

## REVIEW

of Assoc. Prof. **GENA GEORGIEVA PENKOVA (GRANCHAROVA), MD, PhD**

Department of Public Health Sciences  
at the Faculty of Public Health, MU-Pleven

of the dissertation of assist. prof. Zhana Georgieva Pavlovska, a PhD student in independent form of education for awarding the educational and scientific degree “Doctor”  
in the field of higher education 7. “Healthcare and Sport”,  
professional field 7.4. “Public Health”,  
scientific specialty “Health Care Management”

By order № P-109-277 / 31.07.2020 of Prof. Dr. VALENTIN IGNATOV, DS, m. – Rector of the Medical University “Prof. Dr. Parashkev Stoyanov” – Varna, I have been selected as a member of the Scientific Jury in the procedure for obtaining an educational and scientific degree “Doctor” in the scientific specialty “Health Care Management” with a candidate assist. prof. Zhana Georgieva Pavlovska, a PhD student in independent preparation in “Health Care” Department at the Medical University “Prof. Dr. P. Stoyanov” – Varna, with a topic of the dissertation **“Continuing Education of Midwife – Innovative Educational Approaches”**. On the basis of Protocol №1 / 03.08.2020 from the first online meeting of the Scientific Jury I have been appointed as an official reviewer.

### **Biographical data and career development of the doctoral student**

Assist. prof. Zhana Georgieva Pavlovska was born on December 10, 1961 in the town of Kaspichan, Shumen district. In 1983 she graduated from the Institute for Preparation of Health Professionals “Dr. Nencho Nikolaev” in Varna with a specialization in midwifery. Initially she had started work in the Branch Polyclinic in the village of Resen, Veliko Tarnovo region (1983-1987), then for 7 years (1987-1994) she was a midwife in the neonatology department of MHAT “Dr. Stefan. Cherkezov” in Veliko Tarnovo. Since April 1994 she was appointed to the gynecological department of the same hospital, and since January 1995, after a competition, she was elected at the position of a head midwife.

In 1996, Mrs Zhana Pavlovska continued her education at the Higher Medical Institute in Pleven, in the specialty of “Health Care Management”, and in 2000 she obtained a bachelor's degree and a professional qualification as “Manager of Health Care and Practice Trainer at a Medical College. In 2005 she continued her education in the specialty “Health Care Management” at the Medical University – Pleven and in 2007 acquired a master's degree and professional qualification as “Manager of Health Care and Practice Trainer”.

The acquired educational-qualification degrees become the basis for expanding her professional biography in the field of health care management.

After restructuring of the gynecological and maternity department from January 2011 to September 2015, Mrs Zhana Pavlovska has worked as a senior midwife at the joint OGD of MHAT “Dr. St. Cherkezov” in Veliko Tarnovo. Successfully introduces 2 projects: “Improving the quality of postoperative care in the gynecological department by introducing a care plan and reducing postoperative stay” and “Vision for management, optimization and improvement of the quality of health care in OGD of MHAT “Dr. Stefan Cherkezov” Corporation, Veliko Tarnovo . She has participated in the training of nurses at the Medical College – Veliko Tarnovo in the discipline “Clinical Practice” in the obstetrics and gynecology sector.

Since October 2015, Mrs Zhana Pavlovska has won a competition for an assist. prof. in “Health Care Management” in the Affiliate – Veliko Tarnovo of MU-Varna, where she currently works, conducting classes on “Philosophy and introduction to obstetric and nursing cares”, 10 modules of special obstetric care, clinical practice and government experience.

Assist. prof. Zhana Pavlovska has 17 publications in specialized editions on health care and in peer-reviewed collections of scientific forums, 8 of which are on continuing education. She has realized 22 participations in Bulgarian scientific forums and 2 participations abroad.

She has completed 33 continuing education courses, one of which with the participation of foreign lecturers. She has completed an intensive course for pedagogical competence, 3 courses of 100 hours for English studying to level B1, and has 2 certificates for professional qualification.

Assist. prof. Pavlovska is actively involved in the activities of various public councils and initiatives. There are 2 participations in projects. She is a member of the Bulgarian Association of Healthcare Professionals. In 2014 she was awarded the statuette of Leseskepra for first place at the national level in the category “Health Care Manager”.

All this characterizes assist. prof. Zhana Pavlovska as a highly educated specialist with extensive professional and life experience, which will be extremely useful in her work as a teacher and trainer of the future generation of midwives.

### **General characteristics of the dissertation and its relevance**

The dissertation body contains 218 standard pages and is structured in five chapters: 1. Literature review; 2. Methodology and organization of the research; 3. Results and discussion; 4. Innovative approaches for evaluation of continuing education; 5. Conclusions, recommendations and contributions; used literature and 6 annexes. Dissertation includes a total of 6 tables, 69 figures and 6 appendices. The bibliographic list contains 205 literature sources, of which 96 in Cyrillic, 67 in Latin and 42 Internet addresses.

**Relevance of the dissertation work.** The doctoral student has focused her scientific interest on an extremely topical issue. What makes continuing education such an actual issue worldwide, including in Bulgaria? A global problem is the shortage of health professionals, especially nurses and midwives. This is even more pronounced for our country. According to the health profiles of the European Union countries, published at the end of 2019 by the European Observatory on Health Systems and Policies, Bulgaria is among the countries with the most unfavorable ratio of doctors: health care professionals (nurses and midwives). Extremely unfavorable are also most of the indicators for public health in our country (high total mortality, low birth rate, strong negative natural growth, the lowest life expectancy in the European Union). In these conditions, the provision of high quality and safe health care becomes of paramount importance and places high demands on the training of health care professionals, including midwives as well. The rapid implementation of new medical and information technologies requires permanent updating and expansion of acquired knowledge and skills. The path to professional development is vitally related to continuing education. There are no alternative and innovative solutions for its management. The process of continuing education should be studied, analyzed and applied. The dissertation of Zhana Pavlovska seeks answers to these questions.

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

**The literature review** occupies 29% of the actual text of the dissertation body (without taking into account used literature and appendices). In structural terms, the review is divided into 8 parts, in which the doctoral student makes an in-depth and competent analysis of the nature of continuing education, the main regulations, the objectives of continuing education, the scope and cate-

gorization. A critical analysis of the state of educational and organizational aspects of the continuing education of the regulated profession “Midwife” in our country and the role of the Bulgarian Association of Health Care Professionals as a regulatory body has been conducted. Attention is paid to the problems of accreditation, funding and approaches to assessing the results of continuing education. A good feature of the review is the systematic examination of the regulation and management of continuing education of midwives in 30 European countries with the given examples of good practices.

The review is based on 205 literature sources. The citation is below the lines in the order in which the source appears, which makes it possible to trace the accuracy and completeness of the citation. The list of used literature itself, however, is arranged alphabetically. The 42 indicated Internet addresses should be formed with the exact title of the material, the year and the institution that published it. The proportion of sources from the last 10 years is relatively low (about 30%).

**Chapter two** represents a comprehensive **study methodology**. The doctoral student has formulated **the purpose of the study** very precisely: *“Based on an analysis of continuing obstetric education in European systems and the examined opinion of different groups of respondents, to make a SWOT analysis of the existing reality in our country and offer an innovative model for evaluating the results of continuing education”*.

For the realization of this goal 8 particular tasks are indicated, which detail the individual steps of the research and serve as a basis for achieving the ultimate goal of the research.

The first task includes a systematic review and comparative analysis of the systems for continuing education in midwifery in Bulgaria and Europe in terms of legal regulation, licensing, organization, control, financing and stimulation of activities.

The implementation of the second and third tasks provides data on the awareness and attitudes of midwives and students for continuing education, as well as the opinion of the health care managers on the problems of continuing education of midwives. The realization of these tasks creates an opportunity to identify and rank obstacles to effective continuing midwifery education.

As a logical summary of the activities on these tasks comes the SWOT analysis of the continuing education of midwives in our country, which proves the need to develop and apply new approaches to its control and evaluation.

The last 2 tasks are related to the practical value of the dissertation – developing a model for assessing the continuing education of midwives and its evaluation using experts.

The doctoral student has accepted **three working hypotheses**. In the first hypothesis, formulated in future tense, the doctoral student expresses the expectation that the comparative analysis of the systems for continuing midwifery education in Europe will show that the Bulgarian continuing education meets the criteria for legal regulation, organization, transparency and provision of activities. The second hypothesis (presented in a conditional mode) also expresses the expectation that the new approaches to assessment and control of continuing education would increase the ability of midwives to provide safety care. The third hypothesis states that the lack of opportunities for career development and absence of funding for continuing education demotivates midwives for life-long learning.

Although not wrong, I would recommend to the PhD student in her future research to strive to formulate null hypotheses, because according to established principles of research work, the process of hypotheses testing begins with the formulation of null hypothesis, proving its probability and its subsequent acceptance or rejection.

**The organization of own research** is described in great details. The PhD student has approached the researched problem in a complex way, focusing on studying the opinion and assess-

ment of the continuing education, covering 498 persons from four main categories, directly related to the problem:

- 324 regular midwives in OGD and neonatology departments from 3 university hospitals, 2 specialized OG hospitals and 10 multidisciplinary hospitals for active treatment, located in 14 cities;
- 104 third- and fourth-year students, specialized in midwifery from 4 universities;
- 58 health care managers and 12 habilitated lecturers - experts.

For each group of respondents the exact distribution by number and settlements is indicated and presented in attractive graphic images, which facilitate the perception of information, give reliability and prove the representativeness of the samples. The criteria for inclusion of persons are defined for each group. All participants have signed a specially developed "Informed Consent Form for Research".

The implementation of the dissertation is a result of long-term research activity, divided into 6 stages in the period of time from June 2017 to September 2020. Most of the information gathering process is the work of the researcher herself. For a small part of the study, collaborators have been involved, pre-trained and familiar with the purpose and methodology.

A distinctive feature of the dissertation is the rich set of information sources and appropriate methods for data collection and processing. The detailed tools of the research, the carefully prepared author's questionnaires and the included terminological dictionary, which is extremely useful for clarifying the essence and unifying the understanding of the used conceptual apparatus, leave a good impression.

I would recommend the identification questions to be located at the end of the questionnaire (not at the beginning) and not to name the utilization of descriptive statistics  $\bar{x}$  and  $s$  as "Analysis of Variance". It is just an element of descriptive statistics.

My assessment of chapter two is very positive. **The overall design of the study proves the doctoral student's in-depth knowledge and mastery of modern methodological approaches in the field of social and medical research.**

**In chapter three** the specific results of own research, corresponding to the 2nd, 3rd, 4th and 5th research tasks are presented. This chapter is the most extensive and occupies 73 standard pages (38.6%) of the dissertation. In structural terms, 6 subsections are formed, which logically represent the realization of the set tasks. The results of the surveys among regular midwives, students and health care managers are organized in 5 tables and 51 figures.

The motivation for inclusion in continuing education, the forms used for professional development, the opinion on the level and usefulness (application) of continuing education, the attitudes of midwives and students for inclusion in continuing education, the preferred forms, the obstacles to inclusion in continuing education, the sources of information about the offered training, etc. are analyzed. Quite correctly, some questions are formulated in the same way in the 3 questionnaires (for regular midwives, for students and for health care managers), which makes it possible to compare the opinions of different categories of respondents.

Among the surveyed midwives, the predominant persons are over 40 years of age and with professional experience over 20 years. These characteristics testify to maturity, sufficient professional experience and are the basis for a realistic assessment of the importance of continuing education. This is confirmed by the ranking of the motives for participation in continuing education: over 60% of respondents indicate as a leading motive "the opportunity to expand knowledge and skills"; over a third see it as an opportunity for personal development; for a quarter of the respondents, this is an "opportunity for better realization on the labor market". The current practice in our country for

not linking the payment with the level of qualification and education discourages regular midwives and they do not indicate a better payment as a motive for participation in continuing education.

Students arrange their motives for future participation in continuing education in the same way, with the difference that they focus on career development (54%), achieving financial stability (25%) and the opportunity for independent practice.

Leading demotivating factors for inclusion in various forms of continuing education according to regular midwives are the following: insufficient financial resources (70%), distance from home (32%), duration of training (20%) and inapplicability of the studied science in practice (18%).

Among the preferred forms of professional development for midwives, the first two places are occupied by courses and theoretical and practical seminars (50% and 31%, respectively), followed by attendance of scientific forums (22%). These forms are the most preferred forms for students as well (respectively in 67%, 62.5% and 28.6%), but students also emphasize their plans to obtain a master's degree (48%) and a specialty in postgraduate studies (68%).

Midwives see the contribution of continuing education mainly in "providing quality health care" (54%) and "acquiring organizational skills" (17%).

Healthcare managers also place the implementation of "quality healthcare" and the increase of professional competence among the leading contributions of continuing education.

Certificates for qualification at the first level are held by 36% of the surveyed regular midwives and only 6% have a certificate for the second level. The data for the included health care managers are 41.4% and 19%, respectively 40% of managers do not have qualification certificates.

The high proportion of midwives who cannot assess where they could apply the acquired knowledge in their practice (33%) and those who do not have qualification certificates (42%), as well as the significant proportion of non-certificates by managers themselves, emphasize the urgent need to improve organization and management of continuing education and the need of introduction of new approaches. This conclusion is also supported by the fact that almost half of the health care managers do not have a "Continuing Education Plan" developed for the needs of the managed unit. They rely mainly on the activities of BAHCP at regional and national level, the schedule of university hospitals and others.

Dignity of this dissertation is the performed content-analysis of the open questions in the questionnaires, presented in tabular form with a clear distinction between positive and negative opinions and recommendations for each of the three categories of respondents. Although the proportion of those who freely express their opinion is too low, the expressed opinions and recommendations deserve serious attention.

Another advantage of the dissertation is the performed SWOT-analysis. This approach has been recognized as a key tool in the field of management and its use to identify strengths (S - strengths), weaknesses (W - weaknesses), opportunities (O - opportunities) and threats (T - threats) of continuing education in our country is quite appropriate. The doctoral student has defined 14 strengths and 5 opportunities (prospects), as well as 12 weaknesses and 7 threats, overcoming which would really put the continuing education of medical professionals in our country in a position comparable to European countries.

**In general, the presented analysis of the results of own research is extremely rich and in-depth.** The results and conclusions perfectly correspond to the dissertation defended in 2019 on the continuing education of nurses in Pleven region, which proves that the problems of the two main categories of health professionals (nurses and midwives) are the same and they require a common approach in their solution.

When presenting the data, some technical omissions occurred in choosing the appropriate types of graphs. As a result, figures № 17, 18, 20, 21, 32 and 64 are not correctly presented (it is nor

recommended to use vertically positioned bars of the same height when the sum of all categories is not 100% in case of more than one choice of answer).

In conclusion, **I highly appreciate the structure, content, style of result presentation, conclusions and inference drawn, which are a logical precondition for the next chapter 4.**

**Chapter four** represents the PhD student's concept of innovative approaches in continuing education, which is the ultimate goal of the dissertation. The developed innovative approaches for evaluation of the continuing education of midwives are the main essential value of the work.

The doctoral student considers the process of continuing education from a managerial position as a cycle of six stages and on this basis proposes an **algorithm for effective management of continuing education**. The activities during each step of the algorithm and the necessary documents for assessment of continuing education are presented in details: "Professional Development Assessment Card", "Personal Development Plan" or "Professional Portfolio" and evidence.

It is rightly emphasized that the first and second steps are the most important in the process of continuing education managing – determining the needs and selecting appropriate studying forms, taking into account the characteristics of the learners. The algorithm provides an assessment of 3 and 5 years, and for new graduates – annually.

The doctoral student offers a real feasible process of assessment of continuing education at 3 levels: first level – employer, building a: "Quality Council" and the inclusion of the Health Care Council; second level – assessment by the regional board of BAHCP; third level – assessment by BAHCP as a regulatory body.

Among the innovative approaches, the idea of introducing and maintaining a **professional portfolio of midwife** occupies an important place. This approach as an innovative educational technology and assessment tool has long been introduced in developed countries and the doctoral student rightly sees in it a significant reserve for improving continuing education. A specific version of the content of the professional portfolio is proposed, which will really create an opportunity to build a complete description of the professional development of the midwife.

The next step in innovation is the developed concept for external quality assessment through **accreditation of continuing education**. Similar to the accreditation of higher education institutions and PhD programs, the student proposes the establishment of an independent accreditation body for continuing education and 6 evaluation standards, based on the experience of developed countries. This idea definitely deserves attention and further research. Its practical implementation at the level of all medical institutions will be quite difficult. It is more realistic accreditation of continuing education as an element of the activity of higher education institutions, university hospitals and hospitals in the regional centers.

The concluding part of chapter 4 presents the assessment of 12 habilitated lecturers in the field of obstetrics regarding the proposed innovative approaches. The experts emphasize the importance of continuing education for the career development of midwives and support the proposed model for continuing education assessment. They unanimously support the idea of involving employers in the process of organizing and controlling continuing education.

**The eight conclusions** at the end of the dissertation are formulated briefly, clearly and well reflect the main aspects and complement the conclusions done at the end of the literature review and in chapter 3 of the dissertation body.

**The recommendations** to the Bulgarian Association of Healthcare Professionals as a regulatory body are accurate and feasible. However, it is not clear how the recommendations will reach employers in order to have a unified approach in healthcare facilities. This clearly requires the re-engagement of BAHCP and setting the issues for stimulating and financing continuing education to relevant responsible institutions

**The abstract of dissertation** reflects very well the content of the dissertation research and presents in full volume the methodological approaches, the results of the research, the conclusions and the recommendations to the respective institutions.

I accept and totally support the indicated **theoretical and practical contributions of dissertation**. Of the **theoretical contributions**, I am assessing the greatest importance firstly, to the summary of international experience in 30 European countries, concerning the regulation, organization, accreditation, financing and stimulation of the continuing education of midwives, and secondly, to the complex nature of the methodological approach covering all countries and aspects of continuing education. The other theoretical contributions are confirmatory and show that the problems of continuing education of midwives are identical to those of nurses and other health professionals.

**The practical contributions** are clearly outlined through the proposed innovative approaches: model and algorithm for effective management and continuing education assessment, original author's portfolio of the midwife, standards for accreditation of continuing education. These approaches have been developed in great details and are offered for the first time in our country.

In the author's abstract four publications in relation to the dissertation are listed, but the list of publications attached to the CV shows that the doctoral student has eight publications on the continuing education of midwives.

#### **Personal impressions**

Mrs. Jana Pavlovska completed her Bachelor and Master Degree in Management of Health Care in Pleven under my personal supervision. She was an excellent student with extremely expressed interest and thoroughness, the evidence of which are her excellent Bachelor and Master diplomas and consecutive professional development.

#### **Conclusion**

The presented dissertation work is the result of a long research process on a topical issue of the professional development of midwives – the second main class of medical professionals. The research is developed extremely accurately, at a high scientific level, using a wide range of sources of information. Well-selected representative groups of all categories of individuals involved in continuing education are covered. The main results of the study have been published in relevant scientific journals or reported in appropriate professional scientific forums. The dissertation contains theoretical and practical contributions. Innovative approaches to improve the management and evaluation of continuing education have been proposed. The overall layout of the dissertation is an evidence of good doctoral student's abilities to conduct independent scientific research.

The dissertation "**Continuing Education of Midwife – Innovative Educational Approaches**" fully meets the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation, as well as the Regulations for the development of academic staff at the Medical University - Varna.

I give a high evaluation of the dissertation and I suggest to the respected members of the Scientific Jury to vote positively for awarding the educational and scientific degree "**Doctor**" to **Zhana Georgieva Pavlovska** in the scientific specialty "Health Care Management", field of higher education 7. "Healthcare and Sport", professional field 7.4. Public Health.

Reviewer:



Assoc. Prof. Gena Penkova (Grancharova), MD, PhD