

REVIEW

**By Prof. Iskra Slavcheva Mircheva, PhD,
Member of the Scientific Jury in the procedure for obtaining the
Academic Position "Professor"**

By order No R-109-162/14.04.2022 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov", Varna, I was appointed as a member of the Scientific Jury in a procedure for obtaining an academic position "Professor" in the field of higher education 7. Health and Sports, professional field 7.1. Medicine, scientific specialty "Social Medicine and Healthcare and Pharmacy Organization" for the needs of the Department of Social Medicine and Healthcare Organization, Faculty of Public Health at the Medical University of Varna. The competition is announced in the State Gazette, No. 14 / 18.02.2022. At the first meeting of the Scientific Jury, I was appointed to make a review.

There is one candidate in the current competition: Dr. Klara Georgieva Dokova, MD, PhD, Associate Professor in the Department of Social Medicine and Healthcare Organization.

The candidate has submitted all the necessary documents for the competition as required by the Law for the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its implementation and the Rules for the Development of the Academic Staff of the MU-Varna.

1. Biographical data and career development

Assoc. Prof. Klara Dokova graduated from the Medical University of Varna in 1994, in the specialty "Medicine". In 1996-1997 she acquired a Master's degree in Public Health, at the Maastricht University, Netherlands. In 2009 she defended a dissertation on the topic "Awareness, treatment and control of blood pressure among the rural population. Barriers for control" and acquired an educational and scientific degree "Doctor". In 1999, she obtained a specialty "Social Medicine".

Assoc. Prof. Dokova has been in the Department of Social Medicine and Healthcare Organization since 1999, initially as a coordinator of a research project, and a PhD student (2000), and since 2001 as a member of the academic staff of the Department – Assistant Professor (2001 – 2005), Senior Assistant Prof. (2005 – 2010) and Chief Assistant Prof. (2010 - 2012). Since 2012 she holds an Academic position "Associate professor" in the scientific specialty "Social Medicine and Organization of Healthcare and Pharmacy".

In the period 2014 – 2018, Assoc. Prof. Dokova was a Vice Dean of the Faculty of Public Health at the Medical University – Varna, and in the period 2018 – 2020 – Dean of the Faculty of Public Health at the Medical University of Varna.

She is fluent in English and Russian.

2. General characteristics of the research and the applied scientific activity of the candidate

Assoc. Prof. Klara Dokova participates in the current competition with 47 scientific works, all except the dissertation work for the educational and scientific degree "Doctor", after acquiring the academic position "Associate Professor". Their distribution according to publication type, is as follows:

- Dissertation work for the educational and scientific degree "Doctor" - 1;
- Monograph (habilitation work) – 1;
- Textbooks – 1;

- Scientific publications in international journals – 15, of which:
 - a. 10 full-text articles in referenced in Web of Science and Scopus journals;
 - b. 2 full-text reports published in a referenced in the Web of Science and Scopus edition;
 - c. 3 reports published as a summary in the European Journal of Public Health, as in one of the publications Assoc. prof. Dokova is the first author;
- Scientific publications in Bulgarian editions – 29, of which:
 - a. 24 full-text articles, of which 2 as a standalone author and 2 as first author, in peer-reviewed Bulgarian periodicals;
 - b. 4 full-text reports from scientific forums published in collections with ISBN;
 - c. 1 chapter in a collective monograph (in English);

Assoc. prof. Dokova presents also 30 participations in scientific forums, including 12 international and 18 national.

The scientific works of Assoc. Prof. K. Dokova cover extensive scientific issues in the field of Social medicine and the organization of health care. The topic of the presented scientific works fully covers the subject area of the competition.

I accept the presented by the candidate reference on the scientific contributions, which are focused in the following thematic areas:

- *Assessment of public health and health inequalities through indicators of morbidity, mortality and burden of disease*

A total of 22 publications are presented in this area, including the dissertation work for the Educational and scientific degree “Doctor” and the monograph on the topic "Studies on a global burden of diseases. Burden of Diseases in Bulgaria 1990 – 2019”, as well as 20 other publications. The studies presented in this area are the most numerous and can be further divided into three areas (1) study of regional health inequalities; (2) disease registers and epidemiological assessment based on the information collected in the registers and (3) studies of morbidity, mortality and burden of diseases.

I highly appreciate the presented monographic work of Assoc. prof. K. Dokova. Its greatest scientific contributions, in addition to presenting the objectives, principles and milestones of the Global Burden of Disease Study, a study in which Assoc. Dokova is involved, is the presentation of the main terminology in this field, the in-depth, professionally sound complex assessment of the burden of disease in Bulgaria for the period 1990-2019, the role of the main risk factors for the health of the Bulgarian population, the comparative analysis of the disease burden in the countries of the European Union and Bulgaria, as well as the proposed priorities for the health policy in Bulgaria. Discussion of the methodological features in the GBD study points to the assumption that the likely health losses in Bulgaria are even greater than those presented.

The richness of the terminological apparatus can also be pointed out. We are meeting with a master of the interpretation and use of terms. The presented monographic work of Assoc. Prof. K. Dokova is characterized by topicality, thoroughness and comprehensive consideration of the problem. The balance between the necessary theoretical knowledge and the adequate practical guidelines presented in the monograph make it useful both for a wide range of medical and non-medical professionals, as well as for all those who have an interest in this field. Last but not least, considering that so far in Bulgaria, in addition to the standard brief reviews published by IHME, there has been no thorough and complex study of the burden of disease, the presented scientific work is extremely topical and valuable, which is undoubtedly a

contribution to the scientific and medical knowledge. The participation of Assoc. Prof Dokova as a collaborator from Bulgaria in the GBD Study is very important.

Among the contributions of the other publications in this area I can indicate:

- A historical review of the development of the total indicators for public health assessment has been carried out;
- Health losses related to hypertensive heart disease as an important cause of the disease burden from the CVD group for the period 1990 – 2019 have been assessed;
- The disease burden of strokes and their three main pathological subtypes at the global and regional level, as well as the contribution of the disease burden of strokes to the health inequalities between Western and Central/Eastern Europe was performed;
- The international experience of creating registers for chronic diseases has been studied – namely diabetes, diabetic retinopathy and strokes;
- Own results of newly developed regional registers of diabetic retinopathy and stroke are presented;
- A protocol has been developed to determine the scope of the available scientific literature describing the nutritional transition due to a change in the diet of the adult population around the world;
- It should be emphasized that a significant part of the scientific production in this direction demonstrates the professionalism of Assoc. Prof Dokova also in the field of epidemiology and medical statistics, a contribution that I would add to the presented report on the contributions.

- *Prevention and health promotion.*

This area includes 10 publications, which also have important contribution:

- A critical analysis of the emergence and opportunities for practical realization of the concept of health promotion by applying the principles in the so-called “health promotion places” (cities, schools, universities, etc.) has been made;
- The process of development of the global network of universities for health promotion has been studied. The whole university approach, successfully applied in the British Network of Health Universities is presented;
- Basic socio-psychological models applied for the study and impact on health-related behavior have been studied;
- Modern trends and alternative approaches to providing early childhood care and social change leading to radical changes in the care of people with disabilities have been analyzed.

- *Medical Sociology.*

There are 6 publications in this area. The textbook on "Medical Sociology" has an indisputable contribution, suitable for the medical sociology classes of students of all health related specialties. Included are topics that cover the necessary minimum of knowledge for the discipline: (1) application of classic sociological theories in the analysis of health and disease related behavior, and its relationship with social structure and context; (2) classic attention to social inequalities in health and disease; (3) Attention is paid also to the individual experiences of people with chronic diseases, mechanisms for adapting to life with the disease; the topic of stigma and disease; (4) the sociological view on the development of the medical profession and the medical dominance and autonomy, the process of medicalization of life. The presented textbook is the first in this field for MU - Varna, but for the first time in Bulgarian educational material the application of basic sociological theories is presented for analysis of problems in the field of medicine and health care.

Other publications in this field also have important contribution. They examine issues of social status, lifestyle, professional satisfaction and development of various health professionals (doctors and nurses working in hospital; rehabilitators) and attitudes towards disease prevention of women with oncological diseases. The publications are academically sound, and the results are based on adequate statistical analysis.

- *Training of public health professionals.*

The 6 publications included in this area analyze the developments of public health training in Bachelor's degree and the opportunities for its implementation in Bulgaria. It is known that this is a problem that higher medical schools in the country solve according to their capabilities, offering 6 (professional bachelor) and 8 (Bachelor) semester training under different names of the specialty, regardless of the existing unified national requirements for the specialty of Public Health Inspector, the "Professional Bachelor" a class, which in the general case is accepted for public health training. A comparative analysis of the content of the Bachelor Public health training in the specialties offered by the different universities in Bulgaria has been made and some shortcomings of the training in these specialties have been highlighted, namely that the programs under consideration provide some of the competencies needed by the public health professional, with a focus on the skills to control environmental factors, but to a significantly lesser extent they build knowledge for public health research, for project and programme development and health management.

There is also an analysis of the compliance of the training in the specialty "Assistant Pharmacist" with the European recommendations on the competences of the specialists in this profession.

The scientific publications of Assoc. Prof. Dokova are highly rated, recognizable and repeatedly cited in foreign sources. According to the presented Academic Report, the publications of Assoc. prof. Dokova have 16 citations in foreign sources. It should be noted that this is the required number of citations covering the minimum requirements for obtaining the academic position of "Professor". The real citations of the scientific works of Assoc. Prof. Dokova in foreign sources, according to Web of Science and Scopus, are over 15,000. The total number of citations, including sources, outside Web of Science and Scopus, is over 30,000 (Google Scholar). There are no citations in Bulgarian sources, which does not change the importance of the scientific production of the candidate.

The presented Academic Report also reflects the impact factor of the journals in which the candidate in this competition has publications. There are 31 publications in scientific journals with a common impact factor 1307,034. It should be noted that 22 of the publications are related to the large-scale project "Global burden of diseases", in which Assoc. Prof. Dokova actively participated, were published in journals (mainly in Lancet), with a total impact factor of 1282,247. The remaining nine were published in scientific journals with a total impact factor of 24,787.

The above indicators eloquently support the outstanding contribution of Assoc. Prof. Dokova to increase the international prestige of the scientific activity not only of MU – Varna, but also of our country. For this, in 2020, she received the Pitagor Award of the Ministry of Education and Science for the Eclusive Contribution of Bulgarian Scientists and Scientific Collectives to the Development of Science in the period 2017-2019 in the category for a woman with a contribution to science.

To the publication activity of Assoc. Prof. Dokova should also be added her participation with reports in international and national scientific forums. Assoc. Prof. Dokova participated in 12 international scientific conferences and congresses – in France, Norway, South Korea, Belgium, the Netherlands, Finland, Great Britain, Italy, Bulgaria (International).

In national scientific forums Assoc. Prof. Dokova presents 18 reports. Between the main problems presented in the reports of Assoc. Dokova are: management of care for patients with chronic diseases, mortality and regional health inequalities, aging of the population and care for the elderly, health promotion, stroke registers of, electronic register of strokes in Varna, epidemiology and sociology of disabilities, etc. The participations in scientific forums successfully complement the main directions and scientific interests of the candidate.

The quantitative characteristics of the scientific publications of Assoc. prof. Dokova, including the number of citations and the impact factor, reveal that they significantly exceed the requirements for obtaining the academic position "Professor".

The qualitative characteristic of these publications show that they are at an extremely high level, dedicated to current problems in the field of public health, epidemiology, sociology, health inequalities, the specific requirements of training in the field of public health and the application of statistical methods in the field of clinical medicine and research. They are dedicated to principled situations, some of which are posed as a problem and proposed for a solution for the first time in Bulgaria, long before they are placed as a requirement by international and national institutions.

The proposals are up-to-date and still have an innovative character and should be highly appreciated. The publications are accurately developed, with appropriate design, well-organized data and appropriate conclusions and suggestions. The participation in scientific forums successfully complements these topics and illustrates the preferences of the candidate for them.

3. Assessment of the educational - teaching activities

Assoc. Prof. Dokova has a significant teaching workload. Her average annual workload is about 530 hours (standard workload being 180 hours) lectures and seminar exercises, except for the two years (2018/19; 2019/2020), when as Dean of the FZF its average annual workload is about 290 hours (standard workload being 90 hours). She leads a full course of lectures in 12 disciplines, including: Social medicine, Biostatistics, Introduction to Epidemiology, Applied Epidemiology and Health Promotion, Medical Sociology, Health and Disease Sociology, Medical and Social Aspects of Disabilities, Indicators and Public Health Assessment, Introduction to Public Health, Medical Psychology and Sociology with students from various specialties: Medicine, Dentistry, Health Care Management (Master and Bachelor), Public Health Protection and Control, Logopedia, Health and Healthcare Information Technologies in Health and Nursing Care. She has also participated in the training in the Master's program in Public Health (English-language training), in Casa College, Nicosia, Cyprus. She leads a course in Research Design and Statistical Analysis for post graduate education. Assoc. Prof. Dokova is also actively participating in the development and update of curricula and programs.

Assoc. Prof. Dokova actively participates in the Committees for State Exams and thesis defense of Graduates from the specialties: "Health Management"; "Health Care Protection and Control" – in Bulgarian and English. Under her supervision, 18 students have developed and successfully defended a thesis to acquire the Master's degree.

Under the supervision of Assoc. Dokova five PhD students have developed and successfully defended the dissertations for the acquisition of their Doctor's degree.

The candidate has a significant participation in other scientific events: reviewer of thesis of students from the master's programs "Health Management", "Health Care Management" and "Health Care Protection and Control". She has participated as a member of

a scientific jury in competitions for the educational and scientific degree “Doctor” and academic positions “Associate Professor” and “Professor”.

In general, more than the 20-years teaching activity of Assoc. Prof. Dokova can be highly assessed – covering the whole spectrum of Social medicine and Public Health, incl. epidemiology, health promotion, medical sociology, biostatistics. She teaches in all specialties incl. of the English-language students, participatec in the state examination committees, in the development and update of curricula and programs of various specialties at the Faculties of Public Health, Medicine and Dental Medicine of the Medical University – Varna. Her successes in the management of graduates and PhD students have been proven.

4. Participation in scientific projects and other activities

I highly appreciate the project work of Assoc. Prof. Dokova. She is actively involved in a number of research projects, and in one international and two national projects is a leader: (1) “Children’s mortality in Bulgaria – a source of new approaches to optimizing children’s healthcare”, 20.12.2021 – 20.12.2024, Medical University “Prof. Dr. Paraskev Stoyanov” – Varna; (national project); (2) "Training and professional realization of Bachelors in Public Health", 19.12.2019 – 19.12.2022; Medical University "Prof. Dr. Paraskev Stoyanov" – Varna (national project); (3) Empowering service users through support and involvement (ESSI) “Erasmus Intensive Programme; Empowered to the users of services, through support and inclusion in the management of chronic diseases, 01.09.2013 – 31.08.2014; Medical University “Prof. Dr. Paraskev Stoyanov" - Varna (Head of the Bulgarian team in an international project).

In six other projects, four international and two national: (1) COST Action CA18218 European Burden of Disease Network, Member of the Management Comittee; 2020 – 2022 (international project); (2) Global Burden of disease and Geospatial Analysis of Antimicrobial resistance (GRAM Project), IHME, University of Washington and The University of Oxford, UK -2021; (International Project); (3) NuTransAge of Mediuamation of Antimicrobial Resistance (GRAM Project), IHME, University of Washington and the University of Oxford, UK -2021; (InternationalWR).It's anvil's a. 01DS19002) 2018 -2020 (international project), (4) “Regional Partnership for Health and Sustainable Development”, BG07 “Initiatives for public health” 2017 (international project); (5) Electronic register of stroke, diabetes and diabetic retinopathy for the study of the epidemiology of diseases and the effectiveness of their management 19.12.2019 ..06.2012.2022; Medical University "Prof. Dr. Paraskev Stoyanov" - Varna (national project), (6) BG05M20P001-2.016-0025 „Creating a multidisciplinary educational environment for the development of personnel with integral competences in the field of biomedicine and health", 21.07.2021 – 31.12.2023; Medical University "Prof. Dr. Paraskev Stoyanov" - Varna (national project), Assoc. Prof. Dokova is actively involved as a researcher.

Assoc. Prof. Dokova is a member of many scientific organizations in Bulgaria and abroad: European Association of Public Health (EUPHA), the International Association of Epidemiology, the European Stroke Organization, the Bulgarian Public Health Association, the Bulgarian Scientific Society of Public Health (NDGO), the Union of Scientists in Bulgaria, the Bulgarian Medical Association. She is a member of the Faculty council, and of 2 Program councils at MU - Varna.

She is a contributor to the Global Burden of Disease Study and the for the WHO Regions for Health Network – Focal Point for Varna region. She is a member of the

Management Board of the NGO “Public Health – 99”, Varna. She participates in the editorial boards of the journals “Social Medicine” and “Scripta Scientifica Salutis Publicae”.

It's also worth noting her experience as Vice Dean and Dean on the FPH . As such, she contributed significantly to the development of the Faculty of Public Health at MU - Varna.

CONCLUSION

The scientific works, the documents and reports presented by Assoc. Prof. Klara Georgieva Dokova, MD, PhD, reveal that she significantly exceeds the recommended criteria and the scientific requirements of the Law for the development of the academic staff in the Republic of Bulgaria and the Rules for the Development of the Academic Staff at the Medical University of Varna for obtaining the academic position "Professor" in a quantitative and qualitative aspect.

The dissertation work, the topics that are included in the monographic work and textbook, publications in scientific journal and the reports presented at scientific forums fully correspond to the topic of the announced competition. The quantitative characteristics of the scientific publications of Assoc. Dokova, including the number of citations and the impact factor, is such that they significantly exceed the requirements for obtaining the academic position "Professor". The quality characteristic of the presented works is of very high level. Significant contributions and innovative ideas make it possible to give a very high comprehensive assessment of the scientific works presented under this competition.

The training workload, the teaching activity, the project activity and the duration of the position of the position “Assoc. Professor” also meet the criteria.

I have personally known the candidate Klara Dokova from her admission into the Department of Social Medicine and Health Organization and I have witnessed her growth as a colleague, lecturer and scientist. With absolute conviction, I can express my high appreciation of her personal qualities – modest, extremely intelligent, dedicated to her work and colleagues, organized, focused, modern-minded and constantly searching for new scientific challenges.

Based on the comprehensive review of the presented scientific works, their importance, the scientific and applied contributions contained in them, the academic, project and overall activity and taking into account the existence of full compliance with the scientific and other indicators with the requirements of the Law for the development of the academic staff and the Rules for the Development of the Academic Staff at the MU Varna for obtaining of the academic position “Professor”, I find it reasonable to vote positively and I can confidently propose to the members of the respected Scientific Jury to vote positively for Assoc. Prof. Klara Georgieva Dokova, MD, PhD to take up the academic position “Professor” in the field of higher education 7. Health and sports, professional field 7.1. Medicine, scientific specialty "Social Medicine and Organization of Healthcare and Pharmacy", Department of Social Medicine and Health Organization, Faculty of Public Health at the Medical University "Prof. Dr. Paraskev Stoyanov – Varna.

30.05.2022
Varna

Reviewer:



/ Prof. Iskra Mincheva, PhD /