SCIENTIFIC REVIEW

BY

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Member of the scientific jury for AT "professor" (published in SG, ed. 17/.26.04.2021), approved with order N_0 P-109-203/26.04.2021 by the Rector, in the higher education area 7. "Healthcare and sport", professional direction 7.1. "Medicine", "Pharmacology and pharmacotherapy (drug policy) major – one, 0,25 post capacity for the needs of department "Pharmacology, toxicology and pharmacotherapy", "Pharmacy" faculty, MU – Varna.

(additional requirements for the competition: to not apply the requirement of a. 137, a. 1, p. 6 from the Rules of procedure for the development of the academic staff in Medical University "Prof. Dr. Paraskev Stoyanov" – Varna, and the sum of points for the indicators from p. 13 to p. 22 for area 7. Healthcare and sport to be one hundred, without applying the requirement for more than 80 points to be from indicator 14)

There is a single candidate in the competition – assoc. prof. Dr. Albena Zlatareva MD, PhD

Biographical data and career development/profile

Since May 2016 the candidate has acquired scientific title "associate professor" of "Clinical pharmacology and therapy" from MU – Varna.

I know assoc. prof. Zlatareva as an exceptionally active in the area of the national drug policy, as well as in the scientific-research and teaching activity.

experience

Assoc. prof. Dr. Albena Zlatareva also has over 10-year teaching experience in medical universities in the area of anaesthetics and reanimation, including pharmacotherapy, as well as drug policy and pharmaco-economy.

From 01.04.1993 to 30.11.1995 she is an assistant, Department of Anaesthetics, Reanimation and Intensive Therapy, MU – Plovdiv. During the period 2014-2016 she is a honorary teacher on Drug Policy, Faculty of Public Health, MU – Varna and the Masters program for Public healthcare and health management, part time education, with teaching Russian language under optional discipline "Comparative analysis of health systems".

Since 2016 until now the candidate work as an associate professor for MU – Varna. Assoc. prof. A. Zlatareva is scientific officer for 3 graduate students and 3 successful PhD candidates. I have very positive personal impressions from the high quality of one of the doctoral works, which I was a reviewer of from doctor.

The relatively wide and on first glance non-standard, but adequate to the needs of our time specter of teaching, scientific (described below) and socially-expert activities give assoc. prof. Zlatareva the opportunity to develop and propose for approval a new non-clinical major on drug policy and market access of the drugs. Taking note on the importance of the issue she organizes and manages a course on the topic, aiming to prepare qualified specialists in that area. Assoc. prof. Dr. A. Zlatareva is an editor and author of a **learning tool** on market access of drugs, published by MU Varna. The studies done by Assoc. prof. Zlatareva with doctoral candidates are prerequisites for implementation of very well substantiated digital education in the area of drug policy.

Regardless of the candidate refers this proposal only towards her scientific-research contributions, I consider that its educational implementation is very advanced and the COVID 19 situation only confirms the complex beneficial activities by assoc. prof. A.Zlatareva in maintaining the most up to date level of teaching in MU. As will be discussed during the analysis of her scientific-research activities, her fast transition of scientific researches in the practice and conclusions from the practice for optimization of the organization and regulation of healthcare are paramount.

Assoc. prof. Zlatareva is an elected member of scientific jury and reviewer for approved recognition in area 7,7.1 – pharmacology with drug regulation and others.

SCIENTIFIC-RESEARCH ACTIVITIES AND SCIENCE-METRIC INDICATORS

Assoc. prof. Dr. Albena Zlatareva, MD, has extensive publishing activity. She is an author of 2 monographies, 1 book (bilingual), education tool (digital edition), over 54 articles, as well as summaries and posters for scientific events in the area of the drug policy, health and pharmaceutical management.

The presented by assoc. prof. Dr. Albena Zlatareva, MD scientific works are of theoretical, applicational and confirmatory nature. The candidate attends the competition with a total of 58 scientific works as follows:

- Monography on: Basics and tendencies of the drug policy in the European Union, which is presented as a main approved recognition work 216 pages.
- Observe 15 publications in indexed journals, in world renowned databases with scientific information (Scopus and Web of Science) according to the transcript of academic records for minimum requirements, 6 publications in indexed journals, in world renowned databases with scientific information (Scopus and Web of Science) after the acquiring of academic title "associate professor" and 9 publications in indexed journals in world renowned databases with scientific information (Scopus and Web of Science) before candidacy for academic title "associate professor".
- [®] 35 publications in unreferenced journals with scientific review or published in revised collective tomes, 22, presented with the candidacy for occupation of academic title "professor" and 13 before candidacy for academic title "associate professor";

The articles, with which the candidate participates in the competition, are printed in different journals and collections in the pharmacology area, rare diseases and others.

In 41 of the presented articles assoc. prof. Dr. Albena Zlatareva, MD, is first or sole author, and in the other 13 is second or consecutive author. During the self-assessment the candidate has separated the corresponding points for each submitted scientific work, in proportional to the number of co-authors, as the points of the candidate according to groups of indicators, as I approve, are as follows: indicator A - 50p, indicator C - 100p, indicator D - 550p.

Assoc. prof. Dr. Albena Zlatareva is head of series scientific and social-medical projects, concerning mainly improvement of vaccine-prophilaxis programs, the national cancer register, optimization of the reimbursement systems, such as "Western Balkans: coalition for health", "Patient Engagement and Patient Power" and "School for Patients" – projects, aimed at increasing the role of the patient organizations; Listen, learn, Lead: project, aimed at better team work and development of policies for better local environment in the area of oncology and vaccines; Lung cancer treatment rate – international project, aimed at improvement of the treatment for patients with oncological diseases, targeted at lung cancer and series of national projects, concerning Cervical cancer, organization of vaccines campaigns including COVID-19.

The candidate is a scientific referee in several international scientific journals: Balkan Medical Journal – 2015; International Journal of Educational Policy Research and Review, 2021 and Value in Health, 2021.

My complex evaluation for the submitted monography, publication in scientific projects is very positive. The presented works can be summarized in the following main directions:

1. The Monography "Basics and tendencies of the drug policy in the European Union" touches upon different aspects of the drug policy in the European Union in their wide scope and depth, place the focus on the specific features for the Bulgarian health system

2. Digital education in the drug polcy area-

3 publications in international journals, two of which are referenced in international databases. The publications are defined practical science contributions. The need of establishing and development of digital forms of continuing education for medical specialists in the drug policy area is demonstrated.

3. Drug policy and drug regulation

This direction is laid down in all publications. Under consideration is the national drug policy, tasks in front of the regulatory and pharmaceutical industry, legislation in the drug sector, benefits for the society as a whole.

<u>Focus on vaccines policy</u>: 3 articles and participation in projects, regarding the vaccines – contributes for aiding the process of implementation of the European recommendations on local level, which will lead to improvement of the access to health services, relocating of the health budget via achieving direct and indirect health benefits.

Focus on oncological drug policy: participation in projects and scientific publications, concerning the fight with the oncological diseases for aiding the improvement of the local oncological environment aimed at the implementation of good European practices, attracting a wide area of stakeholders, that make decisions, leading to improvement of the access to screening, diagnostics and treatment of the oncology patients.

4. Good and innovative medical practices

8 publications are devoted to this topic. 6 of them in journals with scientific review and 2 in Bulgarian referenced and indexed in a Scopus edition. Under consideration are issue, concerning the rosacea and its non-pharmacological treatment. Other issues in the aesthetical surgery and pain relieving in similar therapies area. The patients' desire for less invasive procedures with shorter recovery period is turning into a permanent impulse for innovations in the aesthetical surgery.

5. Legislation in the drug sector

In 5 scientific publications in journals and in 7 in Bulgarian scientific journals there is an analysis of the legislation, including in historical aspect, not only in Bulgaria, but also in most European countries, as well as the impact of these legislation pieces on the drug sector, the individual patients and the society as a whole. These publications, other than theoretical, also have practical contribution, showing the experience of different countries, as well as the benefits and disincentives of the application of specific legislation pieces.

6. Pharmaco-economic and financial aspects of the drug therapy

In 10 publications in Bulgarian and international scientific journals the expenditures for pharmaco-therapy for a variety of diseases, including the most resource-intensive, are under analysis, also under consideration are expenditures, made by the public health funds in Bulgarian and other European countries. Conclusion are drawn, not only with theoretical, but also with practical contribution for the rational management of the expenditures for drug therapy.

7. Drug usage

The drug usage on macro and micro-level for the entire drug marked and for specific therapeutic classes and diagnoses are under consideration. The main direction is in the rare diseases area and their pharmaco-treatment, the laid down principle in the dissertation work and in 4 publications in Bulgarian journals and in 4 international ones.

In 5 publications in domestic and international journals the pharmaco-therapy is under consideration, as well as vaccine-prophilaxis of the oncological diseases. It is pointed out which diagnoses are

most resource intensive, as well as the impact of the implementation of new therapies in the oncological treatment for the morbidity and the expenditures of the Public funds.

In 6 publications in Bulgarian and international journals under consideration are the therapies for specific diagnoses (SSZ, schizophrenia, arthritis, BK, UK, beta-thalassemia, psoriasis) with big impact not only on the individual patient, but on the society as a whole, which defines the practical contribution of these works.

8. Clinical trials with focus on etical aspects

In 2 publications, one of which is in a journals with impact-factor, under consideration are the motives, benefits and risks from conducting clinical trials on all level of participants in this process. These works have important contribution, because there is a serious focus on the ethical aspects in clinical trials.

Quatations of the presented for recension publications

The candidate covers the legislation requirement for quotation of the scientific works (110 p. according the Academic review), as she has submitted an additional list with quoted publications (120 p. in accordance with the Academic review), which undoubtedly showcases the international recognition of the scientific production of the candidate.

EXPERT and PUBLIC ACTIVITY

To avoid recurrences, I would point out that assoc. prof. Zlatareva has over 17 years of experience in pharmaceutical companies in the drug policy area, drug regulation and market access. She was consecutively an associate of member of parliament in the Healthcare Commission of the national assembly during the period 2005-2009 (refer to the autobiography) with accumulated practical experience and knowledge for development and implementation of the legislation in the drug sector in the country; deputy-director on drug policy and control in the NHIF during the period 2009-2010; member of the Commission for the Positive Drug List during the same period; member of the accreditation council of the MoH in 2009-2010; methodical head, member and responsible for the implementation of work groups for legislation amendments in the drug sector during the period 2009-2010; advisor under the Program for prevention and control of HIV/SPIN in 2012 in the area of drug policy and application of good practices for improvement of the access to diagnostics and treatment among the affected communities.

Her membership in organizations with significant public impact, such as ArPharm, Ceib, Am-Cham, contributes for faster implementation of European drug policy in the Republic of Bulgaria, such as a project for National Cancer Plan in Bulgaria, campaign for enhancing vaccines confidence and others.

My complex assessment of the submitted works and expert-public activities of assoc. prof. Albena Zlatareva is positive. As seen in the detailed statement she has wide and high level teaching activities, including scientific guidance for students, specializing students and doctoral students.

She manages and attends a variety of national and international projects. Their publications and quotations meet the requirements for academic title Professor.

I have no critical notes for the candidate. My recommendation is to continue her publishing activities in the areas, in which she is already eminent, because given the dynamically changing legislation and the increasing number of rare disease, oncological drugs and vaccines, this type of analysis and researches are exceptionally valuable for the decision makers in healthcare.

Overall assessment of the candidate's accordance regarding the mandatory requirements and mandatory quantitive criteria and science-metric indicators, regarding the Regulation for occupation of academic titles in Medical University – Varna

Area of higher education area 7. "Healthcare and sport", professional direction 7.1. "Medicine", "Pharmacology and pharmacotherapy (drug policy)" for the needs of the department of "Pharmacology, toxicology and pharmaco-therapy", "Pharmacy" faculty, MU Varna

Table 1. Minimum required points for groups of indicators for the different scientific degrees and academic titles

Group of indicators	Content	Professor	Assoc. prof. Dr. Albena Zlatareva, MD
A	Indicator 1	50	50
В	Indicator 2		[[] [[] [[] [[] [[] [[] [[] [[] [[] [[]
C	Indicators 3 or 4	100	100
D	Sum of indicators 5 to 9	200	550: 230 (in the main list) + 320 (in the additional list),
Е	Sum of indicators 10 to 12	100	230
F	Sum of indicators 13 to last	100	341.43

Conclusion

Assoc. prof. Dr. Albena Zlatareva **meets** the mandatory and specific requirements in science-metric criteria, pointed out in the Law for Development of the academic staff in the Republic of Bulgaria and the Rules of procedure of Medical University – Varna, for the occupation of academic title "professor" and exceeds them.

The presented by the candidate materials for the competition show that assoc. prof. Dr. Albena Zlatareva MD, fully meets the requirements for occupation of academic title "Professor", according to the Law for Development of the academic staff in the Republic of Bulgaria, the Rules of procedure for its implementation and the Rules of procedure of MU – Varna. The presented scientific works and evidences for the scientific activities meet the quantity and quality criteria and have significant contribution. The same show years long devotion to science and issues in the areas, in which the candidate has publishing activities.

There are presented documents, verifying that the candidate is a proven specialist from the practice and a variety of scientific and practical achievements. Based on my personal impressions I can definitively declare that the candidate possesses the required qualifications for pedagogic and methodical competency.

Given the abovementioned I give my positive evaluation for assoc. prof. Dr. Albena Zlatareva, MD for the competition and propose to the honorable members of the Scientific jury to vote for assoc. prof. Dr. Albena Zlatareva, MD to occupy the academic title "Professor" in the area of higher education 7. "Healthcare and sport", professional direction 7.1. "Medicine", "Pharmacology and pharmacotherapy (**Drug Policy**)".

Scientific referee: Prof.Dr. Mila Vlaskovska MD, PhD,DSc Corresponding Member of BAS

Sofia, 20.05.2021