

REVIEW

By Prof. Dr. Rumen Petrov Konstantinov, MD

Specialty "Epidemiology", Department of Hygiene and Epidemiology, Faculty of Public Health

Medical University "Prof. Dr. Paraskev Stoyanov" - Varna

Member of the Scientific Jury by Order № P-109-392 / 20.09.2021

of Prof. Dr. Valentin Ignatov, MD - Rector of the Medical University

"Prof. Dr. Paraskev Stoyanov" - Varna

Subject: Announced competition for the academic position of **Associate Professor** in the scientific specialty of "Epidemiology", professional field **7.1. Medicine**, field of higher education - **7. Healthcare and sports - one**, for the needs of the Educational Sector "Epidemiology", Department of "Hygiene and Epidemiology", Faculty of "Public Health", at the Medical University of Varna, announced in SG No. 61 / 23.07.2021

In this competition are submitted documents for participation by a single candidate - **Dr. Eliyana Panayotova Ivanova, MD.**

The candidate has submitted the documents required by the Law for the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of MU-Varna, meeting the necessary qualitative and quantitative criteria for holding the academic position of "Associate Professor".

I. Characteristics of the research and teaching activity of the candidate.

1. Brief biographical data and career development

Dr. Eliyana Panayotova Ivanova was born on February 24, 1966 in the city of Burgas. She graduated from the Mathematical High School "Acad. N. Obreshkov" in Burgas and medicine in 1992 at the Medical University of Varna. From 1994-1997 she worked as a resident doctor in the department "Occupational Hygiene" and "Epidemiological Department" of the Institute of Hygiene and Epidemiology – Burgas; from 1999-2008 Dr. Ivanova is a Chief Inspector of the " Surveillance of Communicable Diseases" Directorate, "Anti-Epidemic Control" Department in Regional Health Inspectorate - Varna (1999-2001). Head of "Nosocomial infections" unit, 2001-2004. Head of "Intestinal Infections" Unit. 2004-2006. Head of "Disinfection, Disinsection, Deratization" Unit 2006-2008. Head of the "Immunoprophylaxis" Unit from 2008-2013 - epidemiologist at the "Sanita" Varna Medical Center. Since September 2012 she has been a part-time assistant at the Department of "Infectious Diseases, Epidemiology and Tropical Medicine", Educational Sector of Epidemiology at the Medical University of Varna, and since February 2013, she has been selected as a full-time assistant at the same department, after a competition.

Dr. Ivanova acquired a specialty in "Epidemiology of Infectious Diseases" in 2006.

She specializes in MU Varna, MU Sofia and National Center for Infectious and Parasitic Diseases on the following issues: epidemiology of acute infectious diseases, nosocomial infections, viral hepatitis, immunizations in the Republic of Bulgaria, disinfection, disinsection and deratization anti-terrorism, history of medicine, training in the field of "Modern guidelines in the work of supervision and prevention of legionnaires" and "Prevention of viral hepatitis" National Center for Infectious and Parasitic Diseases - Sofia. In June 2017 she successfully defended a dissertation on the following topic: "Epidemiological effectiveness, organization and management of immunization work in the Varna region" and acquired Educational Scientific Degree "Doctor". Since March 2018, D-r Ivanova has been a Chief Assistant and since 2019 she has been an Administrative Chief Assistant at the Educational Sector of "Epidemiology", Department of "Hygiene and Epidemiology" at the Faculty of "Public Health" of the Medical University-Varna.

2. Presented materials for the competition

In the current competition for the academic position of **Associate Professor**, Dr. Eliyana Panayotova Ivanova participates with **17 scientific papers**, according to the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of MU – Varna

According to *scientometric indicators* presented for holding the academic position "**Associate Professor**" area 7 "Health and Sports" the distribution of scientific production covers the following sections:

A1. *Dissertation for the acquisition of educational and scientific degree "Doctor" Ivanova Eliyana "Epidemiological efficiency, organization and management of immunization work in Varna region"*

B3. *Habilitation thesis - monograph: Ivanova E. Epidemiological chronicles of the fight against infectious diseases in the Varna region*

(1878 - 1944), 2021, ISBN 978-619-221-336-7

G7. Publications and reports, published in scientific journals, referenced and indexed in world-famous databases with scientific information - 6;

G8. Publications and reports, published in non-refereed journals with scientific review or published in edited collective volumes - 6;

G9. Published chapter of a collective monograph - 1;

Full-text publications in scientific journals and collections outside the minimum scientometric requirements for acquiring the academic degree "Associate Professor" - 3;

Citation, reflecting the scientific activity of the candidate - 8. *(Academic reference for the publications, citations and scientific profiles of Dr. Eliyana Panayotova Ivanova, MD,*

Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University-Varna prepared in The Library of MU-Varna).

In conclusion, 17 scientific publications, subject to review and evaluation in this competition are presented after the competition for the academic position of "Chief Assistant" (2018). The provided information - documentary official scientific, educational and teaching, meets the necessary, according to the Law for the development of the academic staff in the Republic of Bulgaria and the Regulations for development of the academic staff of MU-Varna, qualitative and quantitative criteria for holding the academic position "Associate Professor" in Epidemiology of Infectious Diseases.

II. Evaluation of the candidate's scientific works for the overall academic development

1. General characteristics of the scientific and publishing activity

The scientific works of Dr. Eliyana Panayotova Ivanova have been published in authoritative and peer-reviewed scientific journals – *Journal of IMAB, International Journal of Current Microbiology and applied Sciences /IJCMAS/, Trakya University Journal of Natural Sciences, Folia Medica*, as well as in scientific publications published in renowned Bulgarian editions and edited collective volumes - *Notices of the Union of Scientists - Medicine and Ecology. Health Policy and Management. Varna Medical Forum.*

Heart-Lung - Proceedings of the First National Conference "Public Health - a Global Priority in Science and Practice". Proceedings of the Jubilee Scientific Conference with International Participation "New Approaches to Public Health and Health Policy"- Publishing Center of MU - Pleven, 2020. „Third International conference on zoology, zoonoses and epidemiology“, Plovdiv University Press, 2019.

Dr. Eliyana Panayotova Ivanova is the main and leading author in a significant part of the presented publications and reports. She actively participates in the implementation of a research project with valuable applied results. The scientific activity is expressed in numerous participations as an author and rapporteur at international and national scientific forums, where 34 scientific reports in the field of epidemiology of infectious diseases are presented.

2. Main thematic directions and contributions in the scientific works:

The presented monographic work *"Epidemiological Chronicles of the Fight against Infectious Diseases in the Varna Region from the Liberation to 09.09.1944"* is a systematic epidemiological research of the history of infectious diseases in the Varna region. An epidemiological characterization of the infectious diseases important for the public health and an analysis of the prophylactic and anti-epidemic actions have been performed. The pandemic history of the Varna region before the Liberation to 1944 is presented in chronological order: the creation and evolution of health and anti-epidemic legislation in Bulgaria; the opening and development of the Quarantine Service in the Varna region - a prototype of epidemiological surveillance and control system. In-depth historical- epidemiological studies and analyzes on rich archival and literature material on especially dangerous infections - Plague, Smallpox, Cholera, as well as epidemically relevant rabies, Tuberculosis, Measles, Diphtheria, Typhoid

and others are reflected. The author's long-term epidemiological experience is evident in the objective historical-epidemiological analysis of the infectious morbidity in the Varna region, combined with a critical assessment of the anti-epidemic insurance during the specific historical period. Epidemiological interpretation of historical data is successfully intertwined with current epidemiological knowledge. The conclusions and lessons for the current epidemiological condition of the region and the country are useful. Scientific and historical significance are the data on the formation and development of institutions for production and application of organic products for immunoprophylaxis: hospital and dispensary services in the prevention and treatment of current infectious diseases in the country and Varna region. The application of biographical data for health professionals and individuals with an impressive role in the fight against infectious diseases in Bulgaria and the Varna region leaves a pleasant impression.

Published chapter of a collective monograph Ivanova E. *Development of the bacteriological and anti-rabies station 1925-1950 150 years of Paraskeva Nikolau donation hospital 150 years in the service of health care in Varna*. Jubilee book, Medical University - Varna, 2019.84 – 95, is a scientifically substantiated analysis of historical - epidemiological character regarding the formation and activity of the Varna bacteriological and

anti-rabies station for the period 1925-1950. With its four departments - Anti-rabies, Serological, Bacteriological and Chemical, it is a pillar in the anti-epidemic case in the Varna region for the respective historical stage.

Immunoprophylaxis and epidemiology of vaccine-preventable Infections

Includes in-depth epidemiological research and analysis of changes in the organization and management of immunization work in the Republic of Bulgaria and in the Varna region during the various historical stages;

the epidemiological effectiveness of immunoprophylaxis and the influence on the dynamics of epidemic processes in vaccine-preventable infections Tuberculosis, Polio, Tetanus, Measles, Mumps, Rubella, Pertussis and Viral hepatitis type B in the Varna region for the period 2005-2015; epidemiological analysis of the immunization coverage of the population in the Varna region with mandatory immunizations and re-immunizations after the start of the health reform in 2000 to 2015 and factors influencing the level of immunization coverage ; adverse vaccine reactions; formed Structural model of the epidemiological effectiveness of immunoprophylaxis. The field is presented in a dissertation work, monograph and five articles.

Epidemiology of respiratory tract infections, intestinal infections, blood-borne infections, contractual infections and infections with multiple transmission mechanisms

The topics of the presented scientific field include epidemiological studies on the structure and dynamics of the spread of respiratory infections -

Diphtheria, Scarlet fever, Measles, Pertussis, and comparative epidemiological analysis of the incidence in the country :conducted a chronological analysis of the incidence of Tuberculosis

in the Varna region and the prophylactic and anti-epidemic actions in the fight against Tuberculosis; retrospective analysis of the Measles epidemic in the Varna region in 2009-2010 and the connection of the epidemic with the low level of immunization coverage of the subject contingents ;theoretical analysis of the available epidemiological information on the evolution and current aspects of Diphtheria infection in the Varna region. Bulgaria, Europe and the World in the conditions of mass active immunoprophylaxis with Diphtheria toxoid ;retrospective epidemiological study and analysis of the prevalence of Cholera, Typhoid fever, Enterocolitis and Dysentery in the Varna region from the beginning of the 20th century to 1944, as well as the role of mass immunoprophylaxis with typhoid vaccine led to sporadic spread; historical-epidemiological study of the spread of Plague and epidemiological surveillance on the territory of Varna region in the period before the Liberation; participation in an epidemiological analysis of Viral Hepatitis type B in the Varna region for the period 2005 - 2015 and the immunization coverage of the subject contingent. A significant decrease in the incidence of cohorts born after the introduction of mass immunization against Viral Hepatitis type B / 1991 / to zero, after 2011.; epidemiological analysis of the data from the monitoring of the risk of medical procedures with increased use of sharp and cutting objects and the transmission of some blood-borne infections in one of the Multidisciplinary Hospitals for Active Treatment in Varna; applied activity on the epidemiological control over the tick populations for the period 2002-2017 in Varna region features of the Tetanus Epidemic Process for the Period 2005-2015 in Varna District and the immunization scope of the population by age groups; retrospective study of the spread of the disease "street" or "urban" Rabies in Varna region and in Bulgaria until the early 50s of the 20th century ;participation in a team on a retrospective epidemiological research and analysis of the prevalence of Listeriosis in Bulgaria for the period 2009-2018.

Dr. Eliyana Ivanova is a major or active participant in the research process and analysis in the presented topic.

Health promotion and nutrition

A survey of eating habits relevant to bone health in women from the city of Varna is carried out; microbiological monitoring of coastal bathing waters in the Varna region was performed by the Regional Health Inspectorate - Varna from 2012 to 2016 and assessment of the quality of bathing waters along the Varna coast. It is proposed to improve the water supply and collection systems in the Varna region, which will have a positive effect on the quality of bathing water: theoretical analysis of the role of vitamin K for human health, based on the available literature.

Summary: scientific production covers various areas of epidemiology, hygiene and preventive medicine. It is a testament to the broad professional competence and scientific interests of the candidate, and the results obtained have a certain contribution to medical science.

3. Assessment of the candidate's teaching activity

Dr. Eliyana Panayotova Ivanova has 10 years of pedagogical experience in MU - Varna. The high and professional qualification in epidemiology, combined with extensive practical experience, allows the implementation of a quality educational process with students, interns and graduates from Faculty of Medicine, Faculty of Public Health, Faculty of Dental Medicine and specialties from the Medical College – Varna, with an average workload in recent years of 398 teaching hours at a standard – 360.

The range of subjects in the teaching palette of Dr. Eliyana Ivanova includes Medical students, Dental students, Public health inspectors, Nurses, Midwives, Medical Laboratory Technicians. Health Management, Health Care Management. Kinesitherapy: modules in the master's programs of Protection and Control of Public Health, Public Health and Health Management, Health Care Management, Elective course Tropical Medicine and Infection Control, postgraduate education in Epidemiology of Infectious Diseases and General Medicine.

Dr. Ivanova is an academic mentor in a project of the Ministry of Education and Science – “Student internships” phase 2, project BG05M20P001 – 2.013 - 001 for practical training of students in a real work environment.

Dr. Ivanova participates in all modules of postgraduate education

in the course "History of Medicine" from 2016 to 2019. She is also a lecturer on "Epidemics and epidemiological control in post-liberation Varna in 2019.

Dr. Ivanova is an erudite organizer and leader, skillfully applying modern methodology in teaching.

She participates in the compilation of new curricula and the updating of existing curricula and tests for students in medicine, dentistry, health management, protection and control of public health.

She is actively involved in all scientific, anniversary, creative and other events organized by MU - Varna and the Department of Hygiene and Epidemiology.

Dr. Ivanova is a member of the Bulgarian Medical Union, the Bulgarian Scientific Society for Epidemiology of Infectious and Non-Infectious Diseases, The Bulgarian Scientific Society of Public Health, The Bulgarian Association of Public Health and European Public Health Association /EUPHA/.

II. Critical notes

I have no critical remarks about the candidate.

III. Personal impressions

Our joint work in the Department of Hygiene and Epidemiology, gives me a reason to certify that Dr. Eliyana Panayotova Ivanova is an established lecturer, scientist and colleague with high professionalism, broad scientific interests, strong collegiality and organizational skills.

IV. Conclusion

Dr. Eliyana Panayotova Ivanova is a respected member of the academic community of the Medical University - Varna. She is an erudite specialist, experienced teacher and serious researcher with significant professional and pedagogical experience. The scientific, teaching and organizational work of Dr. Eliyana Panayotova Ivanova **fully meets** the requirements of the Law for the development of the academic staff in the Republic of Bulgaria and the Regulations for development of the academic staff of MU - Varna for academic promotion.

I support the candidacy of **Dr. Eliyana Panayotova Ivanova** for the academic position of **Associate Professor** in the Scientific specialty "Epidemiology" at the Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University – Varna.

I will vote "YES" as a member of the Scientific Jury.

Chairman of the Scientific Jury:

Prof. Dr. Rumen Konstantinov MD

09 November 2021