

THE ROLE OF GEORGIAN NATURAL-RECREATIONAL RESOURCES UNDER THE CONDITION OF CORONAVIRUS SPREAD

Otar Paresishvili

Laura Kvaratskhelia

Davit Gamezardashvili

Valentina Mirzaeva

Zhordania Center Studying Productive Forces
and Natural Resources of Georgia of the
Georgian Technical University

Abstract

In 2020, human life underwent important changes as a result of the world-wide spread of a new coronavirus disease – COVID-19 pandemic: life regulations were cardinally transformed, economy was considerably harmed, and what is principal is that millions of people came down with this rather serious and not yet completely studied disease. This is virus-killer, nobody knows how long coronavirus lives, and as medical scientists assume, it leaves complications in different organs and systems for the rest of people's life and particularly hurts immunity. Under difficult conditions, methods to solve COVID-19-related problem have been elaborated throughout the world. The article is the first attempt to examine the problem of efficient using of natural-recreational resources aimed at quick recovery of people's health in the context of responding to the global challenge – COVID-19 pandemic and taking into consideration various complications.

The world for the first time has faced a new coronavirus infection and naturally the primary focus has been given to the issues of medicinal treatment of patients with acute form of the disease. The topic of this article has not yet been studied, it is neither elucidated in scientific literature nor presented as a subject of wide-ranging discussions. Accordingly, one cannot analyze either analogous studies or publications. Based on the above, the primary purpose of the article is to draw specialists' attention to the problems under consideration and to share experience in this sphere.

Key words: pandemic, chronic diseases, natural-recreational resources, therapeutic and health-improving tourism.

1. Introduction

At this stage of civilizational development, a number of serious global-scale challenges have emerged in the world which require adequate and prompt response. COVID-19 pandemic is most recent global challenge which has covered the entire world and caused severe economic slump in all the countries as well as worsening of people's living conditions. However, the biggest harm was inflicted by the virus to human health, physical and psychic state. Medical professionals spare no pains to save human lives. All over the world, elaboration of vaccines and medicaments takes place on a fast-track basis to provide effective treatment for acute patient and prevent serious complications.

One of the special features of COVID-19 is its polyorganic, multifactorial effect – the virus injures a number of vital organs and systems, causes severe acute disease, serious complications, especially if a patient

has concomitant chronic diseases. On the basis of the information accumulated it was ascertained that not too seldom COVID-19 patients after successful treatment still have health problems and need rehabilitation to repair functioning of injured organs and systems of organism. The process of rehabilitation can be speeded up and optimized by means of health-improving procedures with the use of natural factors. The best possibility for this is to go to the health-resorts of suitable profile and undertake necessary procedures to speed up the achievement of healthful effect.

The authors of the article suggest using of a wide range of available Georgian natural-recreational resources for the purpose of rehabilitation of people who underwent COVID-19.

2. Analysis of the main research material

Despite its small territory, Georgia is notable for a variety of geographic, natural-climatic zones, has a number of unique natural resources [Zhordania, 2015; Lomsadze, 2019:59-75]. From times immemorial, all over the world including Georgia, natural factors have been used to treat people, for prophylactic and rehabilitation purposes. The worldwide famous are popular Georgian resorts such as Tskaltubo, Borjomi, Abastumani, Gagra, Bichvinta, Kobuleti, etc.

Thanks to its unique nature, numerous historical and cultural monuments, Georgia has become a centre of attraction for visitors from the whole world, the country successfully develops different spheres of tourism. Within the framework of medical, therapeutic and health-improving tourism, Georgia can offer everyone wishing to take a post-coronavirus course of rehabilitation based on relevant natural components available in the country. Furthermore, having a big potential for the development of mentioned directions, Georgia can become a regional hub in this sphere [Metreveli, 2015:794-873; Paresishvili, 2017:344-348; Paresishvili, 2020:53-68]. Natural-recreational resources of the country afford an opportunity where necessary to offer a wide spectrum of health-giving activities and good multispecialty service in accordance with medical indications.

Below are briefly examined opportunities of the sphere of therapeutic and health-improving tourism which the country can offer as a follow-up rehabilitation to people who had COVID-19.

For a long time, Georgia is known as a country with healing and recreational resources. There are 11 climatic zones on a relatively small territory; high mountains summits covered with snow and ice, subtropics on the Black Sea coast, lowlands, lakes, rivers and waterfalls, many spouting springs with mineral waters – all this has favoured establishing a great number of health-resorts (more than 100) and recreational places (more than 180). The 24-hour yield of more than 2300 prospected mineral springs is hundreds of millions of liters. Among mineral waters the most valuable by their physical and chemical properties are such sources as Borjomi and Nabeglavi (Vichy-type waters), Zvare and Pasanauri (Essentuki-type waters), Lugela (a unique chloride and calcium water) and others. Sulfide, radon, nitric, siliceous thermal mineral waters are distinguished by high therapeutic efficiency and used while treating arthrosis, peripheral nervous system, skin diseases, gynecological disorders, urologic and other diseases [Kvaratskhelia, 2015:875-1062; Meskhia, 2012].

Extensive network of Georgian resorts, a wide range of health-giving activities afford an opportunity to people with different diseases to choose the right resort treatment. Anybody depending on his/her state of health can have relevant medical and rehabilitation course at the health-resort of necessary profile.

Perfect conditions for treatment and recreation at Georgian mountain climatic resorts are related to the high

rate of insolation, activity of ultraviolet spectrum, length of light, healthy climate and moderate temperature in summer months.

An important resort zone is the Black Sea coast where climotherapy is effective throughout the year. Marine climate, the sun, unique magnetic sands (Ureki), mountain air (Bakhmaro) – all these factors make healing impact on blood circulation, respiratory organs, locomotive system.

Occurrences of therapeutic muds of different origin are discovered on the territory of Georgia (Akhtala and Kumisi muds).

Healing microclimate of Georgian caves is very healthful to treat respiratory organs, nervous and immune systems that is of prime importance for those who had COVID-19.

As a rule, resorts are located in the places with healthy climate that promotes strengthening of immune system, recovery of inner energy of organism. Of no less importance is antistress effect from being at the resort that is especially urgent in the context of treatment, rehabilitation and recreation of people who had COVID-19.

According to the principal therapeutic factor as a basis of classification, Georgian health-resorts are divided into the following categories.

- Climate resorts where the principal therapeutic factor is climate (mountain and seaside resorts, resorts located on shore of rivers and lakes), and where methods of therapy include aerotherapy, heliotherapy, pelotherapy.
- Balneological resorts where the principal therapeutic factor is mineral water that is used as an external agent, for drinking, for different procedures. The main therapeutic method is balneotherapy.
- Peloid resorts where the principal therapeutic factor is therapeutic muds along with climate and mineral waters.
- Mixed-type resorts where at the same time are available different types of natural therapeutic factors. Whichever of those factors is principal there are climate-balneological, balneo-climatic, climatic-balneopeloid resorts [Kvaratskhelia, 2015:875-1062].

Based on the features of resort resources, regional particularities and other factors, the territory of Georgia is divided into 12 resort-recreational districts which differ from each other by their specialization, structure of medical institutions and development potential. Those are: Imereti, Kakheti, Samegrelo – Zemo Svaneti, Kvemo Kartli, Guria, Shida Kartli, Racha-Lechkhumi and Kvemo Svaneti, Mtskheta-Mtianeti, Samtskhe-Javakheti, Apkhazeti, Achara and city-resort Tbilisi.

Information about the known Georgian health-resorts in accordance with medical profile is given in a number of publications [Kvaratskhelia, 2015:875-1062; Vadachkoria, 1987; Georgian National atlas, 2012; 100 resorts of Georgia, 2014].

Among the resorts intended for treatment, prevention and rehabilitation noteworthy are the following ones: mountain climate resorts (Bakuriani, Bakhmaro, Tsemi); seaside climate resorts (Batumi, Kobuleti, Ureki, Shekvetili, Chakvi, Gagra, Bichvinta, Akhali Atoni, Sokhumi); balneo-climate resorts (Tbilisi Balneological Resort, Borjomi, Sairme, Nabeglavi); climate-balneological resorts (Abastumani, Surami, Shovi, Lebarde); peloid resorts (Akhtala, Kumisi).

Especially noteworthy are multispecialty Tbilisi Balneological Resort – „Tbilisi Spa“ and Wellness Center „Bioli“ acting within Tbilisi recreational zone where patients are provided with complex medical and re-

habilitation service according to specially developed individual programs which include health-improving procedures, methods of physical and psychological relaxation, healthy nutrition with addition of healing herbs [Erkomaishvili, 2016:53-68]. Wellness-direction becoming increasingly popular all over the world due to its complex effect to organism and recovery of vital energy, is of especial importance in the period of COVID-19 pandemic.

As is evident from the above, Georgian network of resorts and health-improving centers which are mainly based on natural treatment and health-giving factors, can be adapted to the new challenge: for full-scale rehabilitation of those people whose health was seriously undermined by COVID-19 (according to health professionals, as a result of virus mutations some complications can persist for life). It is significant that there is no need to reorganize existing medical and rehabilitation institutions and reorient them for service of COVID-19 patients. Traditional patients should be served as usual, while the service of COVID-19 patients will take place according to specially developed programs. As to the latter, taking into account further complications, existent methods and practices of rehabilitation will be completed with remedial exercises, special physical exercises, respiratory gymnastics, special diets that will not require additional material and other expenses.

When speaking of the factor of recreational resources in the context of the fight against COVID-19, one cannot disregard the role of tourist sphere in this process. At the first stage of epidemic, resulting from innovative approaches of Georgian government authorities and effective management, the involvement of tourist industry in the fight against COVID-19 ensured a low morbidity and mortality rates. Measures taken by the Government were effective from economic point of view, since they enabled to preserve functioning of tourist industry: personnel employed in this sphere was promptly retrained for the work in quarantine zones.

3. Conclusion

Based on the analysis of Georgian natural recreational potential on the one hand and the results of the activities carried out in the country against coronavirus infection on the other hand, we can make the following conclusions.

The new coronavirus infection – COVID-19 is rather dangerous, understudied disease and the fight against this disease requires using of a large set of means; at the rehabilitation stage the treatment of patients will be effective if natural recreational resources as medical and health-improving factors are used; Georgia has considerable potential to be used for treatment and rehabilitation of patients who had COVID-19; prompt reorientation of hotels and tourist objects to serving COVID-19 patients proved to be effective from economic standpoint.

References

1. Erkomaishvili G., „Medical wellness resorts – Georgian brand-code in the world“, Universali, 2016 (in Georgian).
2. 6 (in Georgian).
3. Vadachkoria G., Ushveridze G., Jaliashvili V., „Georgian resorts“, Tbilisi, Sabchota sakartvelo, 1987 (in Georgian).
4. Kvaratskhelia L., Meskhia I., „Remedial (health-resort) resources“ in: Natural resources of Georgia, monograph, vol.II, Georgian National Academy of Sciences, Center Studying Productive Forces and Natural Resources of Georgia of the Georgian Technical University, Tbilisi, 2015 (in Georgian).
5. Metreveli M., „Tourism – priority area of Georgian economy“ in: Natural resources of Georgia,

- monograph, vol. II, Georgian National Academy of Sciences, Center Studying Productive Forces and Natural Resources of Georgia of the Georgian Technical University, Tbilisi, 2015 (in Georgian).
6. Meskhia I., Asatiani R., „Resort-recreational resources and tourism“ in the book: Georgian economy, Tbilisi, 2012 (in Georgian).
 7. Zhordania I., Lomsadze Z., Chitanava N., Paresishvili O. et al. (collective of authors), „Natural resources of Georgia“, monograph, vol.I-II, Georgian National Academy of Sciences, Center Studying Productive Forces and Natural Resources of Georgia of the Georgian Technical University, Tbilisi, 2015 (in Georgian).
 8. Georgian National Atlas, Vakhushti Bagrationi Institute of Geography of Iv.Javakhishvili Tbilisi State University, Tbilisi, 2012 (in Georgian).
 9. 100 resorts of Georgia, „Klio“, Tbilisi, 2014 (in Georgian).
 10. Paresishvili O., Kvaratskhelia L., Mirzaeva V., „Prospects for the development of medical (rehabilitation) tourism in Georgia in pandemic and post-pandemic period“, Business & Law, No.1, January-June 2020, www.b-k.ge (in Georgian).
 11. Lomsadze Z., Paresishvili O., Kvaratskhelia L. et al. „Georgian natural resources (brief review)“, Annals of Agrarian Science, Vol.17, No. 1, 2019.
 12. Paresishvili O., Kvaratskhelia L., Mirzaeva V. „Rural tourism as a promising trend of small business in Georgia: topicality, capabilities, peculiarities“, Annals of Agrarian Science, Vol.15, Issue 3, 2017.