#### **REVIEW**

by

# PROF. ILKO NIKOLAEV GETOV, PhD

#### **MEDICAL UNIVERSITY SOFIA**

#### OF A DISSERTATION FOR OBTAINING EDUCATIONAL AND SCIENTIFIC DEGREE - DOCTOR (MD)

Field of higher education: 7. Healthcare and sport

Professional field: 7.3 Pharmacy

Doctoral programme (scientific specialty): PHARMACOLOGY

Author: Dr. BRANIMIR IVANOV BRANKOV

Type of doctoral programme: self-study

Department: Pharmacology, toxicology and pharmacotherapy

Faculty of PHARMACY, Medical University - Varna Prof. Dr. Paraskev Stoyanov,

Subject:

EUROPEAN PRACTICES AND STANDARDS OF DIGITAL FORMS OF CONTINUING EDUCATION FOR MEDICAL PROFESSIONALS IN THE FIELD OF DRUG POLICY

Supervisors:

Prof. Dr. Marieta Georgieva, MD Assoc. Prof. Dr. Albena Zlatareva, MD

# 1. General Presentation of the Procedure and the MD student

Within the framework of this procedure a set of materials was submitted to me in electronic form in accordance with Art. 69 of the Rules on the development of the academic staff of the Medical University Varna, the materials include the following required documents:

- Doctoral thesis
- Abstract
- A list of scientific publications
- CV, diplomas, orders, records, etc.

The MD student submitted 3 (three) publications in complete form in English which had been published in Bulgarian and internationally referred scientific publications.

Dr. Branimir Brankov was enrolled as MD student by virtue of Order No R-109-423/16.12.2019 of the rector of the Medical University Varna on a self-study programme: PHARMACOLOGY, Professional area 7.3 Pharmacy. The MD student completed the programme and was entitled to defend the doctoral thesis as of 17 December 2020 on the basis a decision of the faculty council of the faculty of pharmacy of the Medical University Varna taken at the meeting of the Department of Pharmacology, toxicology and pharmacotherapy.

The set of documents is in line with the requirements and having studied in detail the procedure on the preparation, submission and development of the MD programme, I consider that they are in line with the requirements of law. The submitted documents prove the legality and completeness of the education provided and the procedure.

# 2. Brief Biographical Note of the MD student

Dr. Branimir Ivanov Brankov has a Master's degree in medicine, a post-graduate specialization in neurosurgery, a Bachelor's degree in economics, a Master's degree in business administration, etc. and has studied at prestigious universities – the Medical University – Sofia, the Military Medical Academy, the University of National and World Economy Sofia, Rutgers University Graduate School of Management and the Merck Future Leaders programme of Harvard University in the USA.

The professional experience of Dr. Brankov started in 1993 entirely in the pharmaceutical industry. He had different successive jobs and duties in various fields. He has been a Country manager, Global Director Community of Practice, Senior Director Head of Strategic Business Intelligence group, Vice President, Head Emerging Markets Business Development and is currently a managing director of MSD for the Balkan region.

He has excellent computer skills for work with strategic and specialized software and applications. He is fluent in English.

# 3. Topicality of the subject matter and appropriateness of the goals and objectives

The MD thesis submitted for discussion and written as a result of the self-study of Dr. Branimir Brankov for the award of an MD degree, entitled EUROPEAN PRACTICES AND STANDARDS OF DIGITAL FORMS OF CONTINUING EDUCATION FOR MEDICAL PROFESSIONALS IN THE FIELD OF DRUG POLICY, has the characteristics of an in-depth medical-social study of the opportunities for maintaining and improving the qualifications and skills of medical professionals by means of the introduction of practices and standards for the use of digital technologies. There is an exhaustive presentation of the European frameworks, legal and other documents, approaches and decisions related to the introduction, application and supervision of continuing education. The topic of drug policy and the focus on the surveys correlated to the content, scope and educational objectives of the MD programme in pharmacology. The surveys contained in the MD

thesis are up-to-date, topical and focus on three different countries from the region – Bulgaria, Slovenia and Croatia which makes them interesting and useful for the fields of medicine, pharmacology, pharmacy, public health and drug regulation. The conclusions and recommendations will be of interest to the professions such as practitioners, experts in drug regulation, managers in the pharmaceutical industry, pharmacy education, public health, state institutions and the non-governmental sector. The contents, volume, the own surveys and the conclusions are exhaustive, balanced in terms of the different elements and the feasibility of the conclusions and contributions.

#### 4. Knowledge of the Issue

The MD student shows in this thesis that he has a very good level of knowledge and command of the subject matter under study. The MD thesis is based on the understanding that it is necessary and important to organize up-to-date and adequate forms of continuing education for medical professionals focusing on drug policy. There is a study of the opportunities and objectives of post-graduate education of medical professionals which undergoes drastic changes following the creation of the most advanced digital platforms providing the most up-to-date and exhaustive information in real time on any field of medicine.

Based on the comprehensive review of the literature on the subject matter of the MD thesis, dr. Brankov has presented an exhaustive picture of the constant need for continuing education and has focused on the changes in drug policy. It is demonstrated that it is important to seek solutions and undertake measures to combine in the best possible way the limited free time and the search for sources, he has studied the impact of comprehensive drug policies leading to better qualifications, skills and accessibility to drug therapy with proven effectiveness.

#### 5. Methodology of the Study

There are 4 pages of the section presenting the materials and outlining the methodology of the surveys and describing the steps and stages of the thesis. I consider the adopted approach justified and reasonable — it contains a detailed presentation of the study design, i.e. survey cards, profile of respondents, voluntary participation, the use of the 'snowballing' technique to distribute the survey cards and select volunteers, it is based on an in-depth analysis, self-criticism and thorough understanding of the issues on the part of the MD student and the supervisors specifying the restrictions during the COVID-19 pandemic.

The survey methods, the sources of data, the materials and statistical techniques, where appropriate, according to the thesis chapters are appropriately selected. There is a detailed description of the sources of information and the times of its creation which accounts for the representativeness and importance of the outcome and conclusions made.

The following statistical techniques are used: descriptive, correlational and regressive analysis with graphic representation. The knowledge and use of up-to-date statistical methods confirm the conclusion of the importance and validity of the survey and the MD student's inclination for self-study.

I think that the methodological schemes applied are sufficiently exhaustive, enable the achievement of the objectives and goals of the study. For completeness of the doctoral thesis, the objectives and goals have undoubtedly been achieved. Having in mind the surveys and studies, I consider that Dr. Brankov has acquired knowledge and familiarity with the scientific methods and techniques used for medical-social and organizational surveys.

#### 6. Characteristics and assessment of the thesis

The thesis contains a review of the literature of 90 pages focusing on the individual aspects of the subject matter with references to 194 up-to-date Bulgarian and foreign sources. There is an exhaustive examination and comments on the legislative documents, recommendations, guidelines and opinions of the EU, the member states and international organizations. The main emphasis is on terminology, the analysis of the surveys, the sources of regulation and data on the major issues, the tools and objectives of continuing education and drug policy. The conclusions are drawn on the basis of the review of the literature and these conclusions concern the exhaustive examination of the most important aspects of the issues. The publications under examination are presented in terms of topic and systematically, there is a critical interpretation and analysis of the date, approaches and recommendations of various authors, factors and points of view.

All contemporary foreign and Bulgarian authors are quoted because the subject matter is very topical, studied in its various aspects and for a long period of time.

There is a separate section on the objectives and THREE research goals achieved in the doctoral thesis. There is no working hypothesis. This part of the thesis follows strictly the adopted standard approach and there is justification of the selected respondents, their demographic characteristics and particular needs for continuing education, basic education and career positions.

The own surveys are outlined in a separate chapter 'Outcome' containing three sections which are aptly organized based on the selected method of analysis – descriptive, correlational and regressive. The results of the surveys are presented in detail:

- topicality of the knowledge of the respondents in the field of drug policy;
- frequency of occurrence of issues of drug policy in everyday work;
- approaches for updating knowledge in the field of drug policy;
- staff policy in terms of upgrading education for better qualifications of the staff working in the field of drug policy;
  - how often staff participate in post-graduate coursed;

- preferences of the people surveyed for the types of upgrading education;
- how to involve people in the course of continuing education;
- awareness of the types of remote web-based education in the field of drug policy offered in the respective country;
  - institutions in the respective country which most often offer and organize post-graduate upgrading education in the field of drug policy;
- the duration and assessment of web-based education in the field of drug policy in order to ensure quality of the education;
- correlational analysis of the relations when assessing the topicality of knowledge in the field of drug policy;
- regressive model demonstrating the predictability which confirms that it is the independent variables which have great impact on how often education is organized that are the way to update knowledge and the types of institutions offering education.

The in-depth analysis of the raw data collected on site and the discussion in a separate section are excellent. The study shows that there is a need to update the areas of education and post-graduate qualifications focusing on the new digital forms through the development, updating and adaptation of specialized education programmes for medical professionals. The rapidly changing environment in the field of drug policy and regulation, the impact on the legislation, the national and international standards, the advisory mechanisms, etc. make it necessary to change the needs for education following the analysis.

The study of the needs unequivocally indicates that there is a need to create new specialized education programmes for medical professionals in the field of management and implementation of the national and international strategies and policies in the field of drug policy. The implementation of the legislation, the strategies, the programmes and policies at national and international level show that the medical professionals in Bulgaria and the Balkan region are motivated and try to upgrade their education in this field. They are relatively well aware of the opportunities for upgrading education in the field of medical education and are willing to participate in various types of post-graduate improvement. It has been found that the attitudes and desires of the working medical professionals to improve their qualifications are in line with the trends for new skills of career development of contemporary people.

The thesis also contains other conclusions, contributions, references to literature and applications.

# 7. Scientific and practical contributions and importance of the thesis

I consider that the doctoral thesis prepared and submitted for assessment makes a valuable contribution with its results in a very sensitive and interdisciplinary field covering the continuing education in terms of drug policy. I believe that it is one of the most important achievements of the thesis that it proves the need for the higher education institutions at the countries included in the surveys to develop

and introduce innovative types of web-based post-graduate education and upgrading education in the field of drug policy in order to provide more people to participate and update their knowledge and in order to be in line with the latest trends in the field post-graduate education.

The contributions are defined as practical scientific and applied scientific. I think that the author could have also made methodological scientific contributions considering that the opinion of different people was surveyed. The high level of trust in the various types of career development and the wide range of post-graduate courses involve methodological problems related to the dynamic and rapidly changing environment of scientific knowledge.

# 8. Assessment of the publications related to the doctoral thesis

There are THREE full text publications on the subject matter of the thesis in referred scientific publications and the MD student is author of all of them. The publications are only in English, cover to a significant extent the surveys, the results and analysis of the doctoral thesis.

There is no information on participation in scientific fora

The analysis of the submitted documents shows that the MD student has the required scientific activity. I accept and assess the scientific work on its merit, recommend the publication in Bulgarian magazines too and note that the publications in English presuppose visibility and an opportunity for the thesis to be quoted and referred to by the scientific community.

## 9. The MD student's personal involvement

There is personal involvement on the part of the MD student in the surveys, the definition of the objective, goals, outcome, recommendations and contributions. I consider it to be a personal merit and achievement that the entire thesis is an original scientific piece of work. The skill to present and describe scientific results and the support from the supervisors attest to the fact that there is an in-depth understanding of the specific subject matter of the doctoral thesis.

## 10. Critical notes and recommendations

I have no significant critical notes and recommendations in relation to the doctoral thesis. I could single out minor terminological flaws, spelling and punctuation mistakes, mismatch in the technical layout of the tables and repetitions which in no may diminish the scientific value, importance and scientific metrics of the doctoral thesis.

I recommend that recommendations should be made on the basis of the results and they should be structured separately and sent to the respective addressees — educational institutions, sectoral organization and scientific associations so that opportunities can be sought to optimize the opportunities for continuing education.

CONCLUSION

The doctoral thesis contains original results, conclusions and contributions and is completely in line

with the requirements of the Development of Academic Staff in the Republic of Bulgaria Act (DASRB), the

Rules on the application of the DASRB and the Rules on the development of academic staff at Medical

University Varna.

In view of the foregoing, I give my positive assessment on the conducted surveys submitted as a

doctoral thesis, abstract, achieved results, conclusions, contributions and publications and propose to the

board of examiners to AWARD the Doctorate of Medicine and Philosophy to Dr. BRANIMIR IVANOV

BRANKOV under the doctoral programme of PHARMACOLOGY for the scientific work entitled EUROPEAN

PRACTICES AND STANDARDS OF DIGITAL FORMS OF CONTINUING EDUCATION FOR MEDICAL

PROFESSIONALS IN THE FIELD OF DRUG POLICY.

Assessor:

Prof. Ilko Nikolaev Getov, PhD

Sofia,