REVIEW

of the dissertation of Tanya Belichenova

for obtaining the educational and scientific degree "Doctor" in:

field of higher education:

4. Natural sciences, mathematics and computer science

professional field: 4.4 "Earth Sciences",

scientific specialty: Economic and social geography

(Regional and local development)

on the topic:

MEDICAL GEOGRAPHICAL ANALYSIS OF THE POTENTIAL FOR SPA AND CLIMATE TREATMENT IN THE MUNICIPALITY OF VELINGRAD AS A FACTOR FOR LOCAL DEVELOPMENT

DATA FOR THE DOCTORAL STUDENT

Dr. Tanya Belichenova is a doctor with two specialties - pediatrics and physical therapy and rehabilitation. She specializes in new SPA and WELLNESS technologies in Paris, London, Tel Aviv, Dubai, Barcelona, Bergamo, Milan, Malto. He is a licensed lecturer in new SPA and WELLNESS technologies. She has prepared a large part of the staff at the managerial and executive level of the multi-star hotels of Velingrad Municipality. She has worked as the head of the rehabilitation department, manager of SPA and medical centers of five and four star hotels, member of the Board of Directors of BLC "Kamena". He is currently the chief expert in balneology, spa and wellness of the Association of Hoteliers and Restaurateurs of the Municipality of Velingrad and the Western Rhodopes. She has presented Bulgaria and the municipality of Velingrad at a number of international and national congresses and conferences in Moscow, Cesme, Paris, Palermo, Chisinau, Ekaterinburg, Malta. She presented the municipality of Velingrad to delegations at high government level from Russia, China, Uzbekistan, Kazakhstan, Dubai, UAE. She has prepared a large part of the advertising materials of the municipality of Velingrad for various catalogs, leaflets and participation in an advertising film about Velingrad by John Lawton. He has won numerous awards, including: BALKAN

SPA AWARD SKOPIE Award for overall contribution to the development of SPA and

WELLNESS in the Balkans; Bulgaria's first Beauty Oscar; BUBSPA Innovation Award; ESPA

Diploma for Innovation and the Bulgarian contribution to the development of the European

SPA and WELLNESS industry; "Golden Star" for overall contribution to the development of

SPA and WELLNESS in Bulgaria; He is the winner of the SPA MANAGER OF THE YEAR

Prize and the Jubilee Sign 70 years. of the Municipality of Velingrad for exceptional merits for

the development of the Municipality of Velingrad.

DOCTORATE DATA

Author of the dissertation: Tanya Borisova Belichenova is enrolled as a doctoral student in

independent training at the Department of Socio-Economic Geography, Faculty of Geology

and Geography, Sofia University "St. Kliment Ohridski "with order RD 20-899 from

02.07.2020 under the doctoral program" Economic and social geography "- Regional and local

development.

By order of the Rector of Sofia University, a jury for the defense of dissertations was approved,

consisting of:

Assoc. Prof. Dr. Kliment Naidenov - Sofia University

Assoc. Prof. Dr. Georgi Bardarov - Sofia University

Prof. Dr. Milen Penerliev - University of Shumen

Prof. Dr. Slavi Dimitrov - VTU

Prof. Dr. Ivan Gatev - VTU

And spare members

Prof. Maria Vodenska - Sofia University

Assoc. Prof. Dr. Kamen Dimitrov – UNWE

DISSERTATION AND ABSTRACT DATA

The presented project for dissertation is a scientific work, which is characterized by a good

selection of a topical topic with a local scope, distinguished by a pronounced interdisciplinary

nature, as well as a good combination of text and applications in the content.

The pioneering nature of research not only in the geographical but also in the wider scientific community is a great challenge for both the doctoral student and his / her research supervisor. Insufficient provision of specific research on the subject of the study on the one hand obliges the researcher to create, of course with the help of his supervisor, his methodology and methodology to ensure the implementation of the goal and objectives.

The dissertation is dedicated to medical-geographical topics, due to the lack of professional awareness about the healing properties of mineral water in the municipality of Velingrad, as well as the local illegal exploitation of water sources. An essential role in this regard and a motive for choosing the topic are the significantly more beneficial effects of balneo and climatotherapy and prevention on difficult to treat and progressive diseases compared to chemotherapeutic agents, which often have a number of side effects and often lead to the so-called. "Medicinal disease".

Scientific research and on this basis critical analysis and methodological upgrading is an indisputable and objective necessity in science and public practice. Based on a detailed review of various elements taken together, corresponding to balneology and climatotherapy, spa and wellness activities, recreation and leisure, we can identify a significant gap in the scientific literature regarding the application of water from hot mineral springs on the treatment of rare and severe illness and the improvement of the overall health status of patients. In addition, such local geographical research would strengthen the position of the Department of Socio-Economic Geography, which administers the teaching of the discipline "Medical Geography", as well as those of the Faculty of Geology and Geography, after the successful enrollment and defense of the doctoral thesis.

The dissertation is in a total volume of 206 pages, of which 171 pages are text. It consists of an introduction, five chapters and a conclusion. The text includes 14 figures (including maps, charts and graphs) and 20 tables. The list of used literature is 10 pages, with a total of 172 sources - 91 in Cyrillic, 69 sources in Latin, 12 other sources, including 38 normative, strategic and planning documents and 21 Internet addresses. It includes various scientific monographs, articles and reports relevant to the study. 11 separate publications on the topic of the dissertation are attached separately. In a volume of 2 pages is the list of abbreviations used, tables and figures in the dissertation. The appendices to the dissertation (in the same book body) are 19 copies, with a volume of 32 pages. They include 14 individual cards, two figures and 10 tables.

The introduction briefly substantiates the topicality of the topic and the research. The wording of the research object is correct, and the subject of the research needs to be specified. In our opinion, the purpose of the dissertation research reflects as much as possible the topic of the work and emphasizes the geographical nature and most of all the contribution of the research.

For the fulfillment of the goal, 8 research tasks have been formulated, with which the fulfillment of the author's searches is sought to the maximum extent. They provide the necessary balance in the content of the work, following the established algorithm of such studies from the general to the particular and from theory to practice. Small adjustments are needed in some of the tasks.

The main hypothesis supported by the author that the benefits of proper exploitation of mineral springs have not yet been assimilated is relatively appropriate. It emphasizes the interdependence between the development and implementation of a new policy to encourage more responsible use of these resources, in addition to being a renewable source for sustainable long-term development of spa, spa and wellness tourism, and together with climate treatment will contribute to the establishment of integrated recreational a cluster combining a spa product and activities for health prevention and rehabilitation of the respective local community.

The complex nature and at the same time the clarity of the formulated working hypothesis create conditions for an objective assessment of the methodological tools and the practical actions in the creation and implementation of the local development policy.

Guided by the interdisciplinary nature of the topic, the methodological tools selected by the doctoral student in the study include a complex methodology, including general and private methods and approaches for analysis and research (systematic, inductive, deductive, comparative, spatial relationship analysis, multidimensional comparative analysis, retrospective analysis , analysis of documents and practices, case studies through a survey method, etc.), as well as classical methods of economic-geographical analysis - geographical description, comparative geographical analysis, geographical synthesis, cartographic method. In addition, in connection with the subject of the study, methods from the medical and social sciences have been applied very seriously. For the purposes of the proposed author's methodological algorithm, the theoretical knowledge is enriched by introducing a model for evaluation of the individual components in the use of hot mineral springs for balneotherapy and recreation. An in-depth analysis and assessment of the interaction between improving the overall health status of patients and the use of natural resources (mainly water and climate)

resources by increasing the importance of hot mineral springs and their current application and future potential is provided. The author presents facts about the mineral springs and makes a complex compilation of the so-called "Key-pillars", pillars or colossi: prevention, spa and wellness, rehabilitation and treatment in one, namely the integration of Velingrad in the thermal recreation cluster, an approach that helps to establish the objective nature of the study. In this regard, the realized idea of the applied conceptual model of analysis in terms of the historical review of hot mineral springs and the effective assessment of their role in recreation and balneology, ecology and local development deserves special attention.

The main difficulties confirm the problems of a number of researchers in this field of scientific knowledge that they encounter, as well as the doctoral student himself, which are dictated not only by the lack of statistical information on social activities and especially economic activities, insufficient professional competence in local administrations, but also from their disinterest in the processes taking place in their spatial communities.

In the first chapter (in a volume of 32 pages) with the means of theoretical analysis and synthesis, in combination with the chronological approach, significant aspects of a number of sciences and scientific directions are revealed, which study the studied problems, their condition, scientific content and methodology used. tools. Based on them, some main categories and concepts used in the dissertation are derived, and a number of scientific researches on the topic are correctly cited. Our recommendation is to deepen the study and review of medical geographic research, both theoretical and methodological and applied in Bulgaria, which will help to enrich and validate the adopted methodology and methodology of the author. There are authors in the text without titles in the literature, and some titles from the literature are not cited in the text. We recommend that the review examine additional literature sources and authors whose publications are related to the research topic, which would support the work and increase its scientific value. We direct the author's attention to the use of certain terms, which requires a clear justification and objective interpretation.

The very detailed medical-geographical analysis of the resource potential in the area of Velingrad municipality, performed in the second chapter (in the volume of 41 pages), is related to the researched topic and territory. It appropriately emphasizes the geographical location, climatic and hydrothermal resources - with their spatial location, main characteristics, exploitation and development. The chapter logically ends with summaries and conclusions arising logically from the medical-geographical analysis.

A significant and contributing place in the study is occupied by the third chapter (in a volume of 15 pages), in which the balneotherapy in the studied area is considered and analyzed. It has the greatest applied significance in the dissertation research, with the most serious contribution character, proving the specific research work of the dissertation. The review of the rehabilitation of over 1000 patients with socially significant diseases shows a good knowledge of the studied processes and an objective assessment of the need for the application of a modern integrated approach to medical practices. The critical nature of the analysis of the processes for assessing the impact of applied medical practices clearly shows the research experience and practical training of the dissertation as part of the process. The review of applied field research can be not only informative but also more emphatically evaluative, which would facilitate the conclusions and conclusions at the end of the chapter, which are short.

With a predominant practical significance for the local development and contribution character is the fourth chapter (volume of 16 pages), dedicated to the creation of a conceptual model for the inclusion of the studied area in the European thermal and climatic treatment cluster. At the beginning, the main elements of the model are identified. It establishes a correlation between many integrated elements that are related to the environment, ecology, natural resources, recreation, medical reputation and infrastructure, and more. A brief spatial and chronological review of European practices in this area was made in order to highlight the possibilities of the study area. The specific prerequisites for the implementation of the proposed model are formulated, as well as the necessary changes at national and local (municipal, city) level for optimization of the processes, as well as those related to the specific topic and territory. The conclusions in the end need concreteness that will increase the practical significance of the research and will support the actions of local authorities.

Chapter Five (38 pages) examines the role of spa and climatotherapy, and spa tourism as a factor in the local development of Velingrad municipality. Logically, the emphasis is on the two most important aspects - the socio-economic and spatial-territorial impacts of these main activities in the local economy. The modern reading of the current medical-geographical situation and its influence directly and indirectly on the studied objects and activities in the territory makes a very good impression. The deepening of the analysis and the conclusions in this part can continue, which naturally follows from the topic of the research and will increase its scientific and especially practical-applied value.

The map and information materials applied by the author illustrate and supplement very successfully the spatial analysis of the studied phenomena, processes and objects, and enrich the scientific and applied contributions of the author.

The abstract with a volume of 65 pages corresponds to the content of the dissertation. It has been prepared in accordance with the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations for its implementation.

SCIENTIFIC CONTRIBUTIONS

Scientific and theoretical contributions:

The conducted complex research and research paradigm represents the influence of geothermal and ecological factors on the general profile of Velingrad and the European and world significance of the city, as well as the significance of this dissertation thesis and the ontological and epistemological assumptions. the model and the conclusions;

The conducted detailed study and assessment of the role regarding the favorable recreational impact of the available hydro-mineral resources, the composition of the mineral water and health and the therapeutic result, by triangulation of the results from the study of the improvement of the health status from the real practice. in the European thermal and ecological cluster.

Scientific and applied contributions:

Applying the constructive paradigm - how healing mineral water used for underwater gymnastics in radon pools improves the overall health status of patients suffering from various diseases, a model that encourages focusing on how a phenomenon, concepts and theories are related by studying behavior and the recreational and therapeutic outcome;

The Ellipsoid of Asclepius, developed by the author, found that sunshine, combined with a mild climate, mineral springs and clean air, have a healing effect on those suffering from lung, cardiovascular, joint and other diseases; The ellipsoid unites the natural resources of the region and explains why it allows the development of tourism, prevention, spa treatment, spa medicine, spa and wellness and recreation.

The ontological assumptions about the role of nature and the opportunities for recreation that bioclimatology provides in Velingrad allow emphasizing the benefits and validation of current knowledge and the correlation between traditions and history in the use of hot mineral springs,

health effects on the body and future prospects and trends. of balneal and spa tourism and cluster expansion.

The complex medical-geographical research of the resources for balneological and climatic treatment actively contributes to the increase of the role of the regional researches in the border field of medical geography and confirms the need for their deepening.

The studied socio-economic and spatial-territorial impacts of balneology and climatotherapy confirmed their importance for the local economy and the need for more effective organization and public administration in the interest of the local community.

Applied contributions:

Epistemology - or the knowledge generated by the practical participation of the author in the complex development and application of therapeutic and recreational programs with a combination of mineral water, inhalations, ultrasound, interference current, therapeutic gymnastics, radon water in Velingrad, which improve overall health and support prevention, recreation and treatment of the observed patient focus groups.

The new knowledge generated from the current data, using a multidisciplinary approach derived from ecology, history, geology, geography to collect what is already known about mineral springs and combine their application based on current data and facts, plus applied research methods in the dissertation for the role on spa, wellness, health and recreational tourism.

The trained specialized staff for the recreational and spa industry in the region, as an integral part of the study, prove the place of the author's conceptual views as a significant applied aspect in the field of balneology and climatology, spa and wellness for the region and for Bulgaria.

A number of the conclusions in the research can find a real place in the updating of the strategic and planning documents, both at municipal and settlement level - ODA, IPGVR, Tourism Development Strategy and others.

I accept the contributions set out in this way, with the proviso that some may be reduced and others combined.

PUBLICATIONS AND PARTICIPATIONS IN SCIENTIFIC FORUMS

Belichenova, T. - Medico-geographical analysis of balneology and climatotherapy in the local development of Velingrad municipality. Yearbook of Sofia University "St. Kliment Ohridski", Book. 2 - Geography, Vol. 114, 2021 (in press).

Belichenova, T. - "Velingrad - an excellent place for health and spa tourism." Mr. "Destination Bulgaria" - place IX. 2020

Belichenova, T. - "10 years spa capital of the Balkans - 70 years - Velingrad" Advertising catalog of the Municipality of Velingrad - 2019.

Belichenova, T. - "Velingrad - SPA capital of the Balkans." Catalog of Velingrad municipality 2009.

Belichenova, T. - "SPA Drorettica - Oasis of health and pleasure". SPA & Beauty Magazine - issue 1, 2008

Belichenova, T. - "SPA center as an emotional branding" SPA & Beauty Magazine - issue 2, 2008.

Belichenova, T. - "Talented managers educate talented workers" SPA & Beauty Magazine - issue 2, 2008.

Belichenova, T. - "Innovative therapies for body and face: Beauty magic - plaster pants. Tender caress - oxygenate mesotherapy ". SPA & Beauty Magazine - issue 3, 2008

Belichenova, T. - Magazine "SPA & Beauty" - issue 4, VIII - 2008

Belichenova, T. - "Velingrad - a city of living water." V. "Tempo" XII-2008.

Belichenova, T. - "The crisis is a time for training." V. "Tempo", 04.05.2010.

Belichenova, T. - "Talented managers educate talented workers" V. "Tempo" - 12-18.08. 2008 interview.

Belichenova, T. - "SPA is an investment in health, vision and physics." V. Tempo, 2010.

Belichenova, T. - "Our observations on the influence of climatic factors in the resort of Velingrad in the treatment of non-specific lung diseases in children under 14 years of age." Proceedings of the scientific-practical conference: "Social and economic efficiency of recreation, spa treatment and business tourism", 1983.

Belichenova, T. - "Tracking the methodology of Strelnikova - paradoxical breathing exercises

in patients with hypertension I-II degree in the resort of Velingrad." Proceedings of the Seventh

National Conference of the Scientific Institute of Balneology, Physiotherapy and

Rehabilitation - Medical Academy, 1982

Belichenova, T. - Manager of the SPA center "Palace" - Velingrad, "Bulgaria on the world

market of SPA and wellness tourism". Mr. "Tourism & Recreation", Issue 2, 2012.

Belichenova, T., Dr. - SPA and Wellness expert. "The fudden treasures of Velingrad and its

mineral waters revealed balneology." "Tourism & Recreation" № 7 - Bulgaria in four seasons,

2017.

CONCLUSION

In conclusion, I believe that the research on the dissertation has the necessary personal

contribution of the doctoral student for this kind of development. The main motive for this is

the knowledge, the qualities it possesses and the huge volume of independently processed

information contained in the dissertation. In support of this is the clear argumentation in the

dissertation, the logically sound structure and reliability of scientific theses. The dissertation

work is carried out on clearly defined issues with scientific and scientific-applied relevance.

He has the necessary qualities to award the scientific and educational degree "Doctor". Given

the merits of the dissertation, I would like to propose to the Distinguished Members of the

Scientific Jury to vote positively and give Tanya Borisova Belichenova the educational and

scientific degree "Doctor" in the professional field: 4.4 "Earth Sciences", scientific specialty

"Economic and social geography. Regional and local development.

PREPARED THE REVIEW:

Assoc. Prof. Dr. Kliment Naydenov

03.09.2021

Sofia