REVIEW

by

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MEMBER OF THE SCIENTIFIC JURY IN THE PROCEDURE FOR OCCUPYING THE ACADEMIC POSITION OF "PROFESSOR" IN THE FIELD OF HIGHER EDUCATION 7. HEALTH AND SPORTS, PROFESSIONAL DIRECTION 7.1 MEDICINE, SPECIALTY "SOCIAL MEDICINE AND ORGANIZATION OF HEALTHCARE AND PHARMACY" (BG AND ENG), FOR THE NEEDS OF THE DEPARTMENT OF "SOCIAL MEDICINE AND ORGANIZATION OF HEALTHCARE", FACULTY OF PUBLIC HEALTH, MEDICAL UNIVERSITY "PROF. DR. PARASKEV STOYANOV" - VARNA, ANNOUNCED IN STATE GAZETTE NO. 7 FROM 23.01.2024.

CANDIDATE: ASSOC. PROFESSOR DESISLAVA IVANOVA VANKOVA, MD, DSC

1. General Provisions

Based on Order No. R-109-97 dated March 22, 2024, issued under Article 4, paragraphs 1 and 2, and Article 29a of the Law on the Development of Academic Staff in the Republic of Bulgaria (LDASRB), Article 6, paragraph 1, Article 139, paragraph 1 and 3 of the Regulation on the Development of Academic Staff at the Medical University - Varna, upon the proposal of the Faculty Council of the Faculty of Public Health (approved at a meeting with Protocol No. 222 dated March 15, 2024) and based on Protocol No. 1/02.04.2024 of the approved Scientific Jury, I present this review.

All necessary materials submitted by the candidate Assoc. Prof. Desislava Ivanova Vankova, MD, MPH, PhD, DSc, have been prepared precisely, fully complying with the requirements of the legal framework and the regulations of the academic institution regarding the procedure for occupying the academic position of "Professor".

2. Education, Qualifications, Specializations, and Professional Development

Assoc. Prof. Desislava Ivanova Vankova, PhD, MD, was born on April 24, 1968, in Burgas. In 1989, she graduated with honors and a gold medal from the English Language High School "Geo Milev" in Burgas. She completed her medical degree at the Medical University - Varna in 1993. (The possession of a Master's degree in the field of "Medicine" is an additional requirement for participation in this competition), and a Master's degree in Public Health (MPH) from Maastricht University, Faculty of Health Sciences, The Netherlands in 1999.

The educational and scientific degree of PhD was awarded to Assoc. Prof. Vankova in 2013, with the topic of her dissertation being "Health-related Quality of Life in the Community" (the educational and scientific degree of PhD is a part of the doctoral program "Social Medicine and Organization of Health Care and Pharmacy", which is also an additional requirement for participation in the competition). She has also been awarded the scientific degree of "Doctor of Sciences" (2022) with the topic of her dissertation being "Integrative Medicine - a Holistic Conceptual Model, Scientific and Educational Approaches".

Since 2001, she has acquired a specialization in social medicine and organization of health care, and since 2024, she has obtained a specialization in medical pedagogy. Assoc. Prof. Vankova has numerous qualifications in various fields, supported by relevant certificates, including: social medicine and epidemiology, health promotion and healthy lifestyles, preventive medicine, quality of life and subjective health, Health technology assessment, integrative medicine, One Health and antimicrobial resistance (AMR), medical pedagogy, and others directly related to her daily teaching and extensive scientific activities.

Assoc. Prof. Vankova also possesses numerous qualifications in the field of digital skills, which she successfully applies.

Assoc. Prof. Vankova's professional journey in the field of clinical practice follows a standard trajectory for her generation: she served consecutively as a resident physician at the Municipal Hospital – Malko Turnovo and a general practitioner in the Rural Health Service - Avren (1994 - 1996), epidemiologist at the Regional Health Inspectorate in Varna (1996-2021), led a team at UNDP– Sofia for a year, worked for a period as a key account manager at GlaxoSmithKline (2001-2015), after which her stable academic development began - as a PhD student at MU - Varna (2011 – 2013), head of the research department and a part-time assistant (2015-2016), chief assistant (2016-2018), and associate professor (2018 - present). The review of master's theses, participation

in publications, successful nominations for prestigious state and regional awards, recommendations for specializations and mobilities, as well as lecturing in theoretical courses at the Medical University - Varna, drafting reviews and opinions for educational guides and monographs, can be attributed to Assoc. Prof. Vankova's successful routine scientific and teaching activities. It's worth noting her diverse expert activities, including participation as a member of ethics committees, expert for project activities of the European Commission, participation in health technology assessment committees, member of scientific juries for the acquisition of educational-scientific degrees and academic positions, and particularly her role as an expert in drafting international health policy strategies.

Assoc. Prof. Vankova's notable activity also extends to peer reviewing in scientific journals: BMC Public Health, Value in Health Regional Issues, Scripta Scientifica Salutis Publicae, Zdrowie Publiczne i Zarządzanie, Социална медицина, Bulgarian Journal of Public Health; Journal of IMAB, Asclepius, Journal of the Union of Scientists-Varna, Медицински преглед, and others. An expression of these activities is also her membership in international networks and professional organizations such as the European Public Health Association (EUPHA); Bulgarian Medical Union; Bulgarian Association of Public Health (member of the Board of Directors since 2023); Bulgarian Scientific Society of Public Health (BSSPH); Union of Scientists in Bulgaria, Varna branch, Medicine section; European Society of Integrative Medicine, NGO "Public Health-99".

3. Research Activity - Scientific Works

The submitted works by Assoc. Prof. Vankova for participation in the competition, totaling 69, reflect her research activity in the period (2017-2023) following her previous habilitation, with the following distribution:

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Habilitation work (B3.) – monograph – 1;

Doctoral dissertation for obtaining the academic degree "Doctor" (A1.) – 1;

Doctoral dissertation for obtaining the academic degree "Doctor of Sciences" (E13.) – 1;

Book based on a defended doctoral dissertation (G6.) – 1;

Published monograph not presented as the main habilitation work (G5.) – 1;

Chapter in a collective monograph (G9.) – 1;

Textbooks, teaching aids (E20. and E21.) – 5;
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Publications and reports published in scientific journals, referenced and indexed in internationally renowned databases with scientific information (G7.) - 16;

Publications and reports published in non-refereed journals or edited collective volumes (G8.) - 39; Published abstracts, incomplete texts, in journals with IF (Impact Factor) - 3.

Assoc. Prof. Vankova, MD, MPH, PhD, DSc is the sole and first author in 47% of the actual developments presented for the competition. She is the sole author in 35 works and co-author in 37, being the first or second author in 11 publications, indicating a predominance of independent publications and those as the first author.

The reference for meeting the minimum national requirements shows that Assoc. Prof. Vankova's indicators are fully met (3241.57) and exceed the minimum required number by 6 times (550).

Reference for Meeting the Minimum National Requirements for Occupying the Academic Position of "Professor"

Group of Indicators	Contents	Number of points minimum national requirements	Number of points of the candidate Prof. Vankova
A	Indicator 1	50	50
A1	Indicator 2		-
В	Indicator 3	100	100
G	Sum of indicators from G5 to G9	200	1356,57
D	Sum of indicators from D10 to D12	100	1140
Е	Sum of indicators from E13 to E22	100	595
TOTAL		550	3241,57

The primary focus of Assoc. Prof. Vankova's research is in the field of social medicine and public health, with an emphasis on public health. The scientific works can be grouped into the following categories:

A. Quality of Life and Health. Social Inequalities

1. In Public Health - For Different Vulnerable Population Groups - Adults, Children, etc.

2. In Clinical Medicine – Patient-Reported Outcomes in Chronic Diseases within the Context of Person-Centered Comprehensive Patient Care

In the publications included in this direction [A1; G5; G9], several theoretical contributions can be highlighted, such as the clear definition of terms like "quality of life," "health-related quality of life" (HRQoL), and "well-being." Assoc. Prof. Vankova is a leading figure in introducing and presenting innovations in the field of subjective health assessment [G5; G8-24].

A significant theoretical contribution is the distinction made between tools for measuring "health-related quality of life" and the broader concepts of "patient-reported outcomes" (PROs), "PROMs" (Patient-Reported Outcome Measures), and "PREMs" (Patient-Reported Experience Measures) [G8-24]. In [G5], as well as in other publications, a comprehensive study on the multifaceted role of quality of life in medicine and public health in the context of early childhood development is presented for the first time in Bulgaria [G5; G9].

For the first time, in collaboration with a team of researchers working in the field of artificial intelligence, an intercriteria analysis is used in [G7-10] to present an innovative solution for quality of life analysis. Assoc. Prof. Vankova is the first researcher in Bulgaria to apply the instrument developed and validated by the European Expert Group EuroQol - EQ-5D-3L - Health Status Questionnaire, Bulgarian version. Today, it is a routine instrument for assessing HRQoL, which is undoubtedly an original contribution.

The presented works [A1; G5] support the idea that subjective health measurements can be performed periodically, every year, or at specified intervals. The studies, in collaboration with clinicians, towards the evaluation of subjective health as an integral part of patient condition assessment and as an aspiration towards person-centered care, demonstrate the need for subjective health evaluation even in patients with various diseases [G8-12].

B. Health Promotion and Preventive Medicine

1. Health Promotion; Active Aging; Values and Development of Public Health

The theoretical and practical contributions in this direction are clearly linked to studies on the increasing elderly population and its positive impact on public health [G8-25; G8-27; G8-29]. Assoc. Prof. Vankova posits that individuals aged 60-65 and above represent human and social capital whose potential should be fully utilized. A specific contribution is the established fact that promoting healthy aging is a process where health promotion is crucial, beginning with the adoption of healthy behaviors throughout life, through health interventions aimed at socially significant

diseases, early information about the challenges faced in old age, and training in technologies and techniques for healthy, active aging [G8-21; G8-25; G8-27; G8-29]. The works discussing societal values, intergenerational solidarity, culture, and human health [G5; G8-27; G8-29] are particularly interesting. These are identified by the author as "proven protective factors" for good health-related quality of life in advanced age.

2. Health Promotion through Bulgarian Folk Dances as Physical Activity and Academic Discipline

The publications examining behavioral health determinants, such as physical activity, are original and noteworthy. These determinants are highly responsive to change through successful public health interventions. Significant contributions are the studies on Bulgarian folk dances and their presentation as a health education strategy for stress management and building healthy habits among students, the future health professionals [G7-9; G7-12; G7-14; G7-15; G8-33; G8-34; E14; E-18(1)]. The importance and necessity of including Bulgarian folk dances in the curriculum of the "Sport" discipline as a means to preserve and popularize Bulgarian folklore, traditions, and culture are emphasized in the research. Bulgarian folk dances are also an effective way to overcome differences within the multinational student community of the university. The creation of an audiovisual educational tool for learning Bulgarian folk dances as part of the project has proven its role and benefits in online education during the Covid-19 pandemic.

3. One Health – Expert Research at the International Level and Introduction of the Concept in Bulgarian Healthcare, Including Routine Activities for Infection Prevention and Control, and Tackling Antimicrobial Resistance (AMR).

An important contribution is the theoretical research and conceptual presentation of the "One Health" idea in public health in both its narrow and broad senses [G8-4; G8-2]. Assoc. Prof. Vankova is the researcher who introduced the "One Health" concept into Bulgarian healthcare. She is the sole author and the first author of the initial scientific publications in this area in Bulgaria [G8-4; G8-2; G8-15]. She is also an expert for Bulgaria in the team that developed the health policy document for tackling AMR in the context of One Health, published at the end of 2023. The theoretical research and conceptual presentation of the "One Health" idea in public health is a significant contribution [G8-4; G8-2].

C. Integrative Medicine - Conceptual Modeling and Research in the Field of Complementary and Alternative Medicine (CAM) and Health Promotion

This area of research by Assoc. Prof. Vankova stands out as one of the most interesting, showcasing her as an exceptionally erudite researcher with an affinity for lesser-known fields, which she naturally integrates into the realm of social medicine. She is credited with the development of integrative medicine as a new medical-social category that warrants study and research [B3; G5 (in the part about art therapy); G6; G7-1; G7-7; G7-8; G8-1; G8-3; G8-11; G8-13; G8-14 (in the part about studying foreign languages for dementia prevention); G8-16; G8-17; G8-18; G8-19; G8-22; E13; E14; E16(3); E-18(3); E-19(2); E-21(3)]. For the first time, a holistic conceptual model has been developed, offering the opportunity for in-depth study, development, and application of integrative medicine and healthcare [B3; E13; G6]. Particularly noteworthy is the original glossary on integrative medicine, which later evolved into a textbook [E13; E21 (3)]. The glossary serves as a contemporary scientific guide for doctoral students and students in the field of public health, CAM, and health promotion [B3; E14; E19], which defines not only its high theoretical value but also its specific practical application.

Research on the awareness, attitudes, behaviors, and interests of student and professional communities regarding CAM, health promotion, and the concept of "integrative medicine" is the first study of its kind in the field of higher medical education in Bulgaria [B3; E13; G6]. The protocol of the practical-applied model for conducting a Delphi survey is structured as a process for gathering ideas and opinions from experts on the specific complex topic through a series of questions, combined with information exchange to reach a generalized final document, which is exceptionally interesting and deserves high praise. In the context of holistic approaches to health, Bulgarian folk dances are innovatively presented as an integrative health determinant and as art therapy, reducing stress and improving the quality of life among young people.

D. Education and scintific Research. Metthodology and application

1. Education in Public Health and Teaching Methods

Accumulated experience allows Assoc. Prof. Vankova to conceptually consider the evolutionary development of education in public health and propose the concept of "Public health human capacity building" in the scientific literature, which encompasses training across the spectrum of

professionals working in the field of public health. The innovative teaching model with original character [G8-23] finds application in many areas of higher education, as well as in secondary education in our country [G8-8; G8-23; T.Γ8-5]. It should also be noted that the mentioned developments have been presented at prestigious national and international scientific forums, published in open-access publications, highly evaluated, and cited multiple times.

2. Methodology of Scientific Research. Scientometrics and Open Access

Assoc. Prof. Dr. Desislava Vankova, Ph.D., is the author introducing mixed-method approaches as a term and as a real application in social medicine and public health in our country [A1; E13]. The application of sequential-explanatory mixed-methods design has been evaluated as an innovative approach in research related to public health and clinical medicine in our country [E13]. An important part of these studies can be assessed as Assoc. Prof. Vankova's concept that when used in combination, quantitative and qualitative methods complement each other and enable a more comprehensive analysis, which is the primary goal of all studies in the field of social medicine.

4. Citations

Dr. Vankova's total citations are 135, with the majority cited in non-refereed journals with scientific review - 78, followed by citations in peer-reviewed scientific journals indexed in world-renowned databases of scientific information, and in monographs and collective volumes - 42, with citations in monographs and collective volumes with scientific review being 15.

5. Participation in Scientific Projects

Dr. Vankova is the leader of 4 national scientific projects and 2 international projects, 5 of which have been completed. She participates in the teams of 4 national projects and 5 international projects, with her leadership noted in national scientific or educational projects - 4 in total, and leadership in international scientific or educational projects - 2. The projects are on current topics and represent a certain scientific and educational interest.

6. Teaching Activity

As an Associate Professor in the Department of Social Medicine and Health Care Organization, Faculty of Public Health, Medical University - Varna, Dr. Vankova leads lecture courses in social medicine, with emphasis on the respective specialty, for students of: medicine (English-language course); nursing, midwifery, speech therapists, physiotherapists, and optometrists, as well as for students of health management, health care administration, and others. She also conducts seminar exercises for students of medicine (Bulgarian and English-language courses), dental medicine

(Bulgarian and English-language courses, until 2019), pharmacy students, and pharmacy assistants - covering almost the entire spectrum of specialties taught by the Department. In the academic year 2023-2024, she participated in the innovative master's program Artificial Intelligence in Healthcare by developing the new course "Preventive Care, Health Promotion and Artificial Intelligence". It is worth noting her active involvement in the development of educational programs: "Social Medicine and Health Promotion" - for the specialty "Midwifery", Bachelor's Degree; "Social Medicine" - for the specialty "Nursing", Bachelor's Degree; "Eye Health Promotion" - for optometrists, Master's Degree, and others. Since 2019, she has been the chairperson of State Examination Boards in "Social Medicine and Health Promotion and Social and Health Legislation" for nurses and midwives at the Medical University of Varna - having conducted over 15 state exams as chairperson. She participates in state examination boards for the specialty "Medicine", as well as in the training of interns in the sixth year (until 2023). Dr. Vankova's teaching activity began in the academic year 2000-2001 and then resumed in 2015. Over the past 4 years, for which the official record of the lecturer's classroom workload is presented, the workload for the 4 years totals 1334 hours, or an average of 333 hours per year, compared to the normative workload of 180 hours, which is almost twice the normative requirements of the Medical University of Varna.

CONCLUSION

The educational and professional development and qualifications of Assoc. Prof. Desislava Ivanova Vankova, DSC, her achievements in scientific research, high publication activity, and exceptional engagement in teaching, and last but not least, her personal qualities, demonstrate that the candidate fully meets the requirements of the Regulations for the Development of Academic Staff at the Medical University of Varna, covering and significantly exceeding both national and additional criteria specified in the regulations.

The teaching activity is of an exceptionally high level - the delivered lectures, conducted exercises, successful supervision of specialists and doctoral students, active participation in the development of educational programs and specific teaching aids, reviewing of master's theses, involvement of students in joint publications, conducting state exams in the specialty, etc., demonstrate the academic stability of Assoc. Prof. Vankova and her full readiness to assume the academic position of "Professor".

The thematic scope of the publications as a whole is innovative and reflects the contemporary development of social medicine. Through active creativity, combining theoretical analyses and empirical research, the candidate has achieved an inspiring layering of entirely new topics, which are perceived as a natural development of scientific directions in the field of social medicine. Her scientific contributions (theoretical, practical-applied, educational, and methodological) are real and certainly contribute to the development of social medicine as a modern science with interdisciplinary participation.

The exceptional commitment of Assoc. Prof. Vankova in the developed scientific projects deserves high praise, demonstrating her high level of expertise, exceptional efficiency, broad competence, organizational skills, realized at national and international levels, her ability to work in interdisciplinary teams, and to achieve sustainable results.

This gives me full confidence to give my positive assessment and urge the members of the Scientific Jury to vote positively for the appointment of Assoc. Prof. Dr. Desislava Ivanova Vankova, DSc, to the academic position of "Professor" in the scientific specialty "Social Medicine and Health Care Organization and Pharmacy" for the needs of the Department of Social Medicine and Health Care Organization, Faculty of Public Health, at the Medical University of Varna.

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679

May 21, 2024

Prof. Tatiana Ivanova, MD, PhD

Sofia, Bulgaria