

OPINION

by Prof. Dr. Maria Semerdjieva, MD

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Member of the Scientific Jury, according to Order No. P-109-316/26.06.20233 of a dissertation work for awarding the educational and scientific degree „Doctor“.

Professional direction: 7.1. Medicine; Doctoral Program „Social Medicine and Organization of Healthcare and Pharmacy“

Author: Maria Mitkova Ivanova

Topic: Professional burnout and development of the pharmacy profession

Research supervisor: Prof. Lora Hristova Georgieva, Ph.D., MD

Assos. Prof. Anna Hristova Todorova Ph.D

GENERAL PRESENTATION OF THE PROCEDURE

The presented set of materials on an electronic medium is in accordance with the requirements for acquiring the ONS „Doctor“ - according to the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations of the Medical University “Prof. Dr. Paraskev Stoyanov”– Varna.

BRIEF BIOGRAPHICAL DATA ON THE DOCTORAL STUDENT

Doctoral student Maria Mitkova Ivanova graduated as an assistant pharmacist at Varna Medical University in 1997. Two years later she focused her interests in the field of psychology and graduated with a Bachelor's degree in Psychology and in 2005 with a Master's degree in Applied Psychology at Varna Free University "Chernorizets Hrabar". In 2018 she obtained a second Master's degree in Pharmacy at the Medical University "Prof. Dr. Paraskev Stoyanov - Varna.

After graduation, she started working as a pharmacist assistant. She has about 20 years of professional experience in the pharmacy business, initially holding the position of

Assistant Pharmacist and later Master Pharmacist. Since 2019 she is an assistant at the Medical University "Prof. dr. Paraskev Stoyanov - Varna.

She is a specialist in "Organization of distribution and pharmacy practice". She has participated in two intra-university projects related to the thesis topic. Fluent in English.

RELEVANCE OF THE SUBJECT

In contemporary literature, many scientific pieces of evidence can be found regarding the professional burnout among healthcare professionals, with most studies focusing on nurses and doctors and much less on the pharmacy profession. Pharmacists play a vital role in the safe and effective use of medications, ensuring the continuity of drug supplies in the face of regular shortages, managing drug interactions, and providing information about medications. The introduction of the concept of pharmaceutical care in pharmacy practice has imposed greater professional responsibility on these specialists in monitoring the outcomes of applied treatments.

During the COVID-19 period, healthcare workers were subjected to immense stress and pressure when delivering healthcare and pharmaceutical services. Pharmacists were assigned the important task of preventing the spread of the coronavirus by increasing patient awareness of preventive measures, providing up-to-date information, and procuring essential medications.

The increased workload and responsibility have inevitably had an impact on the physical and mental well-being of pharmacists. In this regard, I believe that the development of this current research is very relevant.

CHARACTERISTICS AND EVALUATION OF THE DISSERTATION

The dissertation is presented on 156 pages and contains 21 figures, 20 tables and 1 application. The book collection contains 216 titles, of which 54 are in Cyrillic and 167 are in Latin. The literature cited is contemporary and up-to-date, relevant to the topic under consideration.

The dissertation begins with an introduction, in which the doctoral student states the importance of the chosen topic and the need for its development.

The presented **literature review** corresponds to the concept of the dissertation developed by the author. The text discusses the development of the pharmaceutical

profession in a historical context, the evolution of the concept of pharmaceutical care, and its effectiveness. It explores various manifestations of burnout syndrome and its consequences for medical professionals and pharmacists. The literature review, including its content, logical structure, and citations, clearly demonstrates the knowledge, capabilities, and skills of the doctoral candidate to work with scientific sources and synthesize information. The first chapter concludes with logically formulated findings and a strong justification of the topic's relevance.

Chapter two presents the structure and organization of the empirical study. The objectives are clearly defined, and seven specific tasks are outlined. The outlined working hypotheses align with the dissertation's topic and research goals. The research methods used to allow for both quantitative and qualitative investigation of the subject.

To gather and process primary information, the following methods were used:

- Documentary method – normative documents and literary sources were examined.

- Sociological method – a questionnaire was developed, including a validated tool for assessing burnout among medical specialists, the Maslach Burnout Inventory (MBI).

- Statistical methods – a comprehensive range of statistical analyses was applied.

The "**Results and Discussion**" chapter represents the core of the research. The analysis of collected data is competently and comprehensively presented in 14 paragraphs, following the logical sequence of the set tasks. The study involved 127 master pharmacists, which constitutes one-third of the total of 301 master pharmacists in the Varna region, ensuring the necessary representativeness of the research. The obtained results are discussed substantively and professionally, with comparisons to other similar studies.

Based on her professional experience and the conducted research, M. Ivanova has developed an original brochure that distinguishes the main symptoms related to professional burnout among pharmacists.

As a natural conclusion drawn from the results and their interpretation, several conclusions and specific recommendations to the legislator and the professional organization of pharmacists are formulated by Doctoral student M. Ivanova.

CONTRIBUTIONS AND PRACTICAL RESULTS IN THE DISSERTATION WORK

The successful accomplishment of the tasks set in Maria Ivanova's dissertation work is reflected in the indicated scientific-theoretical and practical contributions. It becomes clear that the dissertation's goal has been successfully achieved through the use of scientific methods and resources presented in the dissertation. For the first time, the main individual and workplace factors influencing the level of professional burnout among pharmacists have been investigated. The role of pharmacists in promoting public health and supporting rational drug use has been successfully elucidated. The most significant contribution of the dissertation is the proposed brochure for preventing burnout among pharmacists.

ABSTRACT AND PUBLICATIONS

The abstract (57 pages) in terms of structure and content meets the requirements and includes the main results obtained in accomplishing the stated goals and tasks. In connection with the dissertation work, three scientific articles and two participations in scientific forums are presented. In all scientific developments, Doctoral Candidate M. Ivanova is the first author, which confirms her scientific growth in the ability to independently address a scientific problem.

CONCLUSION

My overall assessment of the current scientific work is that it meets the requirements for the development of a dissertation: the structuring method, understanding of the problem, data analysis, formulation and defense of the author's main theses, and the successful attempt to offer a brochure for burnout prevention among pharmacists. Based on the above, I recommend that the esteemed Jury members award Maria Mitkova Ivanova the educational and scientific degree of "Doctor" in the Doctoral Program in "Social Medicine and Healthcare Organization and Pharmacy".

01/09/2023

Signature:

/prof. Dr. M. Semerdjieva, MD/