

OPINION

By Prof. Valentina Boyanova Petkova-Dimitrova, DSc

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Faculty of Pharmacy, Medical University - Sofia

Subject: Dissertation work for the award of a scientific and educational degree "Doctor" in the field of higher education 7. "Health and sport", professional direction 7.3. "Pharmacy", doctoral program "Social Medicine and Organization of Health Care and Pharmacy" of Stefka Stoyanova Stoyanova Department of "Physicochemistry", educational and scientific laboratory "Social Pharmacy", Faculty of "Chemistry and Pharmacy" (HF), Sofia University (SU) - "Kliment Ohridski", according to Order of the Rector of SU RD 38-593/24.10.2023.

Topic of the dissertation: "Analysis of the diagnostic and therapeutic strategies in patients with arterial hypertension using the methods of measuring drug usability and rational drug use at the macro level in Bulgaria"

Scientific supervisor: Prof. Dr. Emil Hristov, PhD

By Order RD 38-593/24.10.2023 of the Rector of Sofia University "Kliment Ohridski", I was elected as a member of the Scientific Jury, and on the basis of Protocol No. 1/09.11.2023, I was appointed to prepare an Opinion on the procedure for acquiring the Doctoral degree with a Ph.D. candidate. Stefka Stoyanova Stoyanova, full-time doctoral student at the Department of "Physicochemistry", educational and scientific laboratory "Social Pharmacy", Faculty of "Chemistry and Pharmacy", University of Sofia - "Kliment Ohridski".

Procedure data

Assistant professor Stoyanova is enrolled as a full-time doctoral student in the doctoral program "Social Medicine and Organization of Health Care and Pharmacy" in the field of higher education 7. "Health and Sports", professional direction 7.3. "Pharmacy", with the topic of the dissertation work "Analysis of the diagnostic and therapeutic strategies in patients with arterial hypertension using the methods of measuring drug usability and rational drug use at the macro level in Bulgaria" and supervisor - Prof. Emil Hristov, Ph.D. according to Order No. R-20-937/09.07.2020 of the Rector of SU "St. Kliment Ohridski" Prof. Anastas Gerdzhikov.

Assistant Professor Stefka Stoyanova successfully passed the doctoral minimum exam and was dismissed with the right of defense by Order No. RD-20-1284/ 07/25/2023 of the Rector of SU "St. Kliment Ohridski".

All administrative documents according to the procedure provided for in the Law for development of the academic staff, the Regulations for its application and the Regulations for the development of the academic staff of the SU are presented.

Brief biographical data

Assistant Stoyanova acquired the educational qualification degree "Master" in Pharmacy in 2019 at SU. From 2023 until now, he has been an assistant at SU. She has a variety of professional and social skills, including communication skills, ability to work in a team, skills to organize common work and to distribute functions and duties.

General characteristics of the dissertation work

The dissertation contains 124 pages and is illustrated with 46 figures and 19 tables. The literature reference includes 189 literary sources.

The dissertation work is well balanced and includes: Literature review (19 pages), Aim, Tasks, Materials and methods (54 pages), Results (51 pages), Conclusions (2 pages).

Relevance of the topic

Arterial hypertension is a socially significant disease that goes unnoticed for a large part of people. According to a recent study, nearly 2 million Bulgarians have arterial hypertension. About half of them are untreated or unaware of their disease. When treating high blood pressure, the doctor and the patient do not only strive to normalize its values, but to achieve maximum protection of the impact on the various organs and systems and to avoid the life-threatening consequences of hypertension.

In the first place in the fight against this disease is prevention. So I consider the topic to be relevant and inform both therapeutic strategies and rational drug use. The information is of utmost importance for the measures to be taken at the national level to minimize the risk and ensure good planning and implementation of the financial resources for the treatment of the disease. The literature review is targeted, thorough and well structured. Demonstrated ability to critically evaluate, summarize, systematize, and interpret scientific literature.

The purpose of the dissertation is clearly and precisely defined. The 9 tasks set are well formulated and meet the set goal.

The methodology is complex, described in detail and corresponds to the tasks set. Appropriate research methods have been selected.

The results and their discussion are the essence of the fifth chapter. The presentation of the results of the conducted studies follows the set tasks. The presented discussion of the results shows the doctoral student's deep knowledge of the problem at hand and her ability to think analytically.

The conclusions drawn are correctly formulated. They meet the set goals and objectives and follow the results logically.

I approve contributions that are scientific-theoretical, scientific-applied, confirmatory and methodical. As the most significant, I consider that for the first time in Bulgaria, an analysis of the diagnostic and therapeutic strategies in patients with arterial hypertension by measuring the drug usability and the rational drug use is made. For the first time in Bulgaria, a retrospective comparative analysis is being conducted between epidemiological and reimbursement data for the evaluation of prevention and treatment effectiveness of socially significant diseases. I hope that the developed original setup for evaluating the positive and negative relationships between effective prevention, timely diagnosis, science-based treatment, reimbursement, cost-effective

therapies and health outcome by measuring drug usability (quantitative parameters) will enter into practice.

The study enriches the knowledge of medical specialists (doctors and pharmacists) about the practical application of drug usability and rational drug use in the treatment of socially significant diseases. The study shows the existence of scientific and regulatory problems in the validation and implementation in real practice of the pharmacotherapeutic guidelines by the national competent authorities for the treatment of different groups of diseases.

The research results will provoke subsequent, building fundamental studies in the field of diagnostic and therapeutic strategies in patients with arterial hypertension.

The dissertation is written in good language, precise in terms of terminology. Technically, the dissertation is formatted according to the requirements, and the bibliography is comprehensive.

The abstract faithfully reproduces the content of the dissertation. It is prepared in a volume of 57 standard pages that accurately represent the structure and content, contributions and participations and publications of the dissertation work. In connection with the dissertation work, the doctoral student has presented 2 publications and reports in scientific publications, referenced and indexed in world-renowned databases of scientific information and 5 publications and reports published in non-refereed peer-reviewed journals or published in edited collective volumes

In conclusion, the dissertation meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria. The work is presented in a complete and well-formed form.

In the dissertation of Master of Pharmacy Stefka Stoyanova Stoyanova presents her own experience from researching a significant problem of modern society. The comprehensive and consistent analysis provided opportunities to develop innovative approaches to optimize the treatment of patients with arterial hypertension. I find the topic developed by the doctoral student extremely relevant and timely. The content of the dissertation is legitimately and thoroughly developed, well illustrated and presented in good professional language.

All this gives me the reason to positively evaluate the dissertation work "Analysis of diagnostic and therapeutic strategies in patients with arterial hypertension by the methods of measuring drug usability and rational drug use at the macro level in Bulgaria" and to give my positive vote for the awarding of the M.Sc. pharmacist Stefka Stoyanova Stoyanova of the scientific and educational degree "Doctor" in the field of higher education 7. "Health and sport", professional direction 7.3. "Pharmacy", doctoral program "Social Medicine and Organization of Healthcare and Pharmacy"

24.11.2023

Prepared the review:

/Prof. Valentina Petkova-Dimitrova, DSc/