

## **R E V I E W**

**Reviewer: Prof. Sonya Koleva Toncheva, PhD, PSc**

Member of the Scientific jury, according to No. 109-114/ 22.03.2024 of  
Rector of MU "Prof. Dr. P. Stoyanov" – Varna

### **Regarding: procedure for occupying an academic position "Associate Professor"**

in the field of higher education 7. Healthcare and Sport, professional field 7.4 Public Health, specialty "Health Care Management" – for the needs of the "Health Care" Department, Affiliate Veliko Tarnovo, Medical University – Varna.

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The current competition for the academic position of "Associate Professor" is announced in State Gazette No. 7/23.01.2024 and one candidate participated in it – Zhana Georgieva Pavlovska, Ph. D. – chief assistant in the Department of Health Care – Veliko Tarnovo Affiliate of the MU – Varna.

According to order No. 109-114/ 22.03.2024 of the Rector of MU "Prof. Dr. P. Stoyanov" – Varna I am a member of the Scientific jury preparing a review on the procedure for occupying the academic position of "Associate Professor" in the scientific in the field of higher education 7. Healthcare and Sport, professional field 7.4 Public Health, specialty "Midwife" – for the needs of the "Health Care" Department, Affiliate Veliko Tarnovo, Medical University – Varna

For the competition ch. assistant Zhana Georgieva Pavlovska, Ph. D., has submitted all the necessary documents, according to the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria (LDASRP) and the Regulations on the Development of the Academic Staff (RDAS) of the Medical University Varna, drawn up in an orderly form.

#### **1. Career profile of the applicant**

Ch. assistant Zhana Georgieva Pavlovska was born on 10.12.1961 in town of Kaspichan, region Shumen. In 1983, she graduates from the Health Care Cadre Institute "Dr. Nencho Nikolaev" in the city of Varna, majoring in "Midwifery". In 2000, she obtains a bachelor's degree in "Health care management" and in 2007 a master's degree in the same specialty at the MU – Pleven.

In 1983, she starts working in the Branch Polyclinic in the village of Resen, Veliko Tarnovo region, and from 1987 in the Neonatology Department of MHAT "Dr. St. Cherkezov" in Veliko Tarnovo. Since 1994, she has been working in the Gynecology Department of the same hospital, since January 1995 she has been a senior midwife. From January, 2011, after a competition, she is appointed as a senior midwife at obstetrics and gynecology department at MHAT "Dr. St. Cherkezov" in Veliko Tarnovo. She also works as a part-time lecturer in Clinical Practice at Medical College – Veliko Tarnovo from 2002 to 2005.

In 2015 Pavlovska's, Ph. D. academic career begins, and after successfully passing a competition, she is appointed as an assistant in the "Health Care" Department of the Affiliate Veliko Tarnovo at the "Prof. Dr. Paraskev Stoyanov" MU – Varna.

On 2020 she defences a desertion work on the topic "Continuing Education of Midwife – Innovative Educational Approaches" and acquires educational and scientific degree "Doctor". Since 2021, she is the chief assistant at the "Health Care" Department of the MU "Prof. Dr. P.

Stoyanov”, Affiliate Veliko Tarnovo. In 2023, she obtains a specialty in “Public Health” at MU Varna.

She has held over 54 continuing education courses to increase professional qualifications, over 30 participations in national and international conferences and congresses. There are 4 participations in national and regional projects and 4 programs.

She is the winner of the prestigious award of Bulgarian Association of Health Care professionals (BAHCP) – the statuette of Lesseskepra – first place in the category “Health Care Manager”. Zh. Pavlovska, Ph. D. is a member of BAHCP and has been elected chairman of the Regional College – V. Tarnovo from 2003 to the present. She has 3 certificates for the implementation of quality obstetric health care, issued by BAHCP. She speaks English at B1 level and Russian at a good level.

## **2. General description of the submitted materials for the competition**

Zhana Pavlovska, Ph. D. has submitted for participation in the competition a list with a **total number of 26** scientific papers, distributed *by authorship* as follows:

	PUBLICATIONS				
Place as author	A1. Monograph B3. Dissertation G9. Chapter of a collective monograph	In periodicals	In collec- tions	Total publication	
	Number	Number	Number	Number	%
Independent	3	7	1	11	42%
First author		1	7	8	31%
Second author		1	5	6	23%
Third and subsequent author			1	1	4%
Total	3	9	14	26	100%

The candidate participates in scientific production (articles and reports), of which she is: independent author of 11 publications, with one co-author 8, second author 6, third and subsequent author 7. Her leading authorial participation in the development of scientific works and her ability to conduct scientific research work in teams is impressive.

A large part of the publications are printed in authoritative specialized editions of ours: Health Care, Asklepii, Nursing, Social Medicine, etc. The rest are published in collections.

**According to quantitative indicators of the criteria for awarding the academic position “Associate Professor”, on the basis of RDAS in MU “Prof. Dr. P. Stoyanov”, the production presented by the candidate meets the requirements for “Associate Professor”.**

The candidate has created a profile in “Google scholar” and “Research Gate” ORCID, etc., where there is international visibility for her works in Bulgarian and foreign magazines, an indicator of her publication image and the relevance of the subject on which she works.

A reference is presented for 9 citations in the foreign database of the candidate’s works, which is prepared by the library of the MU Varna.

The scientific activity of ch. assistant Zhana Pavlovska is also expressed in a strong presentation in scientific forums related to health care and the training of midwives and nurses, which guarantees the promotion of scientific production.

The candidate presents data on participation in four projects as follows:

1. *Project BG05M90P001-2.012 “Continues support for deinstitutionalization for children and youth” under the operational program “Development of human resources” 2014 – 2020.*

2. *Project BG05M2OP001-2.013-0001 “Student practices - phase 2” under the operational program “Science and education for smart growth” during the period 2020 – 2021 and 2021 – 2022 study year.*

3. *“Social inclusion” for those working in maternity departments and working directly with babies and young children with disabilities, Ministry of Labour and Social Policy, 2014.*

4. *Mentor and trainer of newly admitted midwives and paramedics under the project “Closer to work” under the operational program “Development of human resources” 2013-2014.*

Ch. Assistant Zhana Pavlovska also works actively with students as a methodical supervisor, supporting their publication activity. An author's report on participation in student scientific forums is presented, and the training, clinical aspects and practice of midwives are affected in a thematic aspect.

### **3. Evaluation of the candidate's scientific research and scientific – applied activity**

The candidate in the competition summarized and presented data from the Reference for Scientific Contributions, on the presented scientific works in Academic Reference No. 73/06.03.2024 – **distribution of scientific works by type and place of publication:**

<b>Indicator A1.</b>	Dissertation work – <b>1.</b>	<b>Bulgaria</b>
<b>Indicator B3.</b>	Monograph – <b>1.</b>	<b>Bulgaria</b>
<b>Indicator G7.</b>	Publications and reports published in scientific publications, referenced and indexed in world-renowned databases of scientific information – <b>2.</b>	<b>Bulgaria</b>
<b>Indicator G8</b>	Publications and reports published in non-refereed peer-reviewed journals or published in edited collective volumes – <b>5.</b>	<b>Bulgaria</b>
<b>Indicator G 9.</b>	Published chapter of a collective monograph – <b>1.</b>	<b>Bulgaria</b>
	Full-text publications in scientific publications and anthologies, beyond the minimum scientometric requirements for holding the “Associate Professor” – <b>16.</b>	<b>Bulgaria</b>

The presented 26 scientific works (of which 2 under print), with which the candidate participates in the competition for the appointment of academic position “associate professor”, contain scientific-applied and theoretical-cognitive contributions in the following 6 main scientific areas, which I present in order of importance as follows:

<b>№</b>	<b>Thematic direction</b>	<b>№ of publication from the list of scientific works</b>
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<b>I.</b>	<b><i>History of the midwifery profession and midwifery education in Bulgaria, professional realization of the midwife</i></b>	<i>B3.; G7.1.; G7.2.; G8.1.;1.; 2.; 3.; 13.; 14.</i>
<b>II.</b>	<b><i>Continuing education of midwives in Bulgaria – comparative characteristics, regulation, organization, problems, innovative educational approaches for assessment</i></b>	<i>A1.; G8.2.; G8.3.</i>
<b>III.</b>	<b><i>Stress in the education of students of the specialties “Midwife” and “Nurse”</i></b>	<i>5.;6.;7.;8.</i>
<b>IV.</b>	<b><i>Healthy nutrition during pregnancy and lactation</i></b>	<i>G9.; 15.; 16.</i>
<b>V.</b>	<b><i>Health care for the elderly</i></b>	<i>G8.4;9.</i>
<b>VI.</b>	<b><i>Varia</i></b>	<i>G8.5.; 11.;10.;12.;4.</i>

***Direction I. History of the midwifery profession and midwifery education in Bulgaria, professional realization of the midwife (B3.; G7.1; G7.2; G8.1.; 1.; 2.; 3.; 13.; 14.)***

I find this direction of the presented production to be the most significant. Substantial contributions of cognitive importance have been made. Midwifery practices in the Bulgarian lands from ancient times, during the Middle Ages, the Ottoman rule and the Renaissance, when the first midwives who graduated abroad entered the country, are examined. The regulation and organization of the profession after the Liberation (1878) is presented; the difficult process of its confirmation before and after the deployment and expansion of the network of maternity homes and health facilities, which is a prerequisite for the rise of the midwifery profession. Socio-economic and demographic changes after 1989 that lead to an outflow from the profession are examined. The activities that midwives perform according to their competence during the different periods have been studied – in the Health Counseling Stations, through patronage care, to the modern ambulatory-polyclinic obstetric-gynecological and hospital care. A generalized professional image of the midwife is presented, characterized by marked independence, determination and expediency, built thanks to the high demands on this profession in our country. Biographies of the first certified midwives who worked in post-liberation Bulgaria – 21 in number – are presented. Midwives-donors are represented or worked for noble causes; midwives – participated in various periods of the revolutionary struggles as couriers, executioners or direct participants.

The candidate has thoroughly examined the regulation of midwifery education in Bulgaria, its scientific basis; the chronology of the training of midwives from the establishment of the first Midwifery School at the Alexandrovska Hospital, passing through various political influences and periods of reconstruction to the educational and scientific degree “Bachelor”. All educational institutions for midwives are presented, as well as the opportunities to upgrade the education. The professional organizations of midwives, the first independent organization “Midwife”, the subsequent mergers in progressive unions up to the modern organizations – BAHCP and Alliance of Bulgarian midwives (ABM) are presented. The activity of the midwifery section, the requests made to improve maternity care and health care, the active protection of professional and material interests are reviewed.

The problems and difficulties faced by midwives and managers in carrying out continuing education activities have been identified.

The initial period of professional realization of the graduates of nurses and midwives from the first class of the Veliko Tarnovo Affiliate of the Medical University – Varna and the choice of workplace, made for most of them, already during the training, are analysed.

***Direction II. Continuing education of midwives in Bulgaria – comparative characteristics, regulation, organization, problems, innovative educational approaches for assessment (A1.; G8.2.; G8.3.)***

In this direction ch. assistant Zh. Pavlovska has made contributions of a theoretical and practical-applied nature.

An analysis is made of the legal documents in force in Bulgaria and Europe, regulating the continuing education of midwives and the safety of midwifery practices. The international experience in 30 European countries regarding the regulation, organization, accreditation, financing and promotion of continuing education of midwives is studied. A detailed SWOT analysis of the continuing education of midwives in Bulgaria is executed.

Results of a survey of midwives, students and health care managers are presented and the leading motivations for their participation in continuing education are identified. The leading factors impeding effective continuing education of midwives have been identified. A theoretically grounded Midwifery Continuing Education Assessment Model. Through a standardized interview with habilitated teachers, the need to introduce a **single accreditation of continuing education has been proven.**

**Of important practical importance** are the developed **Algorithm of effective continuing education, Model for evaluation of continuing education and toolkit, including Card for assessment of midwife's professional development and Professional Portfolio.**

**Direction III.** Stress in the education of students of the specialties "Midwife" and "Nurse" (5.;6.;7.;8.)

With the sensitivity of a teacher, Pavlovska examines the *stress during the training of students of the "Midwife" and "Nurse" specialties*. In the four publications dedicated to the problem, the causes, manifestations and techniques for overcoming stress in first-year students are identified. Variable levels of stress are found across different semesters and specialties, from "anxiety and worry all the time" to "severe anxiety"; the leading causes of stress related to upcoming exams and the study process; the predominant manifestations of stress – emotional and physiological. The techniques used to overcome stress have been studied. Exam preparation strategies at established levels of stress among students are investigated. Predominant use of inappropriate strategies by students in preparing for exams and low levels of satisfaction with the results achieved are found. The need to develop an "Adaptation Program" in order to support the assimilation of permanent knowledge, create habits of independent work, proper time planning and create sustainable interest in the chosen profession has been proven.

The dependence of the achieved results on the stress resistance of the studied students is investigated. An indirect dependence is established, which is explained by internal factors (type of higher nervous activity, temperament, experience, value orientation, motivation) and external factors (environment, study environment), some of which can be successfully influenced through successful adaptation, training, mental regulation and self-regulation.

The students' coping behavior and the strategies they use to deal with stress are studied using the psychometric method of Edler and Parker – problematic students are accurately identified and encouraged to apply more effective and adaptive coping styles.

**Direction IV.** *Healthy nutrition during pregnancy and lactation (G9.; 15.; 16.)*

In her scientific production ch. assistant Pavlovska constantly challenges herself and explores various aspects of the midwifery profession, from historical to purely practical, with which she contributes to raising the professional role of midwives. The main nutrients are presented in detail – proteins, fats, carbohydrates, as well as biologically active substances necessary during pregnancy and for the growing fetus. The energy needs during each trimester of pregnancy are indicated. The need for higher amounts of certain vitamins and micronutrients during pregnancy has been substantiated; the need for adequate energy intake, necessary for lactogenesis and to meet the energy needs of the new-born through mother's breast milk. Advice is given to limit certain foods during pregnancy, reduce the consumption of coffee, carbonated drinks, avoid negative behavioural habits such as alcohol consumption, smoking, etc.

**Direction V.** *Health care for the elderly (G8.4.; 9.)*

In this field, the candidate has few publications. Nevertheless, serious health problems and significantly reduced independence have been found in elderly people over 80 years of age. The need for daily specialized medical assistance at home has been proven. The needs of medico-social services for the elderly in home conditions among the elderly living alone, the elderly and the disabled have been determined. An assessment of the most necessary needs is made by differentiating the needs and taking into account the complex nature of the needs arising from the age and individual characteristics of the individual.

***Direction VI. Varia (G8.5.; 11.;10.;12.;4)***

1. The influence of the sexual debut on the subsequent intimacy is studied experiences of the individual. No statistically significant difference is found regarding the influence of sexual debut on relationship stability. (G8.5.)

2. The main directions are defined and the charitable one is presented activity of the women's societies that arose in the middle of the 19th century: support for girls' education, raising the educational level of Bulgarian women, the refugee issue, the creation and maintenance of the first maternity hospital of its kind - the "House of the Lihus". (11.)

3. The health and sexual culture and its influence on the reproductive intentions of college students. An increase in financial opportunities is indicated as a condition for the birth of more children. (10.)

4. Literary and documentary historical sources have been studied information about the origin and development of the pharmacy business in Tarnovo, proving that the first pharmacies in Bulgaria are established there. (12.)

5. Literary and documentary historical sources have been studied information on the emergence of the concept of "mental injury". A historical overview of the origin, formation and development of the doctrine of the problem through the various stages is made. (4.)

**4. Assessment of the candidate's pedagogical training and activity**

Ch. assistant Zhana Pavlovska is an established and respected lecturer in the field of health care with over 8 years of teaching experience at the V. Tarnovo Affiliate of MU Varna, proficient in lecture and practical teaching.

A report on the candidate's study employment over the last 5 years is presented, according to which it is indicated that it significantly exceeds the norm of 360 hours, formed by practical training, exercises and lectures, as well as supervision of a pre-graduate internship of students from the specialty "Midwifery". Ch. assistant Pavlovska teaches a large number of compulsory subjects from two sections of the study plan of the specialty "Midwife" – "Philosophy and introduction of nursing and midwifery care. Theoretical Foundations" and "Practical Foundations".

Ch. assistant Zh. Pavlovska participates in the preparation of accreditation procedures for the "Midwife" specialty. The candidate for the competition has other activities related to ensuring the educational process and scientific research work in the Department of Health Care at Veliko Tarnovo Affiliate – equipping 2 health care laboratories, as well as course guidance in the specialty "Midwife".

The submitted references for the candidate's pedagogical training and activity prove a desire for continuous improvement and maintaining a level of high precision and awareness regarding the development of modern requirements for health care and the managerial and pedagogical aspects of the teacher's activity.

**5. General assessment of the candidate's compliance with the mandatory conditions and scientometric indicators of MU-Varna**

The volume of the scientific production presented by Ph. D. Zhana Pavlovska significantly exceeds the basic scientometric indicators provided for in the Regulations of the MU-Varna for occupying the academic position "Associate Professor". The actuality of the topic under consideration in the relevant time order is striking. Scientific activity and

contributions refer both to the provision of new information and to the formulation of hypotheses and theoretical generalizations and the development of models. Ph. D. Pavlovska's studies are methodologically well-placed, providing theoretical conclusions and practical – applied solutions. The candidate is a proofed teacher, mastering the practical and lecturing art in many areas of health care and through her scientific – research activity contributes to the enrichment of midwifery care.

## **6. Personal impressions**

I personally know ch. Assistant Zhana Pavlovska. My first contacts with her are through the Bulgarian Association of Health Care Professionals and subsequently as my doctoral student in the Department of Health Care at MU Varna. I am familiar with the scientific activity of the candidate, as well as with her development as a teacher. Ph. D. Pavlovska does thorough and interesting research, touching on the historical aspects of the specialty “Midwife”. Her modern thinking and critical attitude towards the educational process and professional realization of midwives directs her to search for innovative solutions for their implementation in practice. Responsible for study process, she teaches and engages students in various activities related to both academic and research activities. With an underline interest in acquiring new knowledge and researching good practices in midwifery work, she is constantly looking for ways to optimize health care management by clarifying the role and functions of the modern midwife. I respect her curiosity, hard work and willingness to be helpful.

Benevolent to colleagues and students, responsive and attentive with readiness for team cooperation, ch. assistant Pavlovska has built the authority of a respected teacher, colleague and professional.

## **7. Conclusion**

On the basis of the positive assessment of the educational and teaching activity and the scientific significance of the scientific works, I find it reasonable **to propose to the respected members of the Scientific jury to propose to the Rector of the Medical University – Varna the candidacy of ch. assistant Zhana Georgieva Pavlovska, Ph. D. for the occupying the academic position “Associate Professor”** (in the field of higher education 7. Healthcare and Sport, professional field 7.4 Public Health, specialty “Health Care Management”) in “Health Care” Department of the Affiliate Veliko Tarnovo of Medical University – Varna.

Заличено на основание чл. 5, §1, б. „В“ от Регламент (ЕС) 2016/679
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**Date: 05.06.2024**

**CHAIRMAN OF SCIENTIFIC JURY:  
Prof. Sonya Toncheva, PhD, DSc**