

# REVIEW

by Prof. Albena Kerekovska, MD, PhD

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**Member of the Scientific Jury pursuant to Order No P-109-303 from 07.08.2020  
of the Rector of Medical University of Varna**

**Re:** Competition for acquiring the academic position “**Associate Professor**” in the area of higher education 7. Health and Sports, professional field 7.4. Public Health; specialty “Public Health Management” for the needs of the Department of “Social Medicine and Healthcare Organisation” at the Faculty of Public Health, Medical University “Prof. Dr. P. Stoyanov” - Varna, promulgated in State Gazette 53/12.06.2020.

According to Order No P-109-303 /07.08.2020 of the Rector of the Medical University of Varna I was appointed as an internal member of the Scientific Jury and with the decision of its first meeting (Protokol 1 from 25.08.2020) I was designated to prepare a Review.

In the present competition there is only one candidate, **Chief Assistant-Professor Silvia Pavlova Nikolova, PhD**.

The candidate has submitted precisely all necessary documents for participation in the competition as required by the Act for the Development of the Academic Staff in the Republic of Bulgaria and the Rules for its application.

## **Career profile of the applicant**

Silvia Nikolova graduates Medical University of Varna and consecutively acquires “Bachelor” (2005) and “Master” (2006) degrees in Healthcare Management. During the period 2009 – 2013 the candidate is a full-time PhD student in the Department of Social Work at the Universidad Autonoma Nuevo Leon/ University of Texas at Arlington. In 2013 she successfully defends her PhD dissertation at the University of Texas at Arlington, USA on the topic “*Geography of Disability: An Analysis Based on the Socioeconomic Levels of Two Metropolitan Areas – Dallas, Texas and Monterrey, Nuevo Leon*”.

Since 2014 she is a full-time Assistant-Professor at the Department of Social Medicine and Healthcare Organisation, Faculty of Public Health, Medical University of Varna and since 2016, after recognition of her PhD degree and a competition, she acquires the academic degree “Chief Assistant-Professor” at the same department. Silvia Nikolova combines the academic work and position with active involvement in the Centre for E-learning and Distance Education, Medical University of Varna contributing to the intensive development of e-based education in the university.

In 2020 the candidate upgrades her professional qualification by gaining the specialty in „Medical Informatics and Healthcare Management”. She has an additional qualification in the area of Special Pedagogy (work with children with blindness and vision impairment). She has completed various

postgraduate courses, corresponding to the area of her professional position and interdisciplinary interests. These qualifications have additionally contributed to her professional development as very well prepared, engaged and innovative professional, expert, teacher and researcher. The main fields of her post-graduate training and qualification are in the areas of social activities, special pedagogy, biostatistics, health inequalities, medical informatics and healthcare management.

The candidate is actively involved in the international research project in the public health area “*Regional partnership for health and sustainable development*” within the Programme BG07 “Initiatives for Public Health” – in partnership with Ostfold Region, Norway (2018 – 2019).

Chief Assistant-Professor Nikolova is a member in national and international scientific, professional and nongovernmental organisations, such as The Bulgarian Healthcare Management Association; the Bulgarian Public Health Association; The NGO “Public Health -99” – Varna and the Council on Social Work Education.

She has received awards and honorary distinctions such as “Disability Manuscript Award” of the Commission for Diversity and Social and Economic Justice (2014), and a Fulbright Programme scholarship for the research project “*Prevalence and patterns of non-communicable disease-related disabilities in the US*” in the University of Illinois Chicago.

The candidate uses fluently English and Spanish languages in her professional activities and research work.

### **Scientific activity of the candidate**

The publications and references presented for the competition prove high quality and international recognition of the candidate’s scientific work.

Chief Assistant-Professor Nikolova applies for the competition with a scientific production that fulfills and exceeds the minimum scientometric requirements of the MUV for occupying the academic position of “Associate Professor”.

The scientific activity of the candidate is evaluated on the basis of real publications. The complete list of scientific works contains a total of 22 titles, reflecting the research work of the candidate during the period 2012 - 2020. They are grouped as follows:

- 1 monograph (habilitation work) - “*Geography of Disability: An Analysis Based on the Socioeconomic Levels of Two Metropolitan Areas – Dallas, Texas and Monterrey, Nuevo Leon*”.
- 1 chapter in collective book – in Spanish;
- 2 publications in Bulgarian and English – in collective monographs;
- 18 full-text publications in periodic scientific journals and edition collections:
  - ✓ 8 of which published in journal refereed and indexed in world databases of scientific information;
  - ✓ 10 of which published in refereed scientific journals not indexed in world databases of scientific information;

Seven of the publications are in Bulgarian language, and the rest 15 are published in foreign language – English and Spanish.

All full-text publications are correctly described and enclosed in full in electronic format to the competition materials.

Additionally, the candidate presents information for 32 participations in scientific forums, 24 of which abroad and 8 – national with international participation.

The personal contribution of the candidate to the scientific publications has been proved. She is the sole and first author of 6 of the submitted real publications (28%); second author - in 6 publications, third and subsequent author - in 10 publications.

The articles of the candidate are published in the following well-known international and Bulgarian journals: *AIDS and Behavior*; *Journal of Transcultural Nursing*; *Journal of HIV/AIDS and Social Services*; *International Journal of Adolescent Medicine and Health*; *International Journal of Biomedical and Advance Research*; *International Journal of Medical and Health Research*; *Metabolic Syndrome and Related Disorders*; *Folia Medica*; *The Journal of the Union of Scientists – Varna (Medicine and Ecology Section)*; *Practical Pediatrics and Varna Medical Forum*.

Silviya Nikolova's research and scientific contributions are in the field of the scientific specialty of the announced competition. They can be grouped in the following areas:

1. Inequalities among people with disabilities (scientific works 9, 11, 13, 15, 16, 17, 18, 21 and 22 in the list of publications);
2. Gender inequalities and HIV risk in sub-Saharan Africa (publications 1, 5 and 6 of the list);
3. Health promotion and health motivation of pupils and students (publications 2, 3, 7 and 10);
4. Varia (publications 4, 8, 12 and 14 of the submitted list).

The leading direction in the candidate's scientific research is related to the problems and **inequalities of people with disabilities** - analyzed for Bulgaria, as well as for the USA and Mexico. The monograph "*Metaaspects of Disabilities*" discusses the main aspects of the problems faced by people with disabilities. Emphasis is placed on the correlation of disabilities with poverty and the lack of indicators and measurements of disability in population poverty assessments. Guided by the *poverty-disability* relationship, the author tests different models that show a clear gradient and "hot spots" with a high concentration of people with disabilities in certain areas in Bulgaria. Insufficient research in the field, the lack of universal and standardized tools for determining the severity and extent of disability, as well as its fragmentary and incomplete coverage have been cited as the main reasons hindering the real coverage and effective solution of disability-related problems. Analyzing critically the possibilities and limitations of the medical and social model for measuring disability, the monograph examines standardized tools proposed by the Washington Expert Group on Disability Research Methodology. Considering disability as "limited / unachieved access to social inclusion", the author analyzes the main and most common barriers to the functioning of people with disabilities (social attitudes, communication, physical, political, social and transport barriers) and provides examples of each of them. In the extremely current context of inaccessibility, isolation and restrictions during the COVID 19 pandemic, examples of overcoming barriers through digital accessibility are given.

Research interest for the candidate is the development of social services for people with disabilities in our country, as well as the establishment of the first non-governmental organizations for people with disabilities in Varna and the region (16). The qualitative analysis of the society attitudes towards the people with disabilities during the last 30 years is original in its nature.

An original contribution is the critical analysis that the author makes of the first specialized care programme for people with disabilities in Mexico (22). The comparison of objectives with planned

activities and strategies draws conclusions about ineffective disability policies in Mexico. A similar analysis was made with regard to the resources provision in Varna and the need for specialized health care in the field to meet the health needs of the population (17). The analysis is important for the local politics and population of Varna.

The study assessing the nutritional status and development of children with neuropsychiatric disabilities in Bulgaria through biomarkers and anthropometric indicators according to the standards of the World Health Organization and the American Society for Parenteral and Enteral Nutrition has a genuine contributing character for the country (9,11,15, 18). The study found deficiencies of micro and macro-nutrients in children with neuropsychiatric disabilities. The oral status and its influence on eating difficulties in children with neuropsychiatric disabilities were studied. The quality of life of parents and caring children with neuropsychiatric disabilities was assessed.

The second thematic area focuses on current international issues related to **gender inequalities and HIV risk in sub-Saharan Africa**. The author examines the challenges facing women living in underdeveloped countries in the context of the Covid-19 pandemic, drawing a parallel with the HIV situation (1). The study is original in nature and is extremely relevant in the context of the existing global threat of SARS-CoV-2 worldwide. Female genital mutilation, a popular practice in a number of countries in sub-Saharan Africa, is another issue of international importance and a focus of candidate's research interest. She examines this practice in Sierra Leone, one of the countries with the highest levels of genital mutilation in women, analyzing the factors that determine this behavior (2).

The systematic review, which summarizes the factors that lead to increased health risk as a result of gender inequalities in sub-Saharan Africa, has also made an original contribution (6). Different interventions and their effectiveness related to the spread of HIV in sub-Saharan Africa are presented and compared. The analysis shows that long-term interventions based on sociological theories involving biochemical indicators (HIV test) are needed to build an effective design of health interventions aimed at reducing HIV risk among women in sub-Saharan Africa. The review article is the first systematic review involving men and highlighting their role in the success of health interventions targeting women at risk of HIV infection.

The third thematic area is focused on the **promotion of health and health motivation of students**. Various factors that influence the health behavior and motivation of pupils and students have been studied (2,3,7,10). The only study in Bulgaria that explores how Bulgarian folk dances can influence students' motivation and help building health behaviors aimed at preventing socially significant diseases such as obesity and depression is original. Three of the articles (2,3,10) reflect the results of a study of the influence of sports dance activity on changes in anthropometric and psychometric indicators.

Based on data from a large-scale national study, the Malawi Global School-based Health Survey (2009) examined the link between school bullying and alcohol and cigarette use among vulnerable children in Malawi (7). The analysis shows that factors such as loneliness and affiliation in a particular social group are mediators of school bullying among children from different socio-economic groups in Malawi.

The candidate's contribution to the last thematic area "**Varia**" is extremely methodological. Results of research projects aimed at significant, current and specific research problems in different clinical

areas are presented (publications 4, 8, 12, 14). In these studies, Silviya Nikolova participates as a methodologist - contributing to the design, methodology, data analysis and interpretation of the results. The variety of applied methods and statistical analysis are proof of her skills and competence in the field of research methodology and biostatistics.

This thematic area also reflects the interests and experience of Silviya Nikolova in the field of e-learning and distance learning methodology. The submitted publication (19) is one of the few in the country presenting a methodology for the work of teachers in an online environment. Three levels of preparation are discussed, which ensure effective knowledge transfer: familiarization with basic tools, content building and knowledge management of students through electronic testing and assessment.

I accept the scientific contributions indicated systematically in the candidate's reference. They are correctly defined, grouped by thematic areas and well-grounded in the submitted scientific papers. The scientific output of the Chief Assistant-Professor Nikolova is a reflection of her interdisciplinary background, multicultural experience, her erudition and dedication to her research pursuits.

As generalizing characteristics of the scientific works, I emphasize the topicality of the studies; sensitivity to research problems of global significance; belonging to international research and author teams; innovative ideas; precise execution and potential for practical applicability of results. The scientific contributions are original – with knowledge-based, methodological and practical application at the national and international level.

Evidence is presented for the high quality of the publications and their reflection on the Bulgarian scientific literature, The reference lists 35 positive citations in scientific journals, refereed and indexed in world-renowned databases of scientific information or in monographs and collective editions, which is indicative for the topical relevance of the scientific work and the recognition of the candidate by the international scientific community.

Doubtless confirmation of the international recognition and the quality of the scientific work of the Chief Assistant-Professor Nikolova is also the high Impact Factor of her scientific production - IF = 15,688.

The candidate takes an active part in many national and international forums and work groups in the scientific area of this competition.

An information is presented for the active participation in one international research project in the public health area “Regional partnership for health and sustainable development” within the Programme BG07 “Initiatives for Public Health” – in partnership with Ostfold Region, Norway (2018 – 2019).

Chief Assistant-Professor Silviya Nikolova is a scientific supervisor of one PhD student, who has successfully defended her dissertation in 2019. She has also been a scientific supervisor of two master degree students, successfully defending their theses in 2019 and 2020 respectively. She also works very actively with many other PHD students and young scientists, providing methodological support for their research work.

A prove of the recognition of the candidate's research achievements are the awarded prizes and honorary distinctions, such as “Disability Manuscript Award” of the Commission for Diversity and Social and Economic Justice (2014), and a Fulbright Programme scholarship for the research

project “*Prevalence and patterns of non-communicable disease-related disabilities in the US*” in the University of Illinois Chicago.

### **Educational and teaching activities of the candidate**

Chief Assistant-Professor Silviya Nikolova has 6 years teaching experience at the Department of Social Medicine and Healthcare Organisation, Faculty of Public Health, Medical University of Varna. Her teaching load is high (500 hours average annual load), and significantly exceeds the required standard for teaching work load.

The candidate's teaching and training activities are in the field of her interdisciplinary training and scientific interests. She teaches the disciplines “Social Medicine and Biostatistics” to students from the English language Programme of Medicine; “Social Medicine and Bioethics” in the English language programme of Dental Medicine and the discipline “Medico-social aspects of impairments” to students from the Bachelor programme of Logopedics. She has taken an active part in the establishment and development of this new discipline.

### **Expert activity**

As an expert at the International Centre for Electronic and Distance Learning at MUV Silviya Nikolova leads training courses and consultation to teachers and undergraduate, postgraduate and PhD students on functionalities and tools of the e-learning platform for training, research and administrative management. She directly supports the academic staff in creating the electronic content of the disciplines – development and didactics of the e-material, interactive tasks, tests, etc.

Silviya Nikolova works very actively with young researchers and PhD students supporting them methodologically with respect to the design of the scientific studies and the application of the statistical methods for data analysis and results interpretation.

The candidate is a consultant on the problems related to impairment and research on impairment and disability at the NGO “Karin Dom” – Varna.

### **Compliance with the requirements of the MU – Varna for obtaining the academic position “Associate Professor”**

The presented information reveals that Chief Assistant-Professor Silviya Nikolova covers and for most of the indicators exceeds the minimal requirements for occupying the academic position “Associate Professor” (Table 1).

*Table 1. Compliance with the requirements of the MU - Varna for obtaining the academic position “Associate Professor”*

<b>Group of indicators</b>	<b>Required number of points</b>	<b>Number of point based on presented evidence</b>
A	50	50
Б		
B	100	100
Г	200	249
Д	50	60
E		

## Personal impressions of the candidate

I know Silviya Nikolova as a student in the Bachelor and Master Programmes in Healthcare Management and later from our joint work as an Assistant-Professor at the Department of Social Medicine and Healthcare Organisation, Faculty of Public Health, Medical University of Varna.

My personal experiences characterize her as intelligent, hardworking, responsible, dedicated, sensitive, compassionate and good-natured person. I highly appreciate her exactness, correctness, ethical and responsible behavior.

She is a respected teacher and researcher with modern thinking, innovative ideas, high potential and working capacity, who consistently and purposefully pursues her research interests.

## Conclusion

The candidate fully complies with the requirements of the Law for the Development of the Academic Staff of the Republic of Bulgaria, the Regulations for its implementation and the Rules for the Development of the Academic Staff of the Medical University - Varna for occupying the academic position "Associate Professor".

Chief Assistant-Professor Nikolova has very good training experience. She presents topical and globally significant scientific production with innovative ideas, international recognition and potential for practical applicability. She has interdisciplinary background, interests and expert competence.

The overall assessment of the professional development, teaching and training activity, the intensive work with PhD students and young scientists, the scientific appearances and contribution, the credibility built up and the expert experience of the candidate give me the reason to present a positive assessment and convinced to suggest the members of the Scientific Jury to vote in favor Chief Assistant-Professor Silviya Nikolova, PhD **to take the academic position of "Associate Professor"** in the area of higher education 7. Health and Sports, professional field 7.4. Public Health; specialty "Public Health Management" for the needs of the Department of "Social Medicine and Healthcare Organisation" at the Faculty of Public Health, Medical University "Prof. Dr. P. Stoyanov" - Varna.

05. 10. 2020

Varna

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