

REVIEW

of a dissertation with subject

EUROPEAN PRACTICES AND STANDARDS FOR DIGITAL FORMS OF CONTINUING TRAINING OF MEDICAL SPECIALISTS IN THE FIELD OF DRUG POLICY for obtaining Educational and Scientific Degree – Doctor in the field of scientific education 7.0 Health and Sport, professional field 7.3 Pharmacy, scientific specialty Pharmacology (including pharmacokinetics and chemotherapy)

Author: Dr. Branimir Ivanov Brankov, Department of Pharmacology, Toxicology and Pharmacotherapy, Faculty of Pharmacy, Medical University of Varna

Reviewer: Corresponding Member Prof. Dr. Mila Vlaskovska, MD, DSc
Department of Pharmacology and Toxicology, Faculty of Medicine, Medical University of Sofia
Selected as a reviewer of the presented dissertation by Order № R-109-12/21.01.2020 of the Rector of Medical University of Varna.

Business address: Corresponding Member Prof. Dr. Mila Vlaskovska, MD, DSc
Department of Pharmacology and Toxicology
Faculty of Medicine, Medical University of Sofia
2 Zdrave Str., 1431 Sofia
e-mail: mvlaskovska7@gmail.com; mvlaskovska@medfac.mu-sofia.bg

I have not found any gaps in the documentation attached by Dr. Branimir Brankov. I declare that I have no common scientific works with Dr. Brankov.

Biographical data and career development

Dr. Branimir Brankov graduated with a master's degree in human medicine, after which he acquired a degree in neurosurgery.

Since 1997 Dr. Brankov has undergone successive training in the field of organization and management of the pharmaceutical business and regulation, specializing and obtaining a bachelor's degree at Rutgers University, School of Management, USA – 1997–2000, followed by Executive MBA, Concentration in Marketing and Management – 2001–2003, Management

Harvard University, Merck Future Leaders Program – 2012–2013. The qualities of Dr. Brankov are highly appreciated and he holds responsible positions in the management of the pharmaceutical business in the Balkans and Eastern Europe such as:

Sr. Director, Head of Strategic Business Intelligence group, Sept. 2006–2011; Vice President, Head Emerging Markets Business Development, August 2011–May 2017 Managing Director MSD Balkans, June 2017 – to the present moment.

In the process of his many years of successful activity, Dr. Brankov is confronted not only theoretically but also in practice with the importance of continuous training of all medical specialists to improve health care. To achieve a high level of career growth, he himself undergoes specific training, which the changes in Eastern European and Balkan countries have imposed as a mandatory practice in the course of harmonization of health regulations within the European Union.

His rich practical and theoretical experience, his extensive working contacts in countries such as Slovenia, Croatia and Bulgaria, are realized in the proposed dissertation.

I would like to comment positively on the selection of the three countries with which I have research projects and more than 10 years of impression of their levels of work since their membership in the CHMP at EMA – Slovenia was active an year before us, while the colleagues from Slovenia had an extremely high start, ambition and an enviable level of preparation.

The subject of continuous training /lifelong learning/ is very important not only as wishes and initiatives of more than 20 years, but also in the aspect that is set here – what are the options for selection and inclusion in such programmes, what is the awareness of health specialists for existing opportunities and especially the real benefit for health specialists of the offered forms and quality/level of training. The adequacy of the requirements of society and the dynamic changes of our time to the specific postgraduate training of our health specialists.

ASSESSMENT OF THE DISSERTATION WORK

Relevance

The rapid introduction of new technologies of training and raising the qualification driven by the sharp inflow of huge new information in the field of medical care as well as the changes imposed by the pandemic in communication, training and work make the problem of the dissertation relevant. Very correctly in the introduction, Dr. Brankov notes that ‘Among the main priorities and challenges for all institutions regulating this dynamic area, and for the medical specialists themselves, is to define clear standards and training sources that can be used effectively in everyday medical practice’.

Structure of the dissertation

The dissertation is written on 147 pages, distributed as follows: 131 pages of dissertation text, 14 pages of bibliography from 194 literature sources and used questionnaires attached.

The structure of the dissertation includes: Literary review 85 pages; Purpose and tasks – 1 page; Materials and methods – 3 pages; Results – 19 pages; Discussion – 5 pages; Conclusions – 1 page; Contributions – 2 pages.

The literary review is written intelligently and purposefully, with a deep knowledge of the problems that are the subject of the dissertation. From the thorough literature review, the way of presentation, the competent and critical analysis of the data with conclusions for future resolution, the erudition and the accumulated experience of Dr. Brankov in the researched field are evident. Three main aspects of the dissertation are very well separated and considered, which facilitates the reader to move on to the resulting purpose and tasks. The main chapters in the literature review are Continuing, lifelong learning ‘Lifelong learning’ 2. Training of medical specialists – a phenomenon characterized by high autonomy and self-directed learning and 3. Need for adequate knowledge of medical specialists in the field of drug policy.

In all three sections of the review attention is paid to the European directives, programmes for synchronization and optimization of the three aspects, as well as the situation in the Republic of Bulgaria, Slovenia and Croatia.

The analysis performed by the doctoral student on the basis of the literature review leads to a logical, well-formulated scientific hypothesis of the dissertation, to develop/build scientifically based platforms for continuing education of medical specialists by comparing motivation, access

to forms of postgraduate education and assessment of its contribution to career growth in Bulgaria, Slovenia and Croatia.

The purpose of the dissertation, although quite circumstantial at first glance, most accurately reflects the intentions of the author: ‘A study to determine the extent to which medical specialists have the desire, aspiration and ability to upgrade their basic knowledge and skills acquired in practice, whether they often encounter in their daily work the need for help from colleagues in relation to issues concerning the field of drug policy, whether they attend forms of continuing training and whether such are organized in the places where they work’.

In order to fulfil the purpose formulated in such a detailed way, three main tasks have been specified:

1. Establishing the point of view of the medical specialists from the Balkan region (specialists from the Republic of Croatia and Slovenia were interviewed) and from the Republic of Bulgaria regarding their need for upgrading knowledge in the field of drug policy, in order to ensure better career development and higher qualification.
2. Degree of access and acquaintance of the medical specialists from Bulgaria and of the respondents from Croatia and Slovenia with the available online specialized programmes for continuing education in connection with their professional qualification.
3. Study of the need for certification of the newly acquired knowledge according to the opinion of the respondents.

I believe that the set purpose and tasks are clearly formulated and allow for a comprehensive study in the Balkans.

Materials and methods: The methods used are adequate enough to evaluate the planned study and are well described. Survey and statistical methods were used. Descriptive, correlation and regression analyses for processing data from the questionnaires are used simultaneously in order to achieve more complex characterization of the obtained answers.

Due to the pandemic situation, the author uses a representative sample - respondents. The principle of participation in the survey is voluntary, using the technique of ‘snowballing’ to distribute the questionnaire and recruit those willing to participate.

Results and discussion. The obtained results are described concisely, clearly and are presented in 16 tables and 13 figures. To avoid duplication in the review, I emphasize that the well-formulated conclusions and contributions are based on the obtained digital data. A pleasant impression is made by the established fact that the Bulgarian medical specialists included in this study show high motivation for inclusion in new platforms for continuing education, appreciate the impact on their career development and emphasize that universities provide the highest quality forms of postgraduate training and improvement. The discussion of the obtained results is done with an understanding of the matter, very analytically with logically derived conclusions and contributions of the dissertation.

The significant part of the results of the research is original, the contributions have both significant theoretical and real applied value and the conclusions sound convincing. In my opinion, the most significant contributions are clearly defined and have a real impact and priority theoretical and applied value.

Conclusions and scientific contributions

The conclusions reached by the doctoral student are a logical consequence of the competent data analysis. The most significant conclusions and contributions of the dissertation are:

1. The creation of online specialized training programmes, as well as other activities (seminars, conferences, etc.) in connection with the professional qualification of employees will undoubtedly help to acquire higher qualifications and will lead to an increase in the quality of health care services for the population.
2. Accordingly, and in order to meet the current trends in the field of postgraduate education, it is good for the higher medical schools in the surveyed countries, in whose level of teaching the respondents have the most trust, as well as for the various career development companies offering courses for postgraduate training, to focus on the development and implementation of innovative forms of web-based postgraduate and further training on drug policy issues, which will give an opportunity to more people willing to get involved and update their knowledge in this dynamic and rapidly changing field of scientific knowledge.

The contributions are divided into scientifically practical and scientifically applicable.

In general, one could think about the definition of the scientifically practical and scientifically applicable, although I understand the author, who proposes those contributions that are directly used in practice as scientifically applicable. The author has a creative right that I understand and accept.

1. The study clearly demonstrates the need for the creation and development of digital forms of continuing education for medical specialists in the field of drug policy, as the study data clearly demonstrates that medical specialists in Bulgaria and the Balkans have the motivation and desire to update their training in this field and the provision of such an opportunity is desired by them.
2. The needs identified in the study for the creation of new specialized training programmes for medical specialists in the field of management and implementation of national and international strategies and policies in the field of drug policy for implementation of legislation, strategies, programmes and policies of national and international level will be useful in planning the activities of higher education institutions in our country and the inclusion of such courses will help develop their portfolio and attract more students.
3. The study showed that the courses and programmes for postgraduate education provided by higher education institutions enjoy the highest level of trust among the respondents, which once again confirms the role of higher education institutions in the quality of acquiring adequate and modern knowledge.
4. The challenges of today, including the epidemiological situation, have imposed a strict requirement for digitalization of the health sector, as well as the need for continuous training of relevant specialists. The only form in which adequate training can be provided to health specialists is digital.

Scientifically applicable

5. Web-based postgraduate and further training on drug policy will enable more people to get involved and upgrade their knowledge in this dynamic and rapidly changing field of scientific knowledge.

Publications related to the dissertation

3 publications related to the dissertation have been made and meet the requirements of Medical University of Varna. The total number of publications presented by Dr. Brankov is 9.

The typographic layout of the dissertation and the abstract are excellent. The presented abstract fully reflects the content of the dissertation.

Critical remarks and recommendations

I accept that the pandemic situation has limited the number of medical specialists surveyed, but I generally recommend that a larger number of respondents be included in future studies.

Conclusion

My complex assessment of the presented dissertation on the topic EUROPEAN PRACTICES AND STANDARDS FOR DIGITAL FORMS OF CONTINUING TRAINING OF MEDICAL SPECIALISTS IN THE FIELD OF DRUG POLICY is **positive**.

The work is shaped by emphasized intelligence, professionalism and visible satisfaction from the successful career of the doctoral student. The presented dissertation work and attached publications meet the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria in the field of scientific education 7.0 Health and Sport, professional field 7.3 Pharmacy, scientific specialty Pharmacology (including pharmacokinetics and chemotherapy) for the Educational and Scientific Degree – Doctor.

Based on the positive aspects presented in detail so far regarding the dissertation, I strongly recommend to the esteemed members of the Scientific Jury to vote **positively** and award Dr. Branimir Ivanov Brankov the Educational and Scientific Degree – Doctor in scientific specialty Pharmacology (including pharmacokinetics and chemotherapy).

Reviewer

Corresponding Member Prof. Dr. Mila Vlaskovska, MD, DSc

04 February 2021

Sofia