

R E V I E W

by Prof. Kancho Trifonov Tchamov, MD, PhD,
Member of the scientific jury appointed by order No RD – 81 / 01.03.2024 of the
Rector of the University "Prof. Dr. Asen Zlatarov" Burgas

Regarding: competition for the academic position "Associate Professor" in the field of higher education 7. "Health care and sports", professional direction 7.4. "Public health", scientific specialty "Social medicine and organization of health care and pharmacy" for the needs of the Faculty of Public Health and Health Care (FPHHC) at the University "Prof. Dr. Asen Zlatarov" - Burgas.

The only candidate in the competition is Chief assistant Dr. Vanya Bojidarova Georgieva, Ph.D.

1. Career development of the candidate

Ch. assist. Dr. Vanya Bojidarova Georgieva is born on January 28, 1978 in the city of Ruse, Bulgaria. In 2002, she graduated from the Faculty of Medicine at Medical University - Sofia as "master" in medicine. She continued her education, obtaining in 2007 a master's degree in Public Health and Health Management from the Medical University - Sofia and in 2009 she obtained a specialty in "neurosurgery" from the Faculty of Medicine at the Medical University - Sofia. In 2016, she defended her dissertation on the topic "Pharmacoeconomic evaluation of surgical and endovascular treatment of brain aneurysms" and obtained the ESD "doctor" in the specialty "Social medicine and organization of health care and pharmacy" from the Medical University of Sofia. Since 2001, she has been working at the Center for Professional Training in Cosmetics and Cosmetic Care. From 2009 to 2022, she worked consecutively as a neurosurgeon at the "N. I. Pirogov" Sofia (2009-2012), "SOFIAMED" UMBAL (2012-2022) and in "Rahila Angelova" UMBAL in the city of Pernik. From 02.11.2022, she works under an employment contract as a chief assistant in the Department of "Organization and Management of Health Care" at the Faculty of Public Health and Health Care at the University "Prof. Dr. Asen Zlatarov" - Burgas.

The candidate is fluent in written and spoken English

2. Scientific indicators

Ch. assist. Dr. Vanya Georgieva, Ph.D. has presented precisely all the documents required by the Regulations of the University "Prof. Dr. Asen Zlatarov" Burgas as well as sufficient volume and content of information about her scientific production.

The candidate participated in the competition for the academic position "Associate professor" with 41 real publications after acquiring ONS "doctor", distributed by type as follows:

- A.1. Dissertation work for ONS "Doctor" - 1 issue;
- C.3. Habilitation thesis - monograph - 1 issue
- D.6. Published book based on a protected dissertation - 1 issue;

- D.7. Publications and reports published in scientific publications, referenced and indexed in world-renowned databases with scientific information - 10 items;
- D.8. Publications and reports published in non-refereed peer-reviewed journals or published in edited collective volumes - 25 issues;
- D.9. Published chapter of a collective monograph – 3 issues;
- E.20. Published university textbook - 1 issue.

Of all the publications presented, 31 were printed in Bulgarian scientific publications, and 11 in foreign language and foreign scientific magazines and anthologies. Dr. Vanya Georgieva, Ph.D. is an independent author in 8 (19.5%), first author in 15 (36.6%) and second and subsequent author in 18 (43,9%) of the scientific publications. The candidate's scientific output has been published in authoritative Bulgarian scientific journals and anthologies.

The citation reference submitted by the candidate indicates 10 citations in Bulgarian and foreign scientific publications found in the databases of WEB OF SCIENCE and SCOPUS , etc. Citations within indicator "E" of the minimum requirements are distributed as follows: E.10. – 8 pieces; D.11. - 2 pieces.

3. Compliance with the minimum requirements of the University "Prof. Dr. Asen Zlatarov"- Burgas for occupying the academic position of "Associate professor" in PD 7.4. "Public Health"

| A group of metrics | Required number of points | Number of points scored by the candidate |
|---------------------|---------------------------|--|
| Indicator A | 50 | 50 |
| Indicator C | 100 | 100 |
| Indicator G | 220 | 619.5 |
| Indicator D | 60 | 130 |
| Indicator E | 20 | 160 |
| Total points | 450 | 1059.5 |

From the 41 publications presented, the candidate scored 1059.5 points, which exceeded the minimum requirements of the University "Prof. Dr. Asen Zlatarov - Burgas to occupy the academic position "Associate professor".

4. Thematic orientation and contributions of the scientific production

The scientific interests of Ch. Assist. Dr. Vanya Georgieva, PhD are directed in the field of the scientific specialty "Social medicine and organization of health care and pharmacy" and find realization in sustainable scientific development and team publication activity. The wide scope of the published results of the candidate's scientific studies is determined by the specifics of her professional and career development as: practicing neurosurgeon; a doctor with an acquired ONS in the professional field of "Public Health"; doctor with interests in pharmacoconomics and pharmaceutical marketing, as well as in the field of cosmetics and phytocosmetics. The scientific production presented by the candidate corresponds to the direction of the announced competition, containing scientific-applied and theoretical contributions, thematically grouped in the following four scientific directions:

4.1. Pharmacoeconomics and pharmaceutical marketing (4)

This thematic area of the candidate's scientific production includes 4 publications, which are aimed at researching pharmacoeconomic and therapeutic evaluation of results and costs in the treatment of brain aneurysms in Bulgaria and other developed countries. The dissertation of the candidate for awarding the ONS "Doctor" on a topic "Pharmacoeconomic evaluation of the surgical and endovascular treatment of brain aneurysms" (2016) and the subsequent monograph under the same title (D 6.1) are the first complex studies in our country on the pharmacoeconomics in the diagnosis and alternative treatment of brain aneurysms. The scientific-theoretical contributions are related to the developed methodology for applying a pharmacoeconomic model using the pharmacoeconomic methods "cost-effectiveness" and "cost-utility". This facilitates their immediate use by researchers with a professional interest in the economic evaluation of the various therapeutic approaches used in this disease. The received scientific and applied scientific contributions are extremely important for the neurosurgical practice and for the comparative pharmacoeconomic evaluation of the surgical and innovative endovascular treatment of brain aneurysms in Bulgaria. The clinical results and the established costs of their diagnosis and treatment support the selection of adequate therapeutic approaches for the modern treatment of brain aneurysms in our country. Comparative economic analyzes were made for the costs of treating diseases in Central and Eastern European countries (D10.6), as well as in our country. Endovascular therapy for brain aneurysms has been found to be more effective but more expensive than surgical treatment and is partially funded by the Health Insurance Fund. Of interest are the conclusions about the measured incremental ratio (ICER) from the "cost-effectiveness" analysis with a 10.33% absolute risk reduction for mortality, disability and from the "cost-utility" analysis for one additional health-related quality of life (QALY). The results of the FI survey are representative for the country. The comparative analysis for some European countries, the USA and Bulgaria for the therapeutic approaches and their cost-effectiveness in the treatment of brain aneurysms has a contribution of applied scientific and informative nature for the specialist neurosurgeons, pharmacists and health economists. (D 6.1, A 8.21).

In her monographic work "Marketing for pharmacists when providing pharmaceutical services in pharmacies", the candidate considers marketing as a new philosophy in business, the focus of which is transferred from the product and service to the patient as a consumer and buyer, whose needs should be satisfied to the maximum extent. The new vision of Dr. Vanya Georgieva, changes the focus of pharmaceutical marketing from mainly corporate marketing of pharmaceutical manufacturers and distributors to marketing of pharmaceutical care at pharmacy level. Contributing character are having the analyzes of: basic marketing concepts in their historical sequence; current techniques in the marketing mix; the methods for evaluating the types of consumer demand for goods and services; the trends in the pharmaceutical market. The proposed marketing strategies for use on an individual level by pharmacy pharmacists have a scientifically applied nature. The specific features of the marketing of cosmetic products in our country were also studied in accordance with the current European legislation.

The candidate's publications in this thematic direction are evidence-based and characterized by the precision of the obtained results.

4.2. Medical ethics and deontology (6)

There are six publications in this thematic direction, in four of which Dr. Vanya Georgieva is an independent author. In them, medical ethics is presented as a system of ethical principles and rules, the observance of which is necessary in the application of humane values and moral views related to human care in physician's and the medical practice. Its commitment to certain normative postulates valid both for all aspects of clinical practice and for the entire health care system is emphasized. The university textbook published by the candidate under the title "*Medical and deontological cases. A Practical Guide for Students of Public Health and Health Care*" provides theoretical knowledge and practical experience to students and medical professionals on the main determinants of medical ethics and deontology. It informs about the chronological development of medical ethics from the physician's ethics, as well as about the resulting principles and norms that apply to all actors in health care - institutions, organizations, doctors and patients. The fundamental ethical values and principles in medical practice and health care are presented in detail. The contribution nature of this textbook is determined by the possibility of application in the education of students of public health and health care.

In the several articles published by the candidate, the medico-ethical models for decision-making in medical practice are analyzed and summarized, as well as the current approaches for conducting clinical ethical consultation. Possibilities for enhancing the role of medical ethics consultants in clinical decision-making in daily practice in support of both physicians and patients are indicated. The analyses and conclusions in relation to the ethical cases concerning assisted reproduction, euthanasia and the development of the field of "Bioethics" are of a contributing nature. Three of the candidate's publications in this thematic direction discuss moral and ethical situations related to decision-making, caused by crisis situations for health care such as the COVID19 pandemic.

The scientific publications of Ch. Assist. Dr. Vanya Georgieva PhD in this direction, have theoretical and scientific-applied contributions, as well as opportunities for application in the education of the students from the specialties in public health and health care.

4.3. Diagnostic and treatment technologies in neurology and neurosurgery (30)

Dr. Vanya Georgieva's publications in this thematic direction (30 in number) include scientific articles and reports from national and international conferences and congresses, having theoretical and applied scientific contributions. In the monograph "*Pharmacoeconomic evaluation of surgical and endovascular treatment of brain aneurysms*" (D 6.1), the candidate presents results of studies of extremely important problems for neurosurgical practice, which treat on the one hand pharmacoeconomic problems of public health, and on the other hand are purely medical for possible approaches to surgical and endovascular treatment with extensive practical experience presented. This analysis is relevant and significant from a scientific-theoretical and scientific-applied point of view because cerebral aneurysms cause high mortality and disability, therefore the appropriate choice of treatment determines a more favorable prognosis.

A large number of interesting and rare clinical cases from the medical practice are presented, as well as a summary of literature data regarding the treatment mainly of cerebrovascular diseases with cutting-edge methods for evaluating etiological and pathogenetic

mechanisms, pathology and treatment options. Applied results of a successfully applied complex are presented approach to cerebrovascular revascularization through high-flow bypass with arterial graft transplantation in the field of neurology and neurosurgery (Г7.6, Г8.6, Г8.9, Г8.11, Г8.12, Г8.13, Г8.15, Г8.16, D 8.17).

Surgical cases with a contribution to practice in the treatment of brain and spinal-cerebral metastases, cerebrovascular diseases and stem malformations are described (D8.7, D8.8). The quality of life of patients after surgical treatment of spinal degenerative diseases was studied and evaluated (G7.10).

The studies on the role of antibacterial prophylaxis in neurosurgery (G8.14) and in pediatrics (G8.18) have important scientific applied and informative contributions; as well as the diagnostic and treatment behavior in alcoholic myelopathy and Wernicke's myelopathy (G7.4, G7.9); for the use of tyrosine-kinase inhibitors in the treatment of acute myeloid leukemia (G7.5); about the complications of COVID19 causing multiple organ failure after surgical treatment of patients with this disease (G8.3).

The scientific production of the candidate in this direction is represented by predominantly team studies, which are evidence-based and have scientific-practical and informative contributions.

4.4. Cosmetics and phytocosmetics (2)

In the collective monographs "Cosmetics" and "Phytocosmetics" basic knowledge of cosmetics is systematized for the purposes of medical cosmetology students at medical colleges in the country, students in professional schools of cosmetology and hairdressing and students in licensed cosmetology training schools. They include modern topics of a scientific, practical and informative nature, important for trainees and practicing cosmetologists, such as: historical development of cosmetics and phytocosmetics; legal and regulatory basis for assessing the safety and application of cosmetic products; glossary of ingredients; counterfeit cosmetic products; genetics of aging; rules for the use of sunscreens, etc.

The sections dedicated to phytocosmetics are focused on the application of more than 20 Bulgarian medicinal plants in various cosmetic forms and preparations. The scientific production of the candidate in this thematic section finds an opportunity to enrich the knowledge of cosmetologists and students of medical cosmetology with a practical orientation in the profession.

The scientific publications of Dr. Vanya Georgieva PhD in this direction have scientific, applied and informative contributions and with possibilities for application in the training of the students of the "Medical Cosmetics" specialty.

5. Educational and teaching activity

The candidate has been appointed to work from 02.11.2022 as a chief assistant in the Department of "Organization and Management of Health Care" at the Faculty of Public Health and Health Care at the University "Prof. Dr. Asen Zlatarov" Burgas. For the time since her appointment, she has implemented a workload for teaching students as follows: for the 2022-2023 academic school year - 191 study hours; for the first semester of the 2023 - 2024 academic year, year - 49.5 study hours. The teaching activity at FPHHC includes conducting exercises and teaching practices in the following disciplines of the specialty "Social medicine and

organization of health care and pharmacy": medical cosmetics and bioproducts - EQD "master"; medical ethics and deontology - EQD "bachelor"; general and medical sociology - EQD "bachelor"; social medicine and epidemiology - EQD "bachelor". Ch. Assistant Dr. Vanya Georgieva, PhD participates in the development and updating of curricula and exercises for the specialties "Health Tourism", "Health Management" and "Medical Representative" for EQD "Bachelor" and EQD "Master".

6. Participation in research projects and membership in scientific societies

The candidate's participation in a European scientific project on "Advanced Computing for Innovation", financed by the European program "FP 7 Capacity Programme, Research Potential of Convergence Regions", launched in 2012, is documented. Lasting 42 months. She was a member of a team developing the medical data collection and analysis section in the simulation of blood flow through vessels and cerebral aneurysms. Dr. Vanya Georgieva, PhD is a member of the following national professional and scientific organizations:

- Bulgarian Medical Union (BMU)
- Bulgarian Society of Neurosurgery (BSN)
- Bulgarian Stroke Society (BSS)

CONCLUSION

In the current contest for occupying the academic position "Associate professor" participates as the only candidate Chief Assistant Vanya Bojidarova Georgieva, MD, Ph.D. The evaluation of her scientific production, educational and teaching activity and compliance with the minimum requirements for scientific and teaching activity of the Regulations of the University "Prof. Dr. Asen Zlatarov" Burgas show: relevance and contribution nature of the scientific production presented; published research results of scientific and applied value; published monographs; and corresponding teaching employment.

In connection with the above and in accordance with the provisions of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff in the University "Prof. Dr. Asen Zlatarov" Burgas I will vote for and I strongly recommend the members of the Honorable Scientific Jury to award Chief assistant Vanya Bojidarova Georgieva, MD, Ph.D. the academic position "Associate professor" in the field of higher education 7. "Health care and sports", professional direction 7.4. "Public Health" and the scientific specialty "Social Medicine and Organization of Health Care and Pharmacy" for the needs of the Faculty of Public Health and Health Care, Department "Organization and Management of Health Care".

04/23/2024
Sofia

Reviewer:

Prof. Kancho Tchamov,