### OPINION

by Prof. Dr. Radosveta Andreeva-Borisova, DSc

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Medical University "Prof. Dr. Paraskev Stoyanov" - Varna

Member of the Scientific Jury pursuant to Order No. 27-10-9-37-1

**Regarding:** Dissertation for awarding the scientific degree "Doctor of Sciences" in the specialty "Public Health Management" in the field of higher education 7. "Healthcare and Sports," professional field 7.4. "Public Health," on the topic "Professional Association and Development of the Activities of Dental Technicians in Bulgaria," authored by Assoc. Prof. Mihaela Atanasova Varneva, PhD, from the "Dental Technician" Teaching Sector at the Medical College of the Medical University - Varna.

# **Procedure for Announcing the Public Defense**

The dissertation was discussed and forwarded for public defense by the Department of "Social Medicine and Healthcare Organization" at the Medical University - Varna during a Departmental Council meeting on <u>KC 16.17.10</u>.2024.

By Order No. 2024 of the Rector of the Medical University - Varna, based on a decision of the Faculty Council of the Faculty of "Public Health" (Protocol No. 2009 34/01) was included as an internal member of the Scientific Jury for the public defense of the dissertation.

According to Protocol No. 1 ...... from the first meeting of the Scientific Jury, I was assigned to prepare an opinion on the procedure.

The candidate has submitted all the required documents for the procedure, which comply with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, its Implementing Rules, and the Rules for the Development of the Academic Staff at the Medical University - Varna.

### Brief Biographical Data of the Author of the Dissertation

Assoc. Prof. Michaela Varneva, MD, was born on November 16, 1963, in Varna. In 1983, she graduated from the IPZKSSO "Dr. N. Nikolaev" in Varna and obtained the specialty

of "Dental Technician." In 1990, she graduated from IU "M. Kalinin" in Sliven, earning a higher professional education and teaching qualification. In 1994, she took a Qualification exam for obtaining higher medical education in the specialty "Dental Technician" at PMU - Varna. In 2000, she completed studies at VMI - Plovdiv and earned the degree "Bachelor" in the specialty "Healthcare Management," with the professional qualification of "Healthcare Manager and College Instructor." In 2010, she graduated from NSA "V. Levski" with the degree "Master" in the specialty "Sports Psychology." In 2011, she enrolled as a PhD student in independent preparation at the Department of "Social Medicine and Healthcare Organization" at MU-Varna. She successfully defended her dissertation in 2013 and obtained the degree of "Doctor" in the specialty "Social Medicine and Healthcare Organization and Pharmacy." The topic of her dissertation was "Retrospective, Analysis, and Social-Psychological Issues in the Preparation and Implementation of the 'Professional Bachelor' in the Specialty 'Dental Technician."

Assoc. Prof. Varneva began her professional career in 1983 as a dental technician at OSP-Varna, where she worked until 1986 in the orthodontic team. During this period, from 1984 to 1986, she was invited to work as a part-time lecturer at PMU-Varna and taught orthodontics. From 1986 to 2006, she worked as a "Practice Instructor" at MK-Varna. In 2006, when the college became part of MU-Varna, she held the position of "Lecturer at the University" until 2015. In 2015, after successfully passing a competition, she was appointed as "Assoc. Prof." at the "Dental Technician" department at the Medical College of MU-Varna. From November 2015 to March 2021, she served as "Assoc. Prof." at the Department of "Clinical Medical Sciences" at the Faculty of Dentistry at MU-Varna. In 2021, she returned as "Assoc. Prof." to the "Dental Technician" department at the Medical College of MU-Varna.

Her teaching career began in 1984 as a part-time lecturer in the "Dental Technician" profile at PMU-Varna. Assoc. Prof. Varneva has been teaching at the Medical College - Varna for 38 years, specializing in dental technology. She has a very active teaching role, delivering lectures and practical classes in Orthodontics, Maxillofacial Prosthetics, and Current Technologies in Orthodontics (an elective course) for dental technician students. She also provides training in the elective course "Introduction to Scientific Research Activities" for students in the specialties "Medical Cosmetologist" and "Rehabilitator."

The courses for continuing education further contribute to Assoc. Prof. Varneva's professional development and interdisciplinary training, shaping her into a well-prepared and forward-thinking professional, educator, and researcher. Her postgraduate training focuses on dental technology, education in the field, and the history of medicine.

Her involvement in the specialty is evidenced by her participation in 1996 in an Expert Group for introducing EDI for education in the professional bachelor's program "Dental Technician" at PMU-Varna. In 2008, she was a member of an expert group with members of the SZA-Varna association for the approval of teaching bases for practical training and pre-graduation internships for dental technician students at MK-Varna.

Assoc. Prof. Varneva is a participant in research project No. 23007 "Knowledge, Attitudes, and Practices Related to Cross-Contamination Control in Dental Laboratories" within the 2023 Call for Research Projects of the "Science" Fund, approved for funding by the Academic Council of MU-Varna on December 11, 2023.

From 2012 to 2019, she was a member of the organizing committee and moderator of the "Dental Health" section at the scientific sessions for faculty and students at the Medical College - Varna. In 2024, she served as secretary of the section at the International Symposium "Alumni Club and Friends" of MU-Varna.

Assoc. Prof. Varneva has received two awards for her contributions to the development of the Medical College - Varna and her contribution to its scientific activities.

Her commitment to the dental technician profession is shown through her membership in the Bulgarian Association of Dental Technicians (BADT) and the General Assembly (GA) of the Varna Regional Branch of BADT since 2019. From 2012 to 2014, she was a member of the GA of MU-Varna. From 2013 to 2020, she was a member of the Quality and Accreditation Committee at MK-Varna. From 2000 to 2016, she was a member of the College Council at MK-Varna. In 2014, she became a member of the newly formed Program Council at MK. From 2012 to 2019, she was a member of the GA of MK, and from 2015 to 2019, she was also a member of the GA of the Faculty of Dentistry at MU-Varna. Between 2015 and 2020, she was a member of the Program Council of the "Dental Technician" department, where she returned as a member in 2023.

Assoc. Prof. Varneva is a member of the editorial board of the scientific journal "Dental Technology," the official organ of the BADT, from 2020 to 2022.

She is proficient in Russian and uses it in her professional work.

he scientometric analysis of the dissertation work by Assoc. Prof. Michaela Varneva shows significant scientific productivity and high scientific activity. The analysis covers 15 published full-text scientific articles in peer-reviewed journals, all of which are entirely related to the dissertation topic. These publications are fully described and included in the complete volume of materials for the competition. Additionally, the

candidate has 30 citations, confirming the relevance of her scientific work and the interest it has generated in the scientific community.

The topic of the dissertation is of social significance, addressing the issues of the Bulgarian Association of Dental Technicians, established in 2019, and the development of the profession of "dental technician" in the country. The study focuses on the need for continuing education in the field, emphasizing the lack of tradition in Bulgaria for controlled education organized by professional associations, in the context of comparative studies with Western countries.

The structure of the dissertation is well-organized and consists of 239 pages with 19 tables, 24 figures, 24 photographs, and 9 appendices. The bibliography includes 281 sources. The dissertation is divided into four main chapters, which fully cover the topic through a review of the historical and current state of the profession, original research, and presentation of results and analyses. It includes innovative elements such as a SWOT analysis and the development of a model and strategy for the development of the profession of "dental technician."

## Conclusions, Recommendations, and Contributions of the Dissertation

The conclusions are clearly formulated and logically follow from the obtained results. They are grouped according to the research tasks set forth in the dissertation.

Valuable conclusions of practical importance include the confirmation of the need for education and additional qualification in the form of Continuing Education (CE) and lifelong learning, through certified courses in academic settings or in Continuing Medical Training Laboratories (CMTL) by prominent professionals from practice, which are practically oriented and driven by the interests of professionals.

The recommendations addressed to the Bulgarian Association of Dental Technicians (BADT), medical universities, and practicing dental technicians will allow for the improvement of both the professional organization's activities and the work of professionals in the field.

The contributions are predominantly original in nature, with both theoretical and practical significance. The dissertation presents the first large-scale, purposeful, and in-depth study in Bulgaria on the historical development of professional associations and the professional organization of dental technicians and others working in healthcare. For the first time, the opinions of the members of BADT and instructors in the "Dental Technician" specialty regarding their attitudes toward the association and other important issues related to the profession are studied, which will allow for the improvement of the organization's activities and the profession. The qualitative studies exploring the attitudes of professionals are of significant contributory value.

As a summarizing characteristic of the dissertation and related publications, I emphasize the broad scope, the relevance and timeliness of the topics addressed, the precise methodology, the contributory nature, and the potential practical applicability of the scientific results.

Assoc. Prof. Varneva's work as a long-time lecturer, her interest in education and professional practice in the field of "dental technician," as well as her additional interests in public health, underpin her scientific focus in this area and allow for indepth analysis.

In relation to the dissertation, she has presented 12 full-text publications, two more than the required 10 (G5 - 9 - 480 points with a requirement of 100 points); 2 participations in scientific forums (in Bulgaria and abroad), and one participation as a lecturer in a course on the History of Medicine. The procedure also includes 3 other publications, showcasing Assoc. Prof. Varneva's diverse interests. She is the sole author in all the presented publications.

Nine appendices have been developed for the dissertation, which could be extremely useful for improving both the activities of the professional organization and the profession itself.

#### **Abstract**

The abstract has been prepared according to the requirements and is in a synthesized form. It fully reflects the content of the dissertation and is developed in 76 pages, well-illustrated with highly informative figures and tables. A list of publications related to the dissertation topic is also included.

# Personal Impressions of the Candidate

I know Assoc. Prof. Varneva as an enthusiastic educator and researcher. Her work on the topic "Professional Association and Development of the Work of Dental Technicians" is a personal cause for her. As a member of the profession since 1983, she set herself the task of researching, systematizing, and chronologically presenting the data on professional associations and the professional organizations in which dental technicians have been members over a long period, from 1910 to 2022. The goals she set were accomplished thanks to her persistence, consistency, systematization, and scientific interest in the topic.

Assoc. Prof. Varneva is an excellent professional, as evidenced by the three utility models registered in the patent office of the Republic of Bulgaria in 2015, 2017, and 2019, applicable in the field of dental technology, particularly in orthodontics. She has been teaching the subject of orthodontics for 38 years as a full-time lecturer.

#### Conclusion

The dissertation of Assoc. Prof. Michaela Atanasova Varneva, MD, titled "Professional Association and Development of the Activity of Dental Technicians in Bulgaria," addresses a current and significant interdisciplinary topic. It is well-structured, with clearly defined aims and objectives. The methodology is comprehensive and competently applied. The results are presented accurately and thoroughly. The conclusions are clearly formulated and form the basis of the dissertation's contributions. The topic of the scientific work requires diverse academic interests, and the research demonstrates the candidate's ability to develop and apply complex quantitative and qualitative research methods.

The dissertation and the presented publications fully meet the requirements of the Bulgarian Law on the Development of Academic Staff, its implementation regulations, and the regulations of the Medical University of Varna for obtaining the academic degree "Doctor of Sciences."

The depth of the conducted research, the topic, the obtained results, and the contributions, with both original theoretical and applied character, provide me with grounds to give a positive evaluation of the dissertation and confidently recommend to the esteemed members of the Scientific Jury that Assoc. Prof. Michaela Atanasova Varneva, MD, be awarded the scientific degree "Doctor of Sciences" in the specialty "Public Health Management."

26,11,14

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679

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