

REVIEW

By Prof. Nevyana Georgieva Feschieva, MD, PhD

**Regarding tender procedure
for occupying the academic position "professor"
in the field of higher education 7. Healthcare and sports,
professional direction 7.1. Medicine,
scientific specialty "Social medicine and organization of health care and pharmacy",
announced in State Gazette, issue 7/ 24.01.2024**

By Order of the Rector of the Medical University of Varna (MU-Varna), No. P-109-97/ 22.03.2024, I was appointed as a member of the Scientific Jury, and at the first meeting of the Scientific Jury (Protocol No. 1/02.04.2024), I was chosen to prepare a review for the competitive procedure for occupying the academic position "professor" in the scientific specialty "Social medicine and organization of health care and pharmacy", professional direction 7.1. Medicine", area of higher education 7. "Health and sports".

The only candidate in the competition is Associate Professor Desislava Ivanova Vankova, MD, MPH, PhD, DSc. The materials for the announced competition, presented in an appropriate way, very precisely by the candidate, were prepared in accordance with the legal regulations and with the requirements in the Regulations of the MU-Varna for the application of Law for the academic development in the Republic of Bulgaria.

1. Biography and career development of the candidate.

Education: She graduated from the English language high school "Geo Milev" in her native city of Burgas in 1989 with a golden medal, and in 1994 graduated as a medical doctor (MD) at the MU-Varna. She received a second Master's degree in 1999 in Public Health (MPH) from the Maastricht University, the Netherlands. In 2000, she acquired a specialty in "Social Medicine and Health Care Organization". After successfully defending a dissertation on the topic: **"Health-related Quality of life in the community"** on 17.09.2013, she received a PhD degree. In 2023 she defended her dissertation **"Integrative Medicine - Holistic Conceptual Model, Scientific and Educational Approaches"**, for which she was awarded the scientific degree "Doctor of Medical Sciences" (DSc). She has a specialty in medical pedagogy since 2024. In 2023-2024, she participated in the innovative Master's program Artificial Intelligence in Healthcare and after appropriate preparation became a member of the teaching team of the program.

Postgraduate courses and additional qualifications (proven by relevant certificates/diplomas)

She has completed numerous postgraduate training courses in Public Health, Modern Epidemiology, History of Medicine, Health Technology Assessment, Integrative Medicine, One Health and Antimicrobial Resistance (AMR). She has a European diploma in homeopathy (2016-2019); she is a certified teacher at the German Academy of Homeopathy and Naturopathy (DHU).

Assoc. prof. Vankova has undergone a number of trainings related to scientific writing, publication ethics, scientometrics, anti-plagiarism procedures. All of them have increased its capacity for scientific and applied work on these problems.

Professional development

She has a total medical experience of 28 years and 7 months. She has started as a physician in the Internal Department of the Municipal Hospital, town of Malko Tarnovo; general practice and emergency duties, Avren municipality (1994-1996); medical doctor at HEI – Varna at the Departments “Organization and health information” and “Infectious Epidemiology” (1996-2001). Part-time lecturer in social medicine at the Medical University of Varna in the specialty "Sanitary Inspector" (1999/2001 and 2001/2002). As a team leader, she participated together with UNAIDS and the Ministry of Health in the final phase of developing a National strategy and in creating a Regional Strategy (Varna) for the fight against AIDS and transmissible infections (08.2000-02.2001). At GlaxoSmithKline–Bulgaria (June 2001-August 2015), Prof. Vankova worked as a key account manager and was responsible for the medical presentations in the fields of neurology, psychiatry, pulmonology, haematology. Since 11.2015, she has held the position of Head of the administrative Department "Science" at MU-Varna and at the same time she was a part-time assistant at the Department of Social Medicine and Health Care Organization (DSMHCO). Since then, her professional path has been permanently connected with the Medical University of Varna, since 2016 she has been a chief assistant, and since 2018 Associate professor at DSMHCO. She develops intensive teaching, research, publication, and expert activities.

Foreign languages competencies: английски и руски - отлично, френски – добре.

Participation of the candidate in research projects. Може да бъде оценено много високо: тя е ръководител на приключили 2 международни и 3 национални научни проекти и има участие в други 10 научни и образователни проекти, от които 2 са текущи.

Participation in editorial board and peer reviews:

- Member of the Editorial Board of “Asklepius” - International Annual for History and Philosophy of Medicine, published by the Balkan Association of History and Philosophy of Medicine);
- Reviewer of scientific peer reviewed journals: BMC Public Health, Value in Health Regional Issues, Scripta Scientifica Salutis Publicae, Zdrowie Publiczne i Zarządzanie, Socialana medicina, Bulgarian Journal of Public Health; Journal of IMAB, Asclepius, Journal of the Union of Scientists - Varna, Medicinski pregled etc.

Memberships in international and national scientific and professional organisations:

- European Public Health Association (EUPHA);
- Bulgarian Medical Union;
- Bulgarian Public Health Organisation (member of the Board since 2023);
- Bulgarian Scientific Society of Public Health;
- Union of Scientists, Varna Branch, Section Medicine;
- European Society of Integrative Medicine.

Expert activities.

- Member of the Ethics Committee at the "Sveta Marina" University Hospital, Varna - from November, 2018 to May, 2022;
- Member of the Research Ethics Committee at Medical University - Varna (KENI) - from October 2020 to the present;
- Member of the EUPHA Working Group on Access to Medicines – since July, 2023.
- Scientific expert at the European Commission – from 2020 to present;
- Health technology assessment (HTA) national expert (2016-2019)
- Member of scientific juries for the acquisition of educational and scientific degrees and academic positions (according to the Law on the Development of the Academic Staff in the Republic of Bulgaria).
- Participates as an expert in the preparation of international health policy strategies of the EC, the WHO, etc.

Summary: Assoc. Prof. Vankova has a broad educational portfolio, but at the same time focused on important, contemporary public health issues. Her professional path has included

working both in primary care and meeting with the upper echelons of specialized medicine. These are prerequisites, along with an excellent command of the English language and fruitful communications in international and national scientific and educational projects, in professional and scientific organizations, to shape his scientific and teaching profile.

3. Scientific research activity, scientometric criteria and scientific contributions

The research activity of Assoc. Prof. Vankova is represented by 72 titles:

- Habilitation work (B3.) – monograph – 1;
- PhD Dissertation (A1.) – 1;
- DSc Dissertation (E13.) – 1;
- A book based on a defended dissertation (G6.) – 1;
- A published monograph that is not submitted as a major thesis (G5.) – 1;
- Chapter in a collective monograph (G9.) – 1;
- Textbooks, handbooks (E20. и E21.) – 5;
- Articles and reports published in scientific journals, referenced and indexed in world-renowned databases of scientific information (G7.) – 16;
- Articles and reports published in non-refereed peer-reviewed journals or published in edited collective volumes (G8.) – 39;
- Abstracts in journals with IF – 3.

Apart from the list of minimum requirements for occupation of the position "Professor", Prof. Vankova, presented an additional short list of publications.

She is the independent author of 39 scientific papers, and 37 are co-authors. The established high independence in publishing largely reflects her broad thematic scientific interests. She is an independent and first author in 47% of scientific production. There is a balance between individual authorship and teamwork.

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**Minimum required points by groups of indicators
for the academic position "Professor" according the national Law on academic
development in the Republic of Bulgaria and the Rule for the Law development**

Indicators	Content	Professor By law (N of points)	Desislava Vankova (N of points)
A	Indicator 1	50	50
B	Indicator 2	-	-
B	Indicator 3	100	100
G	Sum of Indicators G-5 to G-9	200	1356,57
D	Sum of Indicators D-10 to D-12	100	1140
E	Sum of Indicators E- 13 to E- 22	100	595
Total		550	3241,57

Assoc. Prof. Vankova's points, according to indicators **G, D, E**, significantly exceed the minimum requirements, and the total points achieved by her are six times higher than the required ones. The comparison of the data of Assoc. Prof. Vankova with the scientometric criteria laid down in the Rules for the Development of the Academic Staff of the MU - Varna, as well as with the specific requirements for the announced competitive procedure, shows full compliance.

The journals in which Prof. Vankova has published, according to the Academic Reference issued by the MU-Varna library, have an impact factor (**IF**) of **14.715**.

Citations. Declared **142** citations, which testifies to the target audience's good knowledge of Assoc. prof. Vankova's works. From them 42 are in referenced and indexed in world-renowned databases or in monographs and collective volumes, 15 are in monographs and collective volumes with peer review and 78 – in non-referenced peer review journals.

Qualitative characteristics of the research work of Assoc. Prof. Vankova, MD, DSc.

The scientific works presented by Assoc. Prof. Vankova, MD, are on the topic of the competitive procedure. The attached lists of publications used in previous competitions allow her development as a researcher to be traced.

The review of her scientific output makes it possible to derive some (not exhaustive) characteristics of her rich scientific research work:

- ✓ **Introducing and exploring new areas of knowledge.** Already with her first monograph and with subsequent publications, she expressed a desire and demonstrated an opportunity to present theoretical, little-known or new/controversial but promising problems to the medical community. Applies theoretical analysis, terminologically clarifies the conceptual apparatus where necessary; determines the place of the relevant problem in the knowledge system, resp. in scientific classifications. Such issues are Health-related Quality of Life, Integrative Medicine, One Health, Narrative Medicine. A further contribution is the subsequent research interest in the issues she raised, which can be traced in the list of citations of her works.

✓ **Conceptualization** from the position of modern public health care. Assoc. Prof. Vankova, PhD, makes a historical study of the concept of "integrative medicine" as a holistic idea and a medical-social construct (B3). For the first time, a holistic conceptual model has been created that enables a more in-depth study, development and application of integrative medicine and health care (B3; E13; D6). Assoc. Prof. Vankova devotes a number of her studies on concepts important for modern social medicine and public health, such as "quality of life", "determinants of health", "community", "social capital". Linking health promotion and preventive medicine approaches to the problems of vulnerable groups - children (early childhood development) and the elderly - is in this direction. The research proving the place of Bulgarian folk dances in health promotion activities among young people and their prospects for the health of students are original. In the presentation of the concepts, the "history of medicine", as a research field, goes through all the all priority areas of the scientific work of Assoc. Prof. Dr. Desislava Vankova, DSc.

With the above-mentioned two characteristics of the scientific research work, the candidate has won a place as a researcher-theoretician in the field of social medicine and public health in our country.

- ✓ **Integrity.** Assoc. Prof. Vankova defines herself as a representative of the "third generation" of academic researchers of the 21st century, who work in multidisciplinary teams combining methods and approaches from the humanities, social, natural and exact sciences for the benefit of human well-being, of individual and population health (A1, D5, E13, D6, D8-3, D8-8, D8-23). She developed collaborations not only within the medical field, with clinicians, but also with philosophers ("Cross-cultural routes and life narratives of aging and care"), mathematicians and AI specialists (G7-10), which have led to major contributions to social medicine and public health.

✓ **Innovation.** Assoc. prof. Vankova has the merit of being a pioneer in several types of research. First of all, the population-based study "Health-related quality of life (HrQoL) in the community" was conducted in a period when we lack similar studies. She is the first researcher in our country to apply the tool developed and validated by the European Expert Group EuroQol - EQ-5D-3L - Health Status Questionnaire, Bulgarian version. Today, it is a routine HrQoL assessment tool, but most significant follow-up studies with this tool cite the applicant's work.

In second place is the introduction of the idea of One Health in Bulgarian healthcare and the independent and first author of the first scientific publications in this direction in our country (G8-4; G8-2; G8-15). As an expert for Bulgaria, she is in the team that developed the health policy document on tackling antimicrobial resistance, in the context of One Health (December 2023).

Thirdly, although first in time, in 2001 the first analysis of public health education in our country was published, with authors Desislava Vankova and Evelyne de Leeuw, in one of the first open access scientific journals "Internet Journal Of Public Health Education". It has been cited many times and is the starting point for many scientific developments abroad and in our country. Twenty years later, from the position of a professional with extensive experience, Prof. Vankova analyzes the evolutionary development of public health education. An original teaching model (G8-23) was created, which is used in various areas of higher education.

Assoc. Prof. Dr. Desislava Vankova also works in the field of narrative medicine, a relatively new interdisciplinary scientific field, which promotes conceptual connections and practical relationships between biomedicine, based on rational principles and confirmed experimental evidence, and humanitarian knowledge, addressed to the symbolic and linguistic reality of human experience (G8-3).

✓ **Methodological development.** The candidate declares her affinity for qualitative studies and their combination with quantitative sociological methods. She is the author who introduced the mixed-method approach as a term and as a real application in social medicine and in public health care in our country (A1; E13). Applying qualitative methods in field studies (focus groups and in-depth and semi-structured interviews) in a number of projects, she contributes to their dissemination.

The candidate has developed a theoretical model for conducting a Delphi survey among health and social experts in a COVID-epidemic environment, which she named Dynamic Delphi. It can be

applied when reaching consensus on various issues affecting community life, including health and education (A1; E13; H8-35).

As an additional feature, we can note the development of scientific topics over the years as a kind of spiral tracking, which is a good approach to verify conclusions and the possibility of upgrading and development. I hope and recommend that Assoc. Prof. Vankova continues in the same spirit to "grow" her topics and achievements.

Assoc. Prof. Vankova has systematized her scientific works after holding the position of "Associate Professor" in four directions:

1. Quality of life and health. Social inequalities.
2. Promotion of health and preventive medicine.
3. Integrative medicine - conceptual modelling and research in the field of complementary and alternative medicine (CAM) and health promotion;
4. Educational and scientific research. Methodology and application.

I agree with the contributions presented by her, described in detail and accurately in the individual directions.

The research work of Assoc. Prof. Vankova is distinguished by innovation in topics and methods, combining theoretical problems and opportunities for practical application at different work and management levels.

Dissemination of the candidate's research results is carried out through participation in international, national and regional scientific forums, there are nearly 100 of them and a significant, diverse range of foreign and Bulgarian journals in which she publishes.

Assessment of the candidate's educational and teaching activities.

Assoc. prof. Vankova's educational and teaching work began in 1999 as a part-time assistant in social medicine for two academic years. But her intensive involvement has been since 2015, as principal assistant and associate professor at the DSMHCO. In the report on study workload for the last four years, issued by MU-Varna, with a norm of 180 hours per year, there is almost twice as much workload (in individual years, 379, 318, 359, 318).

Academic education: Associate Professor Desislava Vankova is involved with the disciplines Social Medicine, Health Promotion, Introduction to Public Health for students from

almost all majors in the Faculty of Public Health. She is engaged in lecture courses and seminars for students of Medicine (English-language training), Nursing, Midwives, Speech Therapists, Physiotherapists, Optometrists, Pharmacists and Assistant-Pharmacists. Leads seminar exercises for medical students (English and Bulgarian language training), dentistry (until 2019).

Participation in the development of programs and state exams. Participates in the development of curricula on "Social Medicine and Health Promotion" for Midwives and "Social Medicine and Health Promotion" for Nurses, "Eye Health Promotion" - for optometrists, Master degree. The most recent program prepared by her is in the discipline "Preventive care, Health Promotion and Artificial Intelligence" for a master's degree in Artificial Intelligence in Healthcare at the Mu-Varna. She prepared a module in the discipline "Research methods" and participates in the teaching team of the parallel master's program "Artificial Intelligence in Biomedicine" (also in English).

She is the chairman of the state examination commissions in Social Medicine with Health Promotion and Social and Health Legislation for Nurses and Midwives - Bachelors degree at the MU - Varna. As the chairman of the two state commissions since 2019, she has conducted over 15 state exams. Participates in the training of sixth year medical students (until 2023) and in state examination boards for the specialty of Medicine.

Textbooks and teaching materials. Assoc. Prof. Vankova is the author of two modern textbooks: "Social Medicine and Health Promotion" for midwives and "Social Medicine" for nurses - in electronic and paper versions, each of them. She previously authored two teaching aids - compendiums on both disciplines, which are a timely response - the result of her concern for students during the COVID-19 epidemiological situation. She is the co-author of a handbook - an original terminological reference book on integrative medicine, the fruit of many years of research and pedagogical work with PhD students and specialists.

Supervision of specializations of physicians and PhD candidates. She participated as a lecturer in the training of "Public Health" specialists and in the pre-clinical module of the course for ophthalmology specialists. She is supervising two physicians specializing in Social Medicine. There are two successfully defended PhD students in direction 7.1 "Social medicine and organization of health care and pharmacy" and 7.4. "Public Health". She is currently the supervisor of four full-time doctoral students in the same fields.

Summary: The educational and teaching work of Assoc. Professor Vankova is significant in volume, exceeding the normatively provided, innovative, in which she invests knowledge, experience, quality. Associating the educational and pedagogical work with the results of Assoc. Prof. Vankova's research increases her personal effectiveness as a teacher. Developing its potential, it contributes to the expansion and enrichment of the university and postgraduate education offered at the Medical University - Varna.

Personal impressions. I am a witness to the scientific growth of Prof. Vankova. She retained a searching spirit, inexhaustible energy, and workability, but over the years she did a lot for her personal development, which was the fertile ground for her current achievements. She rose to the world of ideas in the field of social medicine. I wish her to look for and find like-minded people for the realization of future creative ideas, which the new times very much need, and the new position she aspires to will present a moral imperative to develop them.

Conclusion: The analysis of Assoc. Prof. Vankova's overall scientific and educational activity shows that she meets all the criteria of the Law for academic development and Rules of MU - Varna for occupying the academic position "Professor". Her work is distinguished by relevance, innovation and the creation of new scientific directions. The contributions are theoretical-cognitive, methodological and practically applied. I am convinced to vote "positive" and appeal to the other members of the Scientific Jury to vote for **Assoc. Prof. Desislava Ivanova Vankova, MD, MPH, PhD, DSc to take the academic position of Professor at the MU-Varna**, speciality in Social Medicine and Organization of Health Care and Pharmacy, professional direction 7.1. Medicine and field of higher education 7. Health care and sports.

Reviewer:
Prof. Dr. Nevyana Feschieva, PhD