

REVIEW

By Prof. Stoyanka Tsvyatkova Zheleva-Popova, MD, PhD

Member of the Scientific Jury according to Order No R-109-337/08/05/2022 of the Rector of MU-Varna, and on the basis of Protocol No 1/08.08.2022 from the First meeting of the Scientific Jury, I have been appointed to prepare a review on the procedure for acquiring the Sc. and Educ. Degree "Doctor" in the field of higher education 7. "Health and sport", professional direction 7.4. "Public Health", scientific specialty "Public Health Management" with candidate Petya Stoilova Boncheva

Procedure details

The procedure for the development and presentation of the dissertation work and the training in the doctoral program fully complies with the regulations:

By order of the Rector of MU-Varna P-109 – 459/17.07.2018 Ass. Professor Petya Boncheva is enrolled as a doctoral student in an independent form of study in the Department of Social medicine and Health care Organization, scientific specialty "Public Health Management". The Protocol for the successfully passed exam for the doctoral minimum from 06.11.2018 was presented, in compliance with Order P-109-612/25.10.2018 of the Rector of the MU - Varna and Protocol for a successfully passed exam in a foreign language from 11.12.2020 on the basis of Order R-100-769/30.11.2020 of the Rector of the MU - Varna.

Given the report with entry No. 102-1849 /26.07.2022 by Associate Professor Nataliya Usheva - head of the Department of Social Medicine and Health Care Organization regarding the readiness for public defense and a proposal for a Scientific Jury and a decision of the FC of the Faculty of Public Health at the Medical University of Varna, protocol No. 191/01.08 .2022, by Order of the Rector of MU-Varna No. R-109-337/05.08.2022 ass. Petya Boncheva was directed to a public defense.

The doctoral student has submitted precisely all the necessary documents, according to the Law of development of academic staff of Republic of Bulgaria.

Biographical data and career development of the candidate

Ass. Petya Boncheva graduated Medical collage-Varna specialty "Sanitary Inspector" in 1990. For 27 years she worked as a sanitary inspector in the Anti-epidemiological control department of the Regional Health Inspection - Varna, which ensured the acquisition of extensive professional

experience and knowledge in the field of public health protection and control and anti-epidemic activity

In parallel, she upgraded her education, obtaining a Bachelor's degree in "Social Pedagogy and Administration" at "Episcop Konstantin Preslavski" University, 2003. Following were two master's programs at MU-Varna: "Nursing Care Management", 2016 and "Public Health", 2018. From 2017 to 2020 she is the Organizer of educational activities in the dean's office, Faculty of Public Health, MU-Varna, which provides an opportunity to get acquainted with the specifics of the university environment and community.

The academic development of the doctoral student began in 2018 as a part-time lecturer in the Department of Social Medicine and Health Care Organization, and from 9.10.2020, after a competition, she holds the position of full-time assistant in the same department. Her teaching activity includes conducting seminars and exercises in the disciplines: "Social Medicine", "Health Promotion", "Applied Epidemiology", "Public Health Indicators" and "Health Risk Assessment" to students from various specialties. Administrative Assistant in the Department.

Ass. Boncheva is enrolled in the specialization "Medical Informatics and Health Management", 2020. She increases her qualifications through courses and seminars in the field of research methodology; pedagogy and andragogy; history of medicine; modern means of communication. Participated in specialized training in English for working with EU institutions, 2008.

As. Boncheva wins a Scientific project in connection with the development of the dissertation work, approved by the "Science" Fund of MU-Varna.

Language skills – English language – B1 level and Russian language – excellent.

She is a member of the Bulgarian Scientific Society for Public Health, the Bulgarian Public Health Association and the European Public Health Association (EUPHA).

An overall characteristic of the dissertation

The dissertation on the topic "UNIVERSITIES FOR HEALTH PROMOTION - DEVELOPMENT OF THE INITIATIVE AND PREREQUISITES FOR IMPLEMENTATION IN THE BULGARIAN HIGH SCHOOL", developed by Petya Boncheva, is in volum of 184 pages. In terms of methodology and composition, it is built according to the accepted standard requirements in the field. It consists of following main parts - Literature Review, Methodology, Results and Discussion, Conclusion, Contributions, Bibliography, in an optimal ratio. It is illustrated with 8 figures, 21 tables and 6 appendices.

The bibliographical reference is correctly presented and includes 232 literary sources (35 in Cyrillic and 197 in Latin). Of the cited sources, 89% are from the last 20 years.

The significance and the actuality of the current dissertation work is determined by the choice of the topic and the approach that the author applies, investigating logically and consecutively:

- "Health promotion" as a concept, the clarification and perception of which is urgent in the current Bulgarian context as an important tool for achieving better health;
- "Setting- approach" as a practical application of health promotion in people's everyday life and environment;
- Higher education institutions as a key place for promoting the health of students, staff and the wider public. The understanding that investing in HPU is an investment for the future;
- Application of the concept "Health promotionu universities" in a specific site - MU-Varna, ending with the development of a report with a self-assessment for its inclusion in the European network of HPU.

Investigating and debating these issues, the developed dissertation work will contribute to popularizing the idea and principles of "Health Promotion" among medical professionals, politicians and the wider involvement of the public in its activities, which is in huge deficit in our country.

The literature review (LR) is based on scientific literature, official sources and normative documents. It is very well structured in 5 parts, looking at the development of the concept, theory and practical application of HP.

In the introductory first part of the LR, the author presents a retrospective of the development of the concept of "Health Promotion" logically linked to the evolution of the understanding of health and the determining factors, with the transition from a biomedical to a holistic approach to health and disease, reaching the perception of health as the main resource for the realization of the individual and society, right and responsibility of the people themselves.

Based on the Ottawa Charter (1986), as a fundamental document tracing the HP, the dissertation focuses on the three main strategies of health promotion and the key areas of action for their implementation. The organized international conferences on health promotion and their contribution to enriching the content of the concept, adequate to the rapidly developing and globalized world, have been tracked.

The second part of the LR is dedicated to the "places" for the practical implementation of HP (healthy settings), based on the approach of creating a health-supportive environment in which

people's daily lives take place – settlement, workplace, schools, health facilities, with their clear geographical/physical boundaries, organizational structures and social roles. The initiatives "Healthy Cities", "Health Promotion Hospitals", "Workplace Health Promotion", "Health Promoting Schools", "Health Regions" initiatives are presented in detail - their essence, goals, organization, achieved efficiency.

Boncheva has very well justified the need to develop activities promoting health in higher education - pointing out the neglect of research on the health status of the so-called "young adults", the peculiarities of student life, environment, habits, risk factors-academic workload and stress. The author cites data on the number of students in our country as not a small part of the population and the recommendations in the scientific literature that they should be treated as a separate subgroup requiring the appropriate attention.

With this motivation, Ass. Boncheva moves on to the emphasis of LR (fourth part) - "Health Promotion Universities" (HPU). At the very beginning, the linguistic variants in the translation of the concept and the adopted terminology in the current work are emphasized, as the most appropriate in the Bulgarian context.

The doctoral student examines the development of the PHU initiative, advocating the thesis that the university is both an educational environment for students, a working environment for teachers and staff, and a center and source of scientific knowledge for the public. As such, the university can create healthy learning and working environments, opportunities to build values, skills and healthy behaviours.

Sources documenting the development and main goals of the HPU movement from the mid-1990s in Western European countries to the present day have been searched for and cited. The documents from the international conferences of the HPU Network, with strategic importance for the development of the HPU movement, have been examined in detail.

The interest in the WHO's HPU initiative leads to its implementation in a number of universities in countries in Europe, Asia, North and South America, New Zealand and Africa, which subsequently unite in national and international networks for coordination and interaction. The achievements of a number of such associations from different parts of the world are cited.

The analysis that Ass. Professor Boncheva makes of a number of documents, the model of Mark Dooris (2010), the Cyclic model for successful implementation of the initiative in a university environment, proposed by the British network of HPU, containing guiding principles, guidelines and a framework for the promotion of health in higher education. The Okanagan Charter, 2015, is

presented in great detail. The latter was translated into Bulgarian and adapted to the Bulgarian cultural context. The translation, which I appreciate as a valuable contribution to the popularization of HP, is attached to the dissertation (Appendix 6).

The dissertation does not miss another important issue, such as the evaluation of the results of the activities of the HPU, in which to demonstrate the degree of integration of health in the university policy, culture and environment. The available assessment tools are also explored, with the Self-Review Tool of the British Universities Network for Health Promotion presented in more detail.

Of great importance for further self-study is the investigation of various aspects of the practical application of the concept of HPU - difficulties related to the different cultural context, educational goals and specific organizational characteristics of the educational institution, the availability of institutional support, availability of resources and funding, as well as the conditions and motivations for the adoption and sustainability of the initiative, illustrated by good practices from the UK and Australia.

Against this background, in the last part of the LR, the author draws attention to the state of the theory and practice of health promotion in Bulgaria. Despite the alarming data on the deteriorating health status of the population and the increase in the prevalence of unhealthy behavior, as well as the commitment and political will declared in strategic national documents to create conditions for health, the author notes the difficult adaptation and application of the terminology, philosophy and practice of HP in our country.

Information on the practical application of HP was found in three areas of people's daily life in Bulgaria: schools, workplaces and health regions, which were expertly examined.

I appreciate the presentation of the membership of the Varna Region in the WHO network "Regions for Health" since 2001, as the only representative from Bulgaria, and the role of professors from MU - Varna as initiators and coordinators in this project, that provides great opportunities to work with WHO experts, exchange experiences and fruitful partnerships in the field of health.

LR as a structure and content deserves a high rating. The in-depth analysis of international literary and documentary sources shows the author's broad awareness and competence on the subject under consideration. It convincingly justify the need and importance of the research presented in the dissertation and point to its goals and objectives.

In the second and third chapters, the author presents the goals, tasks and working hypotheses of the scientific research, as well as the methodology of its implementation.

The main goal is correctly formulated: "To study the conditions for the implementation of the WHO initiative " Health Promotion Universities " in Bulgarian higher education, by evaluating a specific university according to internationally approved criteria for health promotion", for the implementation of which 6 tasks are set. Five working hypotheses have been formulated.

Taking into account that the HPU initiative is new and unknown in our country and that it steps on a completely bare field from a methodological point of view, the author quite rightly focused on researching the tools and methodology used in European practice. At the same time, Ass. Boncheva takes into account Bulgarian studies proving the need for *"trans-cultural interpretation and adaptation of foreign experience to the specificity of Bulgarian reality and culture"* and she is directed towards adaptation and validation of an internationally recognized tool recommended by the global HPU network - "Self-ReviewTool".

In accordance with the tasks set, the study is organized in three phases:

- First phase - adaptation and validation of an internationally recognized tool - "Self-ReviewTool" for self-assessment of readiness of a Bulgarian higher education institution for inclusion in the " Health Promotion Universities" initiative.
- Second phase - application of the adapted and validated tool in an empirical study of the opinion of the academic community at the MU "Prof. Dr. P. Stoyanov" - Varna for the available conditions and health promotion activities at the MU and the study of students' health behavior.
- Third phase – preparation of the institution's self-assessment according to the criteria for the HPU and formulation of the priority spheres for action on the HP.

Each phase is presented in detail, clearly and precisely formulated: object, sources of information, applied tools and methods.

The object of the research is the opinions, understandings, evaluations and behavior of representatives of the university community at the Medical University "Prof. Dr. P. Stoyanov" - Varna: students, members of the academic staff and employees, members of the Academic Management and the Student Council. A 10% representative sample of the target groups was formed.

Toolkit:

- Structured survey card in three versions in electronic form of Google form for the relevant target groups.
- Tool for self-assessment of HPU in Bulgarian language.

The entire toolkit is available in Appendices Nos. 1, 2, 3 and 4 to the dissertation work.

The applied methods for collecting and processing the information are adequate to the tasks set, namely:

Standardized WHO methodology (Process of translation and adaptation of instruments, WHO, 2007) applied to adapt and validate the internationally recognized "Healthy university Self-ReviewTool".

The Delphi method among two target groups: experts in the field of health promotion, regarding the adequate adaptation of the original version of the instrument, and among representatives of the University Leaders and of the Student Council for summarizing the responses to the self-assessment.

Sociological methods: Structured survey; Semi-structured in-depth interview; Documentary method – production of a set of documentation according to WHO translation and adaptation guidelines.

Statistical methods: Descriptive analysis; Parametric, Non-parametric methods and Analysis of Variance (ANOVA) in hypothesis testing; Reliability analyzes of the instrument: Cronbach's alpha coefficient; test-retest reliability - Cohen's kappa coefficient; Tabular and graphical methods for visualizing the obtained results.

Data processing and analysis were performed with the statistical package IBM SPSS version 26.0 (Chicago, IL, USA), and for graphic analysis – MS Office Excel 2007. For the analysis of qualitative data, the software product QSR NVivo v.11 was used.

The doctoral student participated in all phases of the study. The use of the rich set of methods related to the achievement of the ambitious tasks set in the work makes a very good impression about the author's awareness and competences in the methodology of scientific research, which she successfully applies, evident from the reported results.

The study was approved by the Committee on Ethics of Scientific Research at the University of Medicine - Varna with Decision No. 101/24.03.2021

Chapter three presents results and discussion from the three successive phases of the own studies.

Strictly following the guidelines of the WHO (**first phase**), the adaptation and validation in Bulgarian of the used internationally recognized tool for self-evaluation of universities for health promotion Self-ReviewTool (SRT) (in English) was carried out in 4 logically connected consecutive stages. A language translation of the toolkit was carried out; adaptation of specific terms and expressions from the original to the national cultural context by reaching a consensus of an Expert

Panel and back translation establishing a very good correspondence of Version-2 with the original; testing and assessing the degree of reliability and reproducibility of the tested Version-2 of the SRT using the Cohen's kappa coefficient; editing and shaping of the final Bulgarian version of the SRT. This complex process was carried out with extreme precision and documented in relevant protocols. The author shares the difficulties in adapting the tool to Bulgarian conditions (structure of statements, unclear, inappropriate or inapplicable words and expressions, terms and concepts, etc.), which once again unequivocally proves the need for a careful transfer of internationally accepted tools to a given national context, as well as the insufficient awareness of the matter (HP) in our country.

Applying the validated tool for self-assessment of HPU in the **second phase** of the study, an empirical study was carried out among the university community regarding the available conditions and activities of HP in MU-Varna. The presentation of the results follows **the five sections of the adapted self-assessment tool of the HPU in Bulgarian language.**

There is definiteness in the opinion of all three groups of respondents for high institutional commitment and responsibility towards health and financial security of the activities; providing access to health, social, sports and entertainment services; an appropriate work and living environment, food, housing, recreation; supporting the personal, social and professional development of all people in the institution, with which MU-Varna meets the relevant international criteria for HPU.

The inclusion of an additional part of 17 questions to the survey card for the students allows to examine the self-assessment of health, health awareness and attitudes towards participation in health initiatives. Aspects of students' health behavior such as: smoking, use of alcohol and drugs, nutrition and physical activity, level of psycho-emotional stress, sleep duration, academic success are studied, on the basis of which the health problems and needs of students at the MU - Varna are determined.

The high frequency of smoking (35.3%) and alcohol use (53.2%), insufficient physical activity, despite the favorable environment; self-reported unhealthy eating; high stress level emerged as problematic. The declared high motivation and desire to participate in initiatives for HP is positively evaluated.

The results of the third phase of the study present the final self-assessment of the institution, regarding the criteria for the HPU and formulation of the priority areas for health promotion actions. The high positive evaluation of the institution according to the criteria is satisfactory.

In a very precise and systematized way, the main results of the studies are presented in tabular form, which creates a good impression with the possibility of easy perception of the information.

The conclusions drawn from the obtained results are systematized in 9 points (pages 124-128). They are clearly formulated and logically follow the purpose and tasks of the work and provide an answer to the set working hypotheses:

- The HPU initiative has been well received and successfully developed in a diverse cultural and socio-economic environment, which rejects the hypothesis that it finds wide application only in a Western European context.
- The need for cultural adaptation of documents and policies related to HP, of easily applicable tools for initial and regular self-assessment and management of HP activities, such as the adapted and validated in Bulgarian language Self-assessment tool of HPU, is proven.
- There is a high degree of involvement of the university community in creating conditions and activities related to health.
- The analysis of students' health behavior confirms the hypothesis of carrying risk factors and behaviors among students.
- Problem areas are outlined in which additional work is needed for the successful application of the principles of the HPU.
- The performed Self-assessment categorizes MU "Prof. Dr. P. Stoyanov" - Varna in the group of "emerging" HPU and is a step towards official recognition and membership in a national / international network.

The author analytically presented the **positive sides and limitations of the conducted research**. An important positive result is an increase in the activity and empathy of the university community to the activities of the HP, stimulated by the wide participation and real acquaintance with the principles of the HP.

The contributions are correctly formulated and presented on page 134 of the dissertation, which I accept and determine their significance in the theoretical, practical-applied and methodological direction. I would emphasize on:

1. The created tool for Self-assessment of higher education institutions in the Bulgarian language through a trans-cultural adaptation of an internationally recognized toolkit "Self-ReviewTool",

evaluated as working with high validity and reproducibility, which can be used in all higher education institutions in Bulgaria.

2. The attached validated tool for Self-assessment of Bulgarian universities shows that, despite not being official participants in the HPU Network, they carry out a wide range of activities related to HP and the conditions for their realization are in place. The study traces the way for Bulgarian schools of higher education to adopt and apply the principles of HPU.

3. Data on student health behaviors, problem areas, and priorities for resolution are provided.

4. A self-assessment was carried out according to the criteria of the International Network of Higher Education Institutions of one of the elite universities in Bulgaria - MU "Prof. Dr. P. Stoyanov" – Varna, which opens a door towards official recognition and membership in a International network.

5. An adapted translation was made of the Okanagan Charter, 2015, the basic theoretical document of the HPU.

In connection with the dissertation work, the doctoral student presented **three publications**, printed respectively in the magazine "Social medicine", in the Collection of reports from the Jubilee scientific conference with international participation "New approaches to public health and health policy" Pleven, November 26 - 28, 2020, 157 -162, and in "The Black Sea Journal of Medicine and Public Health". Volume 1, 2022 p. 23-30), as well as **one participation** in the Second Scientific Conference with international participation "Health care - contribution to the quality of life" 06.7-8.2019. I believe that these publications and reports really represent the achievements of the doctoral student in the relevant stages of the study.

The abstract faithfully reproduces the content of the dissertation. It is prepared in a volume of 75 standard pages and is composed of parts that present the structure and content of the dissertation work.

Conclusion:

The dissertation is dedicated to a neglected area of our health care - health promotion, which makes it significant and timely. It is the first in-depth study on the practical application of “the setting - approach” for health promotion in Bulgaria, and especially in our country's Higher Education Institutions, and represents a theoretical and high practical and methodological contribution to popularizing the principles of health promotion and their practical implementation.

The dissertation shows the good theoretical preparation and long-term experience of the author in the field of public health, as well as the skills of applying the methodology of scientific research work and developing tools.

The dissertation fully fits into the subject matter of the Department of Social Medicine and Organization of Health Care, where the doctoral student is trained and her educational and educational goals - popularization of the idea of health care, a healthy lifestyle, the attitude and approach to health, and also impact on university policy to achieve better health for the entire university community.

Based on the above, I give my **positive assessment of the dissertation work and a supporting vote for awarding Assistant Professor Petya Boncheva the scientific and educational degree "doctor" in the scientific specialty "Public Health Management"**.

21.09.2022

Signature:

A handwritten signature in blue ink, appearing to be 'Stoyanka Popova', written in a cursive style.

(Prof. Stoyanka Popova, PhD)