of affordable resort medicine, organization of large-scale medical science events	infrastructure, need for big investments; probably the quality of local service may not be worth the price; and it can happen that attracting tourists for this sector fails
Positive examples of green areas arrangement in Borjomi, high interest of the society to the ecological condition of the region	Heavy ecological problems, strong damage of forests, partly wrong planning solutions by the rehabilitation of the existing green areas	Improvement of ecological condition, extension of green areas in suburbs, arrangement of green areas and public spaces in abandoned industry objects	Irreversible processes, related to climate change, delay of green cover restoration measures, Forest regeneration difficulties, late effect

Table 1. Borjomi, SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
Regional development strategy [?]. Well developed trade and handicraft sector	Influence of Akhaltsikhe does not cover the entire region and it can not fulfill the role of real center of the region; its disposition and services are not equally interesting for all subordinated municipalities	Growth of the regional importance, Offering alternative services opposite to the Tbilisi direction, increase of the intellectual potential	Akhaltsikhe might not be able to fulfill all the functions of the real regional center
Key location for the tourist routes, connecting position between Borjomi and Abastumani	Insufficient intellectual and material-technical base, Fewer use of potential in the region	Strengthening of educational and healthcare sectors, restoring of spa-functions of Akhaltsikhe, strengthening of the University	The passive approach of the state and private structures towards the implementation of large investments in the field of healthcare

Positive examples of green areas arrangement in the country	Lack of general master plan of the city, lack of strategic documents and decisions	Ecology improvement, extension of green areas, arrangement of green public spaces, renewing of old protective planting along the roads	Only local measures of some green areas rehabilitation were implemented, protective planting is not used widely
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Table 2. Akhaltsikhe, SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
Formed and well-known brand, existence of development strategy document [*]	Peripheral location, weakness of the transport network, Lack of decision-making skills locally	Increase of the role of Abastumani as unique climate and balneology resort, improvement of the communications and spa infrastructure	There is a view, that the resort treatment can be replaced by the chemical drugs therapy. Therefore the quantity of guests can decrease
Planned large-scale rehabilitation of cultural heritage	Damage of architectural heritage for long years, big part is wooden, damaged by moisture and fungus	Preliminary study of cultural heritage, 3D scanning, searching for the best ways to rehabilitate	It may not be possible to restore in the primary form, or just the facade reconstruction without reinforcement will be
	and other irreversible negative processes		implemented and hidden destruction of buildings continued
Tradition of resort medicine, interest of the governmental structures to the revival of spa medicine, increase of the importance of educational and science system	Balneology system disfunction, lack of qualified personal, expensiveness of the branch, lack of conference infrastructure	Strengthening of resort medicine, education and healthcare sector, development of affordable resort medicine, organization of large-scale medical science events	Maybe, the organizational side could not be carried out well and the investment costs could not be covered
Excellent natural conditions, high solar insolation	High probability of wastewater pollution with bacilles	The strategy envisages improving ecological conditions	Expensiveness and difficulties by the implementation

Table 3. Abastumani, SWOT Analysis

Climatic conditions and resort features, number and chemical ingredients of springs should be investigated again to update existing researches that were performed in 60th-s and 80th-s of 20th century.

Medical tourism could build a chain of interconnected health-care and spa facilities in the surrounding, involving also places with underused or unused potential (thermal sources of Akhaltsikhe and Aspindza Municipality; Aspindza, Nakalakevi, Uraeli, Tskaltbila etc., eco-tourism in Gujareti valley etc.).



Fig. 4. Regional map of Samtskhe-Javakheti Tourism and Recreation Cluster, with water sources

As successful example of medical tourism development we consider the case of “Borjomi Palace” hotel. According to the data of medical center attendees, the number of guests increased from 12 at the very beginning than center was opened in 2013 up to 470 in high season per month last year. But for the moment this is the only one hotel in the region which offers such services like medical treatment and spa-wellness at the same time. Guests of the hotel, like in another luxury hotels of the same area are mainly foreigners from former soviet countries, in which professional unions and insurance companies cover the part of the expenses.

Another issue is to develop system which works like affordable health-care tourism possibilities for Georgian inhabitants. Programs, Plans and Projects should be developed for this purpose. Here the cooperation of the State, Government and self-government, and private sector as banks and insurance companies is important.

Many projects of balneology and spa infrastructure for the future development of medical tourism were elaborated by Georgian Architects in 20th century, but most of them were not realized. We found these works interesting to show as prospective examples that could be used for learning and planning purposes, if health-care tourism industry will develop in Georgia. The Balneology sanatorium for 250 beds was designed for thermal resort Nokalakevi, by the Students Planning Bureau of Faculty of Architecture, Georgian Polytechnic Institute, 1979. Architects: V. Davitaia, G. Kvitsinashvili, T. Kldiashvili.

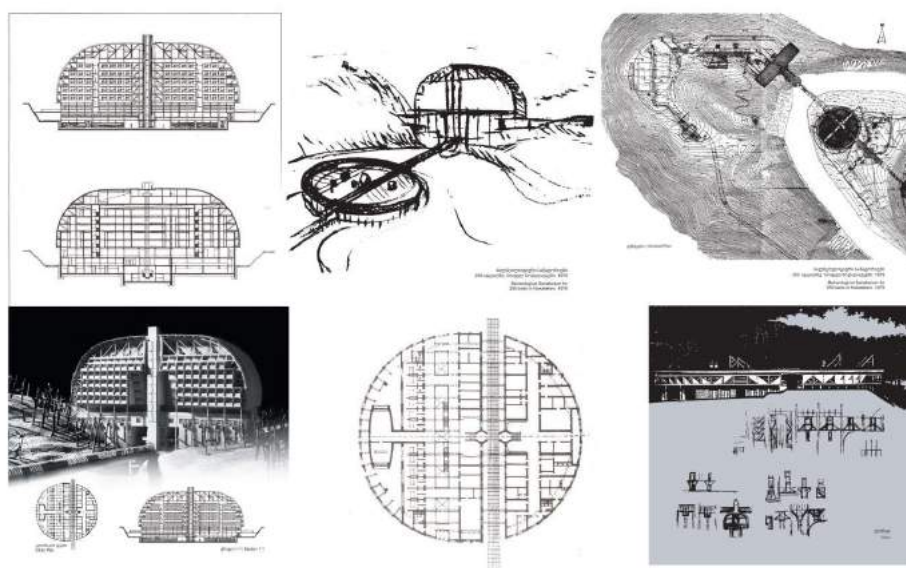


Figure 5. Project of Balneology Sanatorium in Nokalakevi. 1979. (Georgian Technical University archive)

Due to huge resort industry of Soviet Union, many standards and schemes of regional planning as well planning of different big and small touristic hotels and sanatoriums of resort areas were developed. (Urban Planning bases for development of resorts and recreation regions, Sroyizdat, 1990)

But for contemporary conditions old soviet standards, rules and schemes are not significant. According to Georgian building law, we are allowed to use standards of 37 countries by the planning.

Development of new schemes for resort regional planning and also schemes of hotels supported with medical tourism facilities is one of important tasks for the future.

From many world examples we have chosen Germany and Hungary, because of many similiaryties and good experience in the past. German examples of Baden-Baden were used by Romanov’s for the arrangement of Georgian resorts, and in particular, for Borjomi and Abastumani facilities.

2.3 GERMANY

German examples: One of the best experiences is to manage resorts through resort unions. Deutsche Heilbäderverband is the agency which manages, gives information, cooperates with scientific institutions,

organizes trainings and workshops and cares for the resort development in Germany. There are the main and also several other similar unions in different parts of the country.

German experience shows the problems, new challenges and how they were solved. Modification of insurance system to private financing and crisis of spa industry because of this was one of the reasons. German state policies, some data, trends, and positive examples could be well used in Georgia.

2.4 GERMAN EXAMPLES, CURE IN GERMANY

In Germany people are getting a cure e.g. after a serious sickness, when over worked (burnout) or when getting sick for the same reason over and over again. Another reason why people visit a therapeutic bath nowadays is the movement of wellness and lifestyle, to take a so called "Kururlaub".

There are different ways of paying for it: health insurance, social pension fund or with privat money. The duration of cures lasts between 2-6 weeks, depends on the grade of sickness.

During the treatment there are staff members who look for special needs of the patients. If necessary they get helped to go back to the regular workplace after the cure, there are specialized people who help (e.g. what kind of work are you doing, perhaps different chair needed; shorter working hours to begin with).

Over the years the system of cures has changed. In 1996 the German health insurances stopped paying for the cure as it was before (10). Guest did not come as regular as it was, houses stood empty, people lost their workplaces. Because of that cure houses and cities had to reorganize to survive. Nowadays most of the "Kurkliniken" are specialized to persist, have modern rooms, old houses are remodeled or torn down and rebuild. Features like TV and Wifi, workout places and management of quality are important.

Two examples for different approaches are described in the following.

The clinic St.Peter (11) in northern Germany is well known for treatment of cancer patients. They put their focus on rehabilitation back to the regular workplace of the client. Specialist help to identify the critical points.

The network of Helios- Kliniken (12) sets the focus on enhancement of the quality of treatment. While surveying every treatment they do and publishing the operating figures everyone, from staff to patient or admitting doctor, can inform him/her self about the results



On other way of focusing in cures are spas, a speciality not only of Germany. They are called „Heilbäder“ (spa) or „Moorheilbäder“ (peat spa) (13). Around 6% of the spas with higher rating are peat spas. This type of spa uses peat/moor as treatment. The effect of the peat/moor is to appease pain and tension. Through the heat reservoir of the moor it operates depressant and stimulating. In Bavaria such spas are found often.

Figure 6. Resorts and baths in Bavaria. (<http://www.kurorte-und-heilbaeder.de/karten/karte-bayern.html>).

It is obvious on the map, that the communication system is well developed, what supports development of local tourism. To give the customers facts for choosing the place they need/want to go, in German some institutions are evaluating cure clinic's and publish the results in different media.

There is a research institution, supported by the TU Berlin, called Minc (MINQ) (14) founded in 2010. It is independent and does surveys about the German cure clinics every year. The results are published not only in internet but also in a well-known magazine.

The German “Bäder- und Heilkundeverband” (15) (bath and medical science association), issues a quality label with four different focus. Gütesiegel des DHV.



DHV-Gütesiegel Die Kur®

- This label gives information about cure in general, what to expect, where to look for support, how to apply and so on. Three elements, earth, water and air, are the natural remedies of cures. Depending on the medical condition one of these or a combination of them can be chosen.



DHV-Gütesiegel Park im Kurort®

An important issue is the “Park im Kurort” label. As Catharine Ward Thompson said at the 5th Fabos conference in Budapest 2017 “the renewed interest in physical environment is now focused on identifying and understanding salutogenic environments (Antonovsky, 1979), that is, environments that support healthy behaviours and responses”. Presented surveys showed direct impact of green to the circumstances of life, people who are exposed to green environments are healthier than others, stress reduction included (ISBN 978-963-269-549-5, Landscapes and Greenways of Resilience, Catharine Ward Thompson: Greenways to health: the links between access to green space and healthy communities). Perhaps green surroundings enhance and speed up the rehabilitation of the cure-taking people.



- DHV-Gütesiegel Prävention im Kurort®
- This label shall give orientation mostly to private clients of cure houses. Their focus is the prevention of sickness, to enable people to live a healthier life. It combines three factors of exercise, nutrition and relaxation supplemented by communication and empowerment



- DHV-Gütesiegel Wellness im Kurort®
- Relax and enjoy is the motto for this label. In combination with the surrounding landscape and a cultural program it fosters a well-being of the client.

All of them stand for quality enhancement in a different field. Future clients, patients and doctors alike, can use these labels to find the place which fits their needs the most.

CONCLUSION

Cures are paying off after all because people are healthier, resilient and appreciated after a cure.

(For example, Siemens is financing for their employees health cures of 22 days at regular time intervals so that disease rate remains low. (<http://www.tagesspiegel.de/wirtschaft/karriere/kuren-wer-sie-bekommt-was-sie-bringen-urlaub-vom-job/1225054.html>). In return, they must spend 9 days of their annual leave. This is a Win-Win situation.

2.5 HUNGARY EXAMPLES

Hungarian Examples of thermal baths cluster, their management system and state policy, the huge and rapid development of Hungarian thermal spa facilities are positive examples for Georgia, how the Health-care tourism industry became the major branch in the country. Examples of Hungary can be applied for Georgian health-care tourism cluster planning as well.

In Hungary green routes are strongly developed. This strengthens the medical tourism branch. The baths are located in urban and rural spaces as well. Famous baths are also located in the capital city Budapest. The Hungarian Health-care cluster is strong, because thermal potential is investigated and appropriated infrastructure is developed and arranged. In Georgia we have unique mineral and thermal water potential which is underused.

Nature has generously endowed Hungary with thermal water. Due to the geographical location of the country's thermal springs are covering 80% of its territory. Altogether there are fifteen hundred sources and 450 thermal baths.

„Hungary has enormous natural potentials that could be beneficially exploited by health tourism. We have extraordinary and unique thermal water reserves, the amount of which places us among the first 5 countries with the greatest thermal water supplies“ (dr. Judit Visi, Geography of Health, (2013).



Figure 7. Composition of Georgian, German and Hungary resort landscapes.

3 CONCLUSION AND RECOMMENDATIONS

Strengthening Medical tourism seems to be one of the best ways for the sustainable development of South Georgian resorts. Due to the main objective of this article, improvement of health-care cluster in Georgia is possible using mentioned examples.

The main principle of resort planning is to insert healthcare facilities into the green spaces, with careful integration of green areas and buildings, with attention to cultural heritage buildings. Due to the above mentioned examples, spatial planning, appropriated communication system development is a future of regional planning of Healthcare clusters.

- Medical tourism should become the key issue for the regional development strategy.
- South Georgian health-care tourism cluster should be determined and strengthened.
- Existing resorts like Borjomi, Akhaltsikhe, Abastumani should be developed to green, smart, well managed cities; and resort places with unused potential should be involved.
- Good foreign examples of famous spas like German, Hungarian and similar should be used, which includes not only healthcare facilities and resort planning principles, but spatial planning issues with its communication systems, the full complexity of urban planning factors.
- Programs, Plans and Projects should be developed.

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