



## OPINION

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Member of the Scientific Jury, appointed by Order No. R-2158/24.06.2024 by the Vice-Rector of Science and research activities at MU-Plovdiv in connection with the procedure for occupying the academic position of "Associate Professor" in the field of 7.3. Pharmacy, in the scientific specialty, for the needs of MU-Plovdiv, Faculty of Public Health, Department of "Health Care Management," announced in the State Gazette, issue 35 / 19.04.2024.

The candidate for the position is Master Pharmacist Anna Atanasova Mihaylova, PhD, Senior Lecturer at the Department of Health Care Management at the Faculty of Public Health at MU-Plovdiv.

### **I. Analysis of the candidate's career profile**

Anna Atanasova Mihaylova graduated "Pharmacy" in 2008 from the Faculty of Pharmacy at the Medical University of Plovdiv. She also holds a Master's degree in "Public Health and Health Management" from 2004, obtained at the Medical University of Sofia.

Since 1997, she has been employed at the Medical University of Plovdiv, and since 2009, she has served as a Senior Lecturer in the "Pharmacy Assistant" program at the Medical College. In addition to her academic responsibilities, she operates her own pharmacy, thereby acquiring practical experience relevant to the subjects she instructs.

In 2018, she obtained her PhD, defending her doctoral dissertation in Pharmacoeconomics and Pharmaceutical Regulation on the topic: "Epidemiological and pharmacoeconomic study of corticosteroid prophylaxis of Hyaline membrane disease in prematurely born children."

She has acquired two specializations: in "Medical Pedagogy" in 2007 from the Faculty of Public Health at the Medical University of Sofia, and in "Organization and Economics of Distribution and Pharmacy Practice" in 2022 from the Faculty of Pharmacy at the Medical University of Plovdiv. Since 2023, she has been a Senior Lecturer at the Department of Health Care Management, Faculty of Public Health, where she leads the newly established Master's program in "Pharmaceutical Business Management."

Master Pharmacist Anna Mihaylova was a responsible person for the Research activities of the specialty "Pharmacy Assistant" and a member of the Council of the Medical College at MU-Plovdiv during the period 2012-2022. She received the highest rating of "Very Good" in her most recent attestation evaluation for the period 2018-2020.

Her career development fully aligns with the field of the announced competition.

## **II. General overview of the submitted materials for the competition**

Master Pharmacist Anna Mihaylova has submitted all the necessary documents and supporting evidence required by the Law on the development of the academic staff in the Republic of Bulgaria, the Regulations of MU-Plovdiv, and the Regulations for Academic Development at MU-Plovdiv. These include: a curriculum vitae, diplomas for higher education and for a PhD degree, a certificate of English language proficiency (Cambridge English Level 2 Certificate in ESOL International C1), proof of work experience, a report on the academic positions held, a report on teaching workload, a copy of the most recent evaluation form and assessment, monographs and chapters from monographs, a list of scientific publications, a list of participation in research and educational projects, a report on citations of publications and the necessary evidence, summaries in Bulgarian and English, and a presentation of scientific contributions and a self-assessment based on mandatory scientometric criteria. Additionally, supplementary documents have been provided, verifying the candidate's participation in international scientific forums held both in Bulgaria and abroad, work with students, and other relevant activities.

## **III. Evaluation of the candidate's scientific works for overall academic development**

In her career, Anna Mihaylova has been an author and co-author of over 90 scientific publications. For the current competition, she presents her scientific works from 2012 to the present, excluding those submitted for her PhD degree. The presented scientific production includes 86 publications: 35 publications in scientific journals indexed in Scopus and Web of Science, of which 17 have an Impact Factor (Clarivate Analytics) and 51 publications in non-indexed journals with peer review or published in edited collective volumes.

Anna Mihaylova has participated in 9 scientific and educational projects, including 2 international ones, and was a leading expert in one of these projects.

The scientific contributions presented in the report are the result of her research and practical application projects, as well as her work with multidisciplinary teams that include students. The main areas of Anna Mihaylova's research activities can be summarized in the following directions:

### **Pharmaceutical Regulation**

- Dispensing and regulation of medicinal products and dietary supplements.
- Regulation during crisis situations and combating certain infectious diseases.

### **Pharmaceutical Care**

- Pharmaceutical care and patient counseling, pharmacist's role in medication therapy review.
- Pharmaceutical care for certain chronic diseases.
- Pharmaceutical care for specific population groups.
- Information and communication technologies in pharmaceutical care.

### **Pharmacoeconomic Analysis and Medico-Social Aspects in Prematurely Born Children**

- Health economic evaluation of costs for prematurely born children with respiratory complications.
- Pharmacoeconomic and epidemiological study of prenatal corticosteroid prophylaxis.
- Application of surfactant therapy.

#### **Role and Place of Dietary Supplements in Pharmaceutical Practice**

- Therapeutic effects, advantages, and regulation.
- Undeclared ingredients in dietary supplements and alternative products on the market.

#### **Improving the Quality of Training for Medical Specialists**

- Best pharmaceutical practices in professional training.
- Digitalization in modern professional/medical education.
- Additional opportunities for practical training and research activities.

#### **Development of E-Health in Bulgaria**

- Importance of e-health for optimizing pharmaceutical care.
- Telepharmacy – clinical benefits and challenges.
- Ethical challenges associated with digital technologies and artificial intelligence in healthcare.

#### **Therapeutic Approaches and Rehabilitation Programs for Socially Significant Diseases**

- Management of chronic diseases.
- Modern dimensions of health tourism.
- Multidisciplinary rehabilitation approaches.

#### **Impact of the COVID-19 Pandemic on Certain Aspects of Social Life**

- Effective management of distance learning in an online environment.
- Innovative technologies to support students.
- Challenges faced by medical professionals during the pandemic.

#### **Application of Bioprinting and 3D Printing in Healthcare**

- Application of bioprinting in personalized medicine, dental medicine, and the pharmaceutical sector.
- 3D (bio)printing in modern medical education.
- Ethical and legal regulation of bioprinting.

### **IV. Evaluation of the monograph or equivalent publications submitted for the competition**

The main monographic work submitted, titled *"Good Pharmaceutical Practice in the training of pharmacy assistants,"* was published in 2020, with ISBN 978-619-236-208-9, and consists of 187 pages. The scope and topic of the monograph fully comply with legal requirements. The monograph addresses a multifaceted and current issue, specifically the modern concept of good practices in pharmacy, including standards and quality guidelines for pharmaceutical and health services, public health, and education. These are intertwined with various aspects of the training of pharmacy assistants and their development as healthcare professionals. The author, Anna Mihaylova, leverages her extensive experience in this field to skillfully integrate pharmaceutical practice and care with the educational process of training and professional development for pharmacy assistants. Mihaylova is also the author of the curriculum and course

content for the additional subject "*Good Pharmaceutical Practice*" at the Medical College in Plovdiv.

Another monograph presented, co-authored by Mihaylova A. and Parahuleva N., titled "*Health Economic Evaluation of Costs for Prematurely Born Children with Respiratory Complications*," with ISBN 978-619-236-509-7, is a second expanded edition from 2024 (first edition published in 2020) and contains 283 pages. A separation protocol was correctly submitted to certify the co-authorship of the collective monograph, and the scope and topic of the monograph fully meet the legal requirements. This monograph focuses on a globally relevant issue, namely the consequences of premature birth, the prevention of complications, and respiratory pathology in prematurely born infants, presented from a medico-social and health-economic perspective. A significant contribution is the pharmacoeconomic evaluation of the application of surfactant therapy in prematurely born children.

Additionally, Mihaylova has contributed chapters to three collective monographs, which are outcomes of her project activities.

#### **V. Citation impact of the candidate's publications in national and international literature (Publication Impact)**

Anna Mihaylova has provided a list and supporting evidence for a total of **68** citations in the Scopus and Web of Science databases, 6 citations in monographs and books, and **110** citations in non-indexed journals with peer review. Of these citations, **156** were made by foreign authors, and **28** by Bulgarian authors. Mihaylova's H-index is **5** according to Scopus and **4** according to Web of Science.

#### **VI. Comprehensive, qualitative evaluation of teaching, methodological, and supervisory activities, including supervision of students, PhD candidates, and trainees**

The report on Anna Mihaylova's teaching workload for the past three years shows an exceptionally high level of teaching activity: 1250.6 hours, 1246.2 hours, and 881.6 hours, respectively. This significantly exceeds the normative requirement for non-habilitated lecturers (360 hours). Mihaylova conducts 30% of the lectures, practical exercises, and seminars, participates in practical and theoretical exams, and serves as a member of the state examination committee for Social Pharmacy at the Medical College in Plovdiv. She has actively worked with students, resulting in numerous joint publications and participations in national and international forums. Additionally, she has served as an advisor, mentor, and supervisor for interns and students in various international programs.

#### **VII. Critical remarks and recommendations**

I have no critical remarks regarding the candidate. My recommendation is that she continues her publication activities in the areas where she has already demonstrated expertise.

#### **VIII. Overall assessment of the candidate's compliance with the minimum national requirements under the requirements by the Law on the development of the academic staff in the Republic of Bulgaria, as well as the specific requirements of MU – Plovdiv**

A comparative analysis of Senior Lecturer Anna Mihaylova's achievements against the required minimum points for the academic position of "Associate Professor" shows that she has accumulated 3610.3 points, significantly exceeding the minimum requirement of 1270 points. These data demonstrate that Anna Mihaylova meets the mandatory conditions and significantly surpasses both the quantitative criteria and scientometric indicators set by MU-Plovdiv for the field of Pharmacy (7.3) in the competition for the academic position of "Associate Professor."

### **IX. Conclusion**

The candidate meets the mandatory and specific conditions and scientometric criteria outlined in the Law on the development of the academic staff in the Republic of Bulgaria and the MU-Plovdiv Regulations for the academic position of "Associate Professor," and **even significantly exceeds them.**

The presented scientific works and evidence of teaching activities comply with both quantitative and qualitative criteria and have a high contributory value. They attest to a long-standing commitment to science and the issues in the fields where the candidate has publishing activity. Documents have been provided confirming that the candidate has the required experience as a university lecturer and sufficient teaching workload according to the normative requirements. Based on my personal impressions, I can confidently state that Anna Mihaylova possesses the necessary pedagogical and methodological competence required for the position of "Associate Professor" as advertised in the competition.

### **X. Recommendation for appointment**

Based on the above, I give my positive evaluation and firmly believe that Senior Lecturer Anna Atanasova Mihaylova, PhD, meets the requirements of the Law on the development of the academic staff in the Republic of Bulgaria, the MU-Plovdiv Regulations, and the Regulations for Academic Development at MU-Plovdiv. I recommend to the esteemed members of the Scientific Jury to award the academic position of "Associate Professor" in the field of higher education 7. Health and Sports, professional field 7.3 Pharmacy, with a specialization in "Pharmacoeconomics and Pharmaceutical Regulation."

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