STATEMENT

by Prof. Dr. Albena Kerekovska, MD, PhD

Department of Social Medicine and Health Care Organization Faculty of Public Health Medical University "Prof. Dr. Paraskev Stoyanov" - Varna

of a dissertation for the acquisition of the educational and scientific degree "**Doctor**" in the field of higher education "7. Healthcare and Sports" professional direction "7.4. Public Health" scientific specialty "Public Health Management"

of Petya Stoilova Boncheva - a doctoral student in an independent form of study

Topic of the dissertation: "Health promoting universities - development of the initiative and prerequisites for its implementation in the Bulgarian higher education institution"

Research supervisor: Prof. Dr. Klara Georgieva Dokova, MD, PhD

Basis for drawing up the opinion: Order No. R-109-337/05.08.2022 of the Rector of the Medical University - Varna determining the members of the Scientific Jury and Protocol No. 1/08.08.2022. from the first held meetings of the Scientific Jury.

Procedure data

Petya Stoilova Boncheva has completed training in the doctoral program "Public Health Management" in professional direction 7.4 "Public Health", field of higher education 7. "Healthcare and Sports". The doctoral student was enrolled in a free form of education with Order No. R-109-459/17.07.2018 of the Rector of the Medical University - Varna at the Department of Social Medicine and Health Care Organization with scientific supervisor Prof. Dr. Klara Georgieva Dokova, MD, PhD and topic of the dissertation work "Health promoting universities - development of the initiative and prerequisites for its implementation in the Bulgarian higher education institution".

The doctoral student has successfully passed the doctoral minimum exams, completed all the activities provided for in the individual study plan, collected the necessary credits and received positive attestation marks for all academic years of study. The doctoral studies ended on time and Assistant Professor Petya Boncheva was discharged with the right of defense by Order No. R-109-

337/05.08.2022 of the Rector of the Medical University - Varna. Based on the decision of the Faculty Council of the Department of Social Sciences medicine and health care organization from 26.07.2022 and on the decision of the Faculty Council of the Faculty of Public Health (Protocol No. 191/01.08.2022) a defense procedure was opened before a Scientific Jury with Order No. R-109-337/05.08.2022 of the Rector of the Medical University - Varna.

The candidate has submitted all the necessary documents for the procedure, corresponding to the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Implementation and the Rules for the Development of the Academic Staff of the University of Medicine - Varna.

Brief biographical data about the author of the work

Petya Boncheva holds a bachelor's degree in the specialty "Sanitary Inspector" from PMI "Dr. N. Nikolaev" at VMI - Varna since 1990 and a bachelor's degree in Social Pedagogy from "Episcop Konstantin Preslavski University of Shumen" in 2003. In 2016 she has acquired the educational and qualification degree "Master" in the specialty "Health Care Management", and in 2018 - majoring in "Public Health" at Medical University - Varna.

Petya Boncheva began her work experience in 1990 as a sanitary inspector in the Anti-Epidemic Control Department, Hygiene and Epidemiological Inspection - Varna. Since 2006 until 2011 she was a health inspector in the Anti-Epidemic Control Department at the Regional Inspectorate for Protection and Control of Public Health - Varna, and since 2011 until 2017 successively held the positions of "junior inspector" and "senior inspector" in the same department at the RZI - Varna.

Her academic career began in 2017, when, in addition to being an "educational activity organizer" at the Dean's Office of the Faculty of Public Health at the Medical University - Varna, she is also a part-time assistant at the Department of Social Medicine and Health Care Organization, and from 2020, after winning a competition, she was appointed as a full-time assistant professor. Assist. Prof. Petya Boncheva has an intensive teaching program, leading practical classes on disciplines in the field of public health for students from various specialties, such as: "Medicine", "Dental medicine", "Speech therapy", "Health management and medical and social care", "Protection and control of public health", "Management of health care", "Optometrist", etc.

From 2020 she is a specialist in "Medical Informatics and Health Care Management" at the Medical University - Varna. The continuing education qualification courses conducted further contribute to her professional development and interdisciplinary training. The main directions of the postgraduate training and qualification of assist. prof. Boncheva are in the field of social pedagogy, pedagogical and andragogical competence of teachers, research design and statistical analyses, qualitative research methods, modern means of communication and normative documents for health insurance in crisis conditions, etc.

She is a member of the Bulgarian Public Health Association, the Bulgarian Scientific Society of Public Health and the European Public Health Association (EUPHA). She has excellent training in Russian language, which she uses freely in her professional activities. She has passed a specialized training in "English language for working with EU institutions".

In 2018 she was awarded the "Varna Award" of the Mayor of the Municipality of Varna for outstanding success in studies in the Master's program "Public Health", and in 2017 obtained a diploma for the best report at the First Scientific Conference of the Bulgarian Scientific Society of Public Health.

Relevance and significance of the dissertation work

The topic of the dissertation work is aimed at an increasingly relevant direction in public health and health promotion on a European and global scale - the engagement of the public and the development of a supportive environment with a view to affirming a number of areas in people's lives as places to improve their health. The health of young people in institutions of higher education is an extremely important resource that, unfortunately, is often out of reach of health promotion and health promotion activities.

The Health Promoting Universities (HPU) initiative has been well received worldwide and has become a global movement. Despite the evidence of the effectiveness of the established national and international networks of health promoting universities, so far, no Bulgarian university has adopted the initiative in its strategy. It is still insufficiently known in our country. There is no accepted adequate translation of the fundamental international documents and the potential of Bulgarian universities as an environment for health promotion has not been studied.

The dissertation is the first Bulgarian study that studies the possibilities of applying the principles of health promotion in higher education institutions in Bulgaria. In addition to the specific higher education institution evaluated in the course of the study according to the internationally established criteria for HPU (Medical University - Varna), its importance in perspective is extremely beneficial for the rest of the higher education institutions in our country.

Structure and content of the dissertation

The dissertation is presented in a total volume of 184 standard pages. Its structure is logically constructed and balanced, and includes: literature review; purpose, tasks and working hypotheses; methodology; results; discussion; conclusions and contributions; bibliography and 6 appendices. A list of used abbreviations is placed at the beginning of the thesis.

The work is illustrated with 21 tables and 8 figures. The literature used is precisely described in the bibliographical reference. A total of 232 literary sources were systematized and analyzed, 35 of which are in Bulgarian.

The literature review is targeted, comprehensive and very well structured. A broad and up-to-date awareness of the doctoral student was demonstrated, as well as an ability to critically evaluate, generalize, systematize, identify significant issues, thoroughly analyze and comparatively interpret the scientific literature in the researched field.

The development of the concept of Health Promotion with its key areas of action and its practical application is traced, with an emphasis on building a health-supportive environment and healthy settings. The need to promote the health of students - a major segment of the young adult population - is justified. The development of the "Health Promoting Universities" initiative has been systematically studied on a global scale - significant events, international conferences and documents affirming guiding principles, guidelines and a framework for action. Information is provided on national and international networks of health promoting universities. Models of the implementation of the HPU initiative are presented, as well as tools for assessing the potential to become a Health Promoting University and the results of health promotion activity. The practical application of the HPU concept and examples of good practices on an international scale are presented. The literature review ends with tracking the perception and development of the concept of health promotion in Bulgaria and the practical application of health promotion in places of people's daily lives - schools, workplaces and regions, with an emphasis on the accession and participation of Bulgaria in the European network of Health Promoting Schools. On the basis of the review of the scientific literature, conclusions are drawn, determining the relevance of the researched problem and the purpose of the dissertation work.

The purpose of the scientific work is clearly and precisely defined. Six main tasks, logically consistent and aimed at achieving the main goal, have been set out: "To study the conditions for the implementation of the WHO initiative "Health Promoting Universities" in the Bulgarian higher education institution, by evaluating a specific university according to internationally recognized criteria for HPU". Five working hypotheses corresponding to the set tasks were formulated.

The methodology of the scientific research, which is organized in three successive phases, is presented precisely and in detail. Particularly useful and interesting is the first phase "Adaptation and validation in Bulgarian of an internationally recognized Self-Review Tool", the precise implementation of which depends on the subsequent own studies. The tool itself is described in detail, as well as all the steps of the applied methodology recommended by the WHO. In the second phase – the actual research, object of study are representatives of the university community at the Medical University - Varna: students, members of the academic staff and employees. A documentary method and a structured survey using an instrument (structured survey card) specific to each group of respondents were applied.

In the third phase, "Final self-assessment of the institution, according to the international criteria for health promotion and formulation of the priority spheres of action for health promotion", the Delphi method and the adapted and validated Bulgarian-language Self-Review Tool of HPU were applied.

Appropriate statistical methods were applied to ensure the validity and reliability of the obtained results, including analyzes to determine the reliability of the instrument used and a modern product for the analysis of qualitative data.

In all phases of the research, assist. prof. Boncheva demonstrated a very high level of mastery of complex methodology for conducting scientific research.

The results of the three phases of the scientific research are comprehensively presented, sequentially by stages of implementation.

The results of the first phase of the scientific study describe in detail the entire process of adaptation and validation of the Self-Review Tool, very well illustrated by Figure 1. The comparative analysis of the content of the two translations and the overcoming of inconsistencies through reconciliation are presented in detail in a summary translation of the tool. The work of the expert panel to reach a consensus regarding the adaptation of specific terms and expressions of the original version of the instrument to the Bulgarian cultural features and context is described in detail. The layout of the final adapted version of the instrument is based on detailed discussions of each statement in terms of clarity, commented words and expressions and matching the answers with those in the questionnaire in order to achieve equivalence of the original, taking into account the peculiarities of the Bulgarian language and synchronizing with Bulgarian cultural characteristics.

The results of the Second Phase - the real empirical study of the opinion of the university community in the Medical University - Varna about the available conditions and activities for health promotion in the university environment, are presented according to the individual sections of the Self-Review Tool: Leadership and strategic management; Provision of services; Environmental conditions; Communication, information and marketing; and Academic, personal, social and professional development. The results show compliance according to the two main international criteria for HPU from the first section of the tool - presence of a commitment to health in the organization's mission and delegation of responsibility by providing a budget for health promotion activities. According to 88.4% of respondents from all target groups, the university is committed to improving health at a strategic level. More than half of the teachers and employees (56.7%) confirm, in their opinion, the availability of planned and provided funds for health promotion activities. With regard to the second section of the instrument "Provision of services" - the attitude of the respondents towards the provision of health services related to their needs is positive (60.5%). There are clear policies and procedures in place to ensure the confidentiality of personal health information (according to 66.8% of respondents). All survey participants (91.3%) confirm the equal opportunities provided to them to use social, sports, financial and entertainment services. In the third section "Environmental conditions", 96.6% of respondents believe that the university provides an environment that favors the health of the university community; 88.3% - that the University promotes the opportunities for recreation, sport and physical activity that it provides for the use of the University community and the general

public; 75.5% - that the university's dining facilities provide a variety of options for healthy eating. More than half of the respondents have a positive opinion about the organization of transport by the university with a view to protecting the environment and health, encouraging physical activity, walking and cycling. The results of the fourth section "Communication, information and marketing" are also very positive, with 93.5% of the academic staff confirming the availability of accessible communication mechanisms in the university to promote policy, decisions and good practices related to the health of the university community. The majority of respondents (90.4%) agreed that digital technologies and new media are used in the dissemination of health-related information and news among the university community. The majority of respondents (90.4%) agreed that digital technologies and new media are used in the dissemination of health-related information and news among the university community. In the section "Academic, personal, social and professional development", the criteria affecting the inclusion of health in the framework of curricula, programs, freely chosen disciplines, courses and modules, as well as the development of scientific research through which the university contributes to the expansion and dissemination of health-related knowledge, according to students and academic staff, are fulfilled to the highest degree (93.7% and 94.8%). According to 92.1% of respondents, the university provides students, teachers and staff with a variety of opportunities for personal, professional and social development.

The application of the approved Self-Review Tool of HPU requires a study of the health behavior of students at the university, which provides a basis for planning activities aimed at specific health problems of the student community. The students of Medical University - Varna give a much more positive self-assessment of their health compared to other Bulgarian students, rating their health as excellent, very good and good (83.6% of respondents). 35.5% of the students in the study were smokers; more than half use alcohol (53.2%); 53.5% define their diet as healthy. The results regarding daily consumption of fresh vegetables, fresh fruit and confectionery are comparable to those of international studies among students. The eating behavior of the students of the study is distinguished by more frequent intake of coffee, much less consumption of energy drinks, lower intake of carbonated soft drinks compared to the behavior of student communities in international studies. Only 31.1% of students exercise adequate regular physical activity, and 33.9% of students do not do sports at all. Over a quarter of students in the study (25.4%) rated their level of psychoemotional stress as high, with high levels comparable to results from international surveys of medical university students. As expected, health awareness is very high, at 96.5% of the surveyed students know and agree that smoking, alcohol and drug use, unhealthy diet and low physical activity damage health. There is a positive attitude among students to participate in health support initiatives organized by the university: to cope with stress - 78.6%, to healthy eating - 78.4%; for physical activity and sports – 69.8%; for quitting smoking – 52.8%.

The results of the third phase - the final self-assessment of the institution regarding the fulfillment of the criteria for HPU and the formulation of the priority areas for actions on health promotion - show a high degree of fulfillment of the criteria in each subsection of the five main criteria. No areas were identified with a degree of fulfillment of the criteria below 45%. As the highest fulfilled

(100%) according to the criteria for HPU, they are established in MU - Varna the areas: Campus and buildings; Environmental conditions for recreation; Physical activity, recreational and social facilities; Communication; Marketing; Curricula and programs; Research, enterprise and Knowledge transfer. A very high degree of fulfillment of the criteria is also observed for the areas: Professional development (92%); Information (87%); Health services (86%); accommodation and Wellbeing and support services for a better quality of life (83%); Transport (78%) and Stakeholder engagement (73%). The lowest degree of fulfillment of the criteria is in the area of Institutional commitment and responsibility (67%), which points to the need for additional actions by the university management with a view to the formal acceptance of the HPU initiative.

Conclusions of the dissertation work

Conclusions are clearly formulated and logically follow from the results obtained. They provide an answer to the set research tasks and the formulated hypotheses of the scientific work.

Valuable from a practical point of view are the conclusions confirming the good reception and wide application of the HPU initiative not only in the Western European context, but also in an extremely diverse cultural and socio-economic environment, as well as the need for an easily applicable and accessible a tool for initial and regular self-assessment and management of health promotion activities, as developed and actually used in a Western European context. The results of the adaptation of the self-review tool of the HPU in Bulgarian prove the need for cultural adaptation of the documents, tools and policies related to health promotion to ensure their effective application. There is a high degree of involvement of the studied university community (of the Medical University - Varna) in activities related to the strengthening and validation of health. The hypothesis of the existence of unfavorable aspects in the health behavior of the studied student community, as well as high motivation and desire of students to participate in health promotion initiatives, was confirmed.

Especially valuable are the areas identified in the self-assessment of the university community, in which additional work is needed, for the successful implementation of the principles of the University Management by the management of the university.

Dissertation Contributions

The contributions are predominantly original in nature - with theoretical, methodological and practical-applied significance.

A significant contribution is the systematic study of the development and practical implementation of the "Health Promoting Universities" initiative around the world, from its inception to the present day. An original methodological contribution with a great potential for practical applicability is the trans-cultural adaptation and validation (according to established WHO methodology) of the

only available internationally accepted and recommended by the global network of HPU self-review tool for health promoting universities, which can be freely used in Bulgarian higher education institutions. Through this adapted international tool, a self-assessment of a Bulgarian university was carried out for the first time and the priority areas were outlined, which is a significant original contribution of the dissertation work.

The health behavior of students in a Bulgarian university was studied and new data are presented, revealing additional opportunities to expand the range of services related to the health and personal development of members of the university community and further determining the importance of health promotion initiatives in universities.

The proposed adapted translation of the Okanagan Charter – an International Charter of Health Promoting Universities and Colleges, 2015, also has a significant contribution - basic theoretical document of the "Health Promoting Universities" initiative.

A very good impression is made by the **limitations of the study** synthesized by the doctoral student at the end of the paper and the highlighting of its **positive aspects**. The wide participation of the university community in the researched higher education institution leads to its real familiarization with the principles of HPU and their activation for actions in this direction. The shared impressions of the respondents about their involvement in health promotion activities and their willingness to participate in such - brings confidence about the real applicability of the initiative for the HPU not only in the specific institution, but also for the Bulgarian higher education in general.

Publications on the issues of the dissertation work

In connection with the dissertation work, the doctoral student presents three full-text publications, one of which is in an international journal. One participation in a national scientific conference with international participation is also presented.

Evaluation of the Doctoral thesis

The thesis of the dissertation is prepared according to the requirements and in a synthesized form fully reflects the content of the dissertation work. It is developed in a volume of 76 pages, very well illustrated with highly informative figures and tables. A reference to the contributions and a list of publications related to the topic of the dissertation are added to it.

Conclusion

Assist. Prof. Petya Boncheva's dissertation presents the first in-depth study of the initiative "Health Promoting Universities" in our country. The topic is current, significant and extremely innovative for our country. The work is very well structured, with clearly defined goals and tasks. The design of the scientific study is adequately selected and innovative. The methodology is complex,

competently and precisely applied. The results are presented correctly and comprehensively. The conclusions are clearly formulated and are the basis of the dissertation contributions. The contributions are predominantly original in nature and have a high potential for practical applicability. The indisputable ones have been demonstrated candidate's ability to develop an original design and apply complex quantitative and qualitative research methods to a high scientific standard.

The dissertation work and the presented publications fully meet the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria, the Regulations for its Application and the Regulations for the Development of the Academic Staff of the Medical University - Varna for the acquisition of the educational and scientific degree "Doctor".

The current topic, the in-depth nature of the conducted research, the applied precise and complex innovative methodology, the results obtained, the conclusions drawn and the contributions of a mostly original and applied nature give me the reason to give a positive assessment of the dissertation work and to confidently suggest to Assistant Professor Petya Stoilova Boncheva to be awarded the educational and scientific degree "Doctor" in the scientific specialty "Public Health Management" in professional direction 7.4. "Public Health".

20.09.2022

City. Varna

Chairman of the Scientific Jury:

/Prof. Dr. Albena Kerekovska, MD, PhD/