

## REVIEW

**by Prof. Dr. Silviya Aleksandrova-Yankulovska, MD, PhD,  
Faculty of Public Health at the Pleven University of Technology,  
Petya Stoilova Boncheva's dissertation on the topic "Health promoting  
universities - development of the initiative and prerequisites for  
implementation in the Bulgarian school of higher education"**

With Order No. R-109-337/05.08.2022 of the Rector of the Medical University "Prof. Dr. P. Stoyanov" - Varna, on the basis of Protocol No. 191/01.08.2022 of the Faculty Council of the Faculty of Public Health, I have been appointed as a member of the scientific jury in the procedure for obtaining the educational and scientific degree "Doctor" of Petya Stoilova Boncheva in area of higher education 7. Healthcare and sports, professional direction 7.4. Public health, scientific specialty "Public health management". At the first meeting in absentia, the scientific jury appointed me as a reviewer.

### **Brief information on career development and qualifications**

Petya Stoilova Boncheva was born in 1964. In 1990, she graduated from the PMI "Dr. N. Nikolaev" at the VMI - Varna, majoring in "Sanitary Inspection", in 2003 - "Episkop Konstantin Preslavski University of Shumen", bachelor's degree in "Social Pedagogy". In 2016 and 2018, she completed two master's degrees at Medical University of Varna: "Health Care Management" and "Public Health".

Petya Boncheva began her professional career as a sanitary inspector in 1990 in the "Anti-epidemic control" Department of the Hygienic and Epidemiological Inspection - Varna, respectively health inspector in RIOKOZ (Regional Inspection for Protection and Control of Public Health)-Varna in the period 2006 - 2011. From 2011 to 2016 she was a junior inspector, and from 2016 to 2017 she was a senior inspector at RZI (Regional Health Inspection)-Varna. She worked as an organizer of academic activities and a part-time assistant at the Faculty of Public Health of the University of Varna from 2017 to 2020. Since October 2020, she has been an

assistant at the Department of Social Medicine and Health Care Organization of the faculty.

Petya Boncheva has specialized within the SDO (Postgraduate Education) "Medical Informatics and Health Management" degree and has undergone several additional short-term training sessions, including initial pedagogical and andragogical competence of teachers, research design, statistical analyses, history of medicine, specialized training in English for working with EU institutions. Petya Stoilova Boncheva is a member of the Bulgarian and European Public Health Associations and the Bulgarian Scientific Society of Public Health. The candidate speaks English at a good level and Russian at an excellent level.

### **General characteristics of the dissertation work**

The dissertation work has a total volume of 184 pages and is structured as follows:

- Chapter I – Literature review – 48 pages
- Chapter II – Purpose, tasks and working hypotheses – 2 pages
- Chapter III – Methodology – 9 pages
- Chapter IV – Results – 42 pages
- Chapter V – Discussion – 18 pages
- Chapter VI – Conclusions – 6 pages

The dissertation includes a total of 8 figures, 21 tables and 6 appendices.

In connection with the dissertation work, 3 full-text publications are presented, of which two articles and one report are from a national conference, a collection with ISSN, available in the National Reference List of contemporary Bulgarian scientific publications with scientific peer review by NACID. The candidate reports one additional participation in a national scientific conference.

### **Relevance of the dissertation work**

Since its formalization in 1986, the concept of Health promotion has become one of the most powerful tools for the further improvement of public health. The very internal development of the concept with the shift of its focus from only

personal responsibility for health to public engagement and the development of a supportive environment, leads to the affirmation of a number of stages in the modern life of people as places for effective health improvement. Undisputed on a global scale is the success of projects to create healthy cities; health-affirming schools; health promotion hospitals; health promoting workplace. A kind of niche in these initiatives in our country is the coverage of young people from institutions of higher education, which niche is skillfully filled by the present dissertation. In this sense, I congratulate Petya Boncheva and her scientific supervisor, Prof. Klara Dokova for the appropriate elective topic, the study of which is extremely necessary in Bulgaria as an EU member state, which must effectively develop a modern health policy and contribute to achieving the goals of the European health policies. The latter, undoubtedly, cannot be achieved without deploying successful health promotion strategies and using the potential of Bulgarian universities as an environment for health promotion.

### **Evaluation of the structural parts of the dissertation work**

**1) The literature review** systematizes and analyzes 232 literary sources, of which 35 are in Cyrillic and 197 are in Latin script. The literature is contemporary, with 92% being sources from the last 20 years. The other sources are: fundamental international declarations; the health promotion charter; official documents of expert commissions; related to the promotion of health national laws and several fundamental foreign studies among students.

Petya Boncheva structured the literature review in 5 parts covering: essence of the concept of health promotion; practical application of the concept; the need for health promotion in higher education; universities for health promotion (in which part the international development of the initiative for universities for health, its guiding documents and principles is discussed) and Health promotion in Bulgaria.

The literature review is prepared precisely, with a clean style and correct citation of the sources. The candidate was able to concentrate on the aspects of the subject necessary for her further studies and to comply with the recommended volume for this section of the dissertation work. The proposed 4 conclusions from the literature review are based on the systematic literature review and justify Petya Boncheva's scientific interest in this topic in the Bulgarian context.

## **2) Aim, tasks and working hypotheses**

**The aim** is to study the conditions for the implementation of the WHO initiative "Health Promoting Universities" in the Bulgarian higher education institution by evaluating a concrete university applying internationally approved criteria for HPU.

**Six tasks** have been formulated for the realization of the set goal, including the study of the development of the fundamental theoretical concepts; study of the international experience in the implementation of the HPU initiative in university communities in different contexts; validation of the internationally accepted "Self-Review Tool" of HPU and its implementation in a specific Bulgarian university; identification of students' health needs through analysis of their health behavior; identifying priority areas for health promotion activities at the university.

**Five hypotheses** are defined, of which one negative and four positive hypotheses. I believe that hypotheses № 3 and № 4 can be omitted given their more descriptive nature.

## **3) Methodology**

**The research methodology** is described in detail by phases of the research process and meets all the requirements for scientific research.

The first phase deserves special attention, adaptation and validation of the internationally recognized "Self-Review Tool" of HPU, on the correct implementation of which all subsequent own studies depend. Often this phase is underestimated in our country and researchers blindly apply foreign tools compromising (unknowingly) their results. Petya Boncheva has described in detail the tool itself and the applied standard (in 4 steps) WHO methodology for translation and adaptation of instruments. The consent received from the creator of the tool, Prof. Mark Dooris, is correctly reflected. I am impressed by the highly professional mastery of scientific methods demonstrated by the candidate's demonstrated high professional mastery of scientific research methods (such as the expert panel on the Delphi method and the semi-standardized in-depth telephone interview questionnaire) even here, at the stage of validation of the basic tools. The object of research at this stage are 10 representatives of the university community at the

Medical University "Prof. Dr. P. Stoyanov" - Varna: students, members of the academic staff, employees and members of the management.

Among the variety of statistical methods applied, the use of the software product QSR NVivo v.11 in the analysis of qualitative data stands out, which is in line with the best international practices and is extremely rare for Bulgarian research with qualitative data.

My recommendation for this part is related to this, that the candidate and her academic supervisor could with full reason categorize the analysis of the information from the interviews as a type of content analysis, with which to terminologically enrich the already rich methodology used.

#### **4) Results**

The presentation of the results begins with the first phase of adaptation and validation of the Self-Review Tool (SRT). The information presented in Fig. 2 about the individual steps of the adaptation process is valuable. The work of the Expert Panel is reflected in detail and precision. The prepared protocol of the 60-minute discussion of the panel would be an interesting appendix to the dissertation work and could serve as an example for future researchers in the application of foreign language tools. In this regard, I recommend printing an article about the entire process adaptation and validation of the tool in a widely accessible and reputable publication, such as the journal Social Medicine.

The use of google forms for the subsequent structured survey and the description of the cognitive individual interviews reinforced the impression of the excellent research training and skills of the doctoral student. I also highly appreciate the in-depth presentation of the results of the pre-testing of Version 2.0. of the instrument. In the difficulties identified by Petya Boncheva in the process of adapting the instrument, I recognize common problems in the wording even of original (non-translated) questionnaires. Unfortunately, these issues are often unrecognized or underestimated, compromising the results of relevant studies. Popularizing the results of this part of the dissertation would be beneficial to our research community and also in the process of teaching research methodology.

The results of the empirical study of the opinion of the university community in MU-Varna about the available conditions and activities for health promotion in the university environment and the study of health behavior of students are presented in the *second phase of the scientific study*. The specific research tool SRT was

applied flexibly among the different groups of respondents, and the appropriate ones were selected from all 68 statements suitable for each group. A total of 668 respondents were covered, of which 570 (85.3%) were students (representatives of 17 of the 26 specialties at MU-Varna), 77 (11.5%) teachers and 21 (3.1%) employees.

The results of the applied culturally adapted self-assessment tool of the UPZ are presented *by sections*. In the first section, *Leadership and strategic management*, the opinion prevails (88.4%) that the university is committed to improving health at a strategic level. A statistically significant difference was found between the proportion of students, academic staff and employees who agree with this statement. The prevailing opinion (56.7%) is that there are planned and secured funds for promotion activities on health promotion. In the second section, *Provision of Services*, 91% of respondents believed that the university provides access to a variety of health promotion services to support members of the university community. While in the third section, *Environmental Conditions*, 96.6% of respondents believed that the university buildings favor the health of the university community. There is also a large share (75.5%) of respondents who believe that there are opportunities for varied and healthy eating in a university environment, but only 48.6% believe that healthy food and drinks are actively advertised in the university. More than half of the respondents expressed positive opinions about the organization of transport for work and study trips with a view to protecting the environment and health, encouraging walking and cycling and physical activity in general. The results in the fourth section, *Communication, information and marketing*, are also positive, with 93.5% of respondents confirming the availability of accessible communication mechanisms at the university, and 94.8% believing that efforts were made to base information on reliable evidence and sources. In the last section, *Academic, personal, social and professional development*, 93.7% of the opinions are in the direction of the fact that the curricula and programs provide topics and problems related to health and well-being for consideration, and 94.8% of the surveyed academic staff believe that there is an opportunity to provide additional modules and courses on health promotion. It is interesting the opinion of 80.9% of the students that they have the opportunity to participate in scientific research concerning health problems from their lives. As a public health specialist, I had not thought that this could be a form of implementing health promotion in an academic context, but rather I have paid attention to the ethical aspects of including students as objects of

scientific research. The need to combine various expertise in public health to realize the concept of health promotion is obvious.

Petya Boncheva collects valuable data on *some traits of students' health behavior*. In terms of self-assessment of health and health awareness, 68.2% of the surveyed students define their health as excellent and very good and 96.5% agree that smoking, the use of alcohol and narcotic substances, low physical activity and unhealthy eating damage a person's health. At the same time, 35.5% of the students in the study are smokers, and 53.7% of them started smoking before the age of 18. High (43.7%) is the share of students who rate their eating habits as unhealthy, regardless of the fact that 88.8% consume mostly home-cooked food. Tables 17 and 18 contain very valuable information that should be brought to a wider audience. In the next section of the dissertation, Petya Boncheva reasonably summarizes that these results point to additional actions, such as the promotion of healthy foods and drinks, which should find a place in the university nutrition policy.

Only 1/3 of the respondents exercise regularly, and 33.9% do not do sports at all. Over 1/4 of students rate their level of psycho-emotional stress as high (higher for medical and dental students compared to the other specialties covered). The results regarding the use of alcohol seem to be more favorable, where 65.4% of the examined persons did not get drunk even once. More than half of the students would show interest and get involved in health improvement initiatives organized at the university. An exception was reported only for smokers regarding participation in smoking cessation initiatives.

## **5) Discussion**

In this part of the dissertation, Petya Boncheva's ability to analyze the obtained results in the light of the specific context and to explain the meaning, the scientific significance, is most evident.

Petya Boncheva begins with a very interesting discussion of the first phase of her research - the cross-cultural adaptation of the established international Self-Review Tool for the HPU. It not only manages to show what is the international experience in the cultural adaptation of the specific research tool, but also manages to convince us that the translation and adaptation of research tools, in themselves, is a serious scientific work that must be approached responsibly and that requires specific methodologies (and not just linguistic) competences.

In the discussion of the results of the second phase, the doctoral student successfully combines the original interpretation with a comparative analysis of the results of studies of the HPU by foreign authors. Petya Boncheva attributes the positive results in terms of leadership and strategic management to the real feeling of the respondents of the support for improving health, and not so much (and even despite the ignorance) of the formal content of the university's development strategies and plans. The reference made to the Okanagan Charter is very pertinent. As for the provision of a budget for the activities of the HP, it would be good, apart from the opinion of the researched person, that this aspect be supported by a documentary analysis of the specific funds spent on HP in the researched university for the past period. Such a documentary analysis, for example, was done appropriately as an addition to the articles in the section Communication, information and marketing.

The analysis of the health behavior of the students confirms the hypothesis of the existence of unfavorable aspects in the health behavior of the students, and the more favorable results in relation to the use of alcohol and energy are of interest are the more favorable results regarding the use of alcohol and energy drinks compared to similar studies by foreign and our authors. It would be interesting to deepen the analysis of this result, to reveal the favorable factors and to popularize it in the context of HPU.

I highly appreciate the discussion of the results of the third phase, where the data for the HPU in MU-Varna are compared with international criteria through the British network of the HPU. The fact that in no area of the HPU self-assessment tool, indicator values below 45% have been established and only one area (institutional commitment and responsibility) falls in the "yellow zone" with 67% of implementation, besides being positive for the institution, confirms that this is the right choice of research subject. The doctoral student reasonably formulates the areas in which additional work is needed for the successful application of the principles of the HPU.

## **6) Conclusions**

This is an interesting and original part of the dissertation work, which is shaped according to a foreign model for scientific work. In this sense, for the first time I see a section "Positive aspects and limitations of the study" in a Bulgarian



dissertation. I admire this approach of the dissertation student and her supervisor, and I find the text here to be extremely precise and responsibly written.

The contributions could have been distinguished into groups of theoretical and practical contributions, although their summary presentation at this time does not diminish their value.

I believe that the work would also benefit from the formulation of the traditional recommendations for dissertation work, although this practice is unequivocally accepted by our scientific community (which has apparently deterred the scientific team from including them).

The **dissertation summary** meets the generally accepted requirements in terms of structure. The volume could be optimized. The content of the dissertation is reflected fully and accurately. The most important results and established dependencies are presented, as well as the conclusions and contributions of the study.

In connection with the dissertation work, 3 works have been published. Petya Boncheva is the first author on all publications. The papers were published in Bulgaria.

### **Conclusion**

The presented scientific research on the topic "Health Promoting Universities - development of the initiative and prerequisites for implementation in the Bulgarian school of higher education" is distinguished by particular timeliness, innovation and a high standard of scientific preparation and presentation.

The dissertation fully meets the requirements of Proper development of the academic staff at Medical University-Varna, which is why I confidently suggest to the respected members of the Scientific Jury to vote positively for awarding the educational and scientific degree "**Doctor**" in the scientific specialty "Public Health Management" of **Petya Stoilova Boncheva**.

**September 7, 2022.**

**Reviewer:**



Prof. Dr. S. Aleksandrova-Yankulovska, MD, PhD