

STATEMENT

By prof. Prof. Stoyanka Tsvyatкова Zheleva-Popova, MD, PhD
Member of Scientific Jury by Order № R-109-62 / 27.01.2026 of the Rector of MU–
Varna, and with the decision of the Scientific Jury first meeting (Protocol №
1/04.02.2026) appointed to prepare a statement

Re: Procedure for acquiring of the educational and scientific degree “Doctor” in field of higher education 7. Healthcare and Sports, professional field 7.4. Public health, scientific specialty: Management of nursing care on the dissertation thesis „Knowledge, attitudes and practices related to cross-infection control in dental laboratories” of Nela Georgieva Kalapchieva.

Scientific supervisor: Prof. Klara Georgieva Dokova, MD, PhD

Procedure details:

By order of the Rector of MU-Varna № R-109-94 dated 01.02.2023 Nela Kalpakchieva was enrolled as a full-time doctoral student in the doctoral program "Management of Nursing Care", Medical University - Varna. A protocol for successfully passing the doctoral exam was presented - Protocol dated 04.06.2024. and a foreign language exam - Protocol dated 22.04.2024. Based on a decision of the departmental council of the Department of Nursing Care regarding the readiness for public defense and a proposal for a Scientific Jury, Nela Kalpakchieva was permitted to defend the thesis by Order of the Rector of MU-Varna № R-109-62 / 27.01.2026. The full set of required documents are submitted.

Biographical data and career development of the candidate

Nela Kalpakchieva graduated Medical College, MU-Varna, specialty "dental technician", OCS professional bachelor in 2012, and in 2018 upgraded OCS "bachelor" in Nursing care. In 2019 she acquired master degree in Nursingcare Management MU-Varna.

Her professional activity began in 2012 as a dental technician. Her further professional development is related to the training students, initially as a part-time (2013-2018), and since 2018 as a full time employee at the Department of Dental technicians at MU-Varna. She won Project № 23007 of the Scientific Fund - MU-Varna on the topic of the dissertation. She has participated in two international scientific forums. Reference for a registered active profile in Google Scholar and Orcid is presented.

An overall characteristic of the dissertation.

The dissertation, developed by Nela Kalpakchieva, is in volume of 161 pages, including three appendixes. It consists of following main parts –Introduction, Literature Review, Material and Methods, Results and Discussion, Conclusion, Contributions, Bibliography. 34 figures, 39 tables and 3 appendixes illustrated the work. The bibliographic reference contains 178 sources.

Assessment of the actuality of the topic

Nosocomial infections are a serious challenge for public health. The risk of them is high not only in hospitals, but also in outpatient treatment facilities where a high risk of their spread is dental practice, in particular dental laboratories. Unfortunately, this problem is underestimated, although not only patients are exposed, but also the relevant specialists. It is accepted that the most important and most reliable weapon in the fight to minimize cross-infections are prevention and control.

How and to what extent preventive measures are implemented and what are the factors that influence their implementation in dental practice are important questions to which there are no satisfactory answers. PhD student Nela Kalpakchieva has addressed these in her current dissertation, approaching the problem with a certain interest and motivation in investigating the problem.

The literature review is 42 pages long, on which the author presents the results of a literature review, mainly international sources, on the researched topic.

The development of international and national policies and recommendations in the field, as well as the regulatory framework, was monitored, for which the official websites of WHO, CDC, ECDC, as well as specialized professional organizations – FDI, ADA, BDA, BZS and BAZ were searched.

A large volume of international studies are covered, which are analyzed in several directions - applied methodology; results regarding knowledge, attitudes and practices of dental professionals; identified gaps; given recommendations for compensatory training and organizational measures. It is concluded that in Bulgaria the control of cross-infections in dental laboratories is insufficiently studied (only two reports on the topic were found, with a small sample size limiting broad generalizations).

The logically structured and comprehensive literature review reveals the doctoral student's broad awareness and justifies the choice of topic, relevance, goal and objectives of the dissertation.

Methodology

The main goal is stated in the title of the dissertation, specified in 5 tasks, precisely reflecting the research work carried out by Nela Kalpakchieva. The 6 research hypotheses are correctly formulated.

The design of the study is adequate to achieve the tasks and includes the development of a methodology for:

- two theoretical studies, in compliance with the requirements, principles and criteria for scientific research in an electronic environment;
- two empirical studies, carried out using sociological methods, the tools of which include the two developed questionnaires, the structure and content of which are appropriate to the specifics of the information collected from the respective group of respondents.

The statistical processing of the data was carried out through descriptive analysis, correlation analysis to search for dependencies, parametric (t-test) and non-parametric tests for evaluating hypotheses.

The results of the studies and their discussion are presented in Chapter III. The empirical study among dental technicians examined in detail the self-assessment of

awareness on important issues related to a) risks of cross-infection (CI) measures for their control in dental laboratories; b) infection control practices in the laboratory; c) attitudes towards infection control.

The author identified a discrepancy between the respondents high self-assessment of awareness regarding the nature, risk and control of CI (76.6% of dentists and 54.8% of dental technicians) and the actual actions in practice for infection prevention and control, as well as a low level of compliance with international recommendations, which leads to worrying consequences for the safety of patients and dental professionals.

The low share of dental technicians who received training on the topic after graduation (20%) is disturbing, given the expressed need for such training (82.1% of those working in large practices). The results, based on a two-stage regression analysis, convincingly show the relationship between “additional training conducted after completing their basic education” and the level of compliance with the CI control measures.

A logical object of study is also the communication between the dental laboratory and the other participant in the chain – the dental medical establishments, which is insufficiently effective. A difference is also revealed between the level of awareness in the two professional groups. Data are presented for a very high frequency of injuring incidents with sharp objects during work among dental technicians participating in the study (92.6%). The dissertation work would be enriched if data on the real risk of CI were presented (i.e. cases of infected patients and staff).

The established strong correlation between the degree of awareness of the risk of CI and the implementation of control over them directs the Nela Kalpakchieva to the need for increasing knowledge on these issues. In this regard, the “Model for the organization of infection control training in dental technical practice – introductory, periodic and in accordance with new risk circumstances” was developed.

The dissertation focuses exclusively on continues education, without mentioning what the preparation in basic education of graduates on the topic is, the place of this subject in the curriculum and plan of the academic disciplines.

Conclusions and recommendations. Based on the results obtained, **11 conclusions** have been formulated, adequate to the content. Nela Kalpakchieva's study reveals a number of problems related to minimizing CI in dental practice: lack of regulations and specific requirements for dental laboratories; lack of awareness among dental technicians regarding CI control; a disturbing difference between self-assessment and reality, with consequences for the safety of patients and dental professionals; lack of regulation for the continues education of dental technicians on the topic; low level of compliance with international recommendations for CI control.

In connection with conclusions, **recommendations** have been prepared, aimed at educational and healthcare policy, and professional organizations, which I assess as valuable and adequate, corresponding to the results obtained, but not well structured in terms of addressing them.

The reference for the **contributions**, presented with the dissertation, objectively reflects the real achievements of the author. The contributions in the dissertation are a theoretical-cognitive and practical-applied, which I accept. Options are available for prevention and control of infections in dental practice are offered. The need to increase the awareness of health professionals on the issues raised is highlighted.

In connection with the dissertation, the doctoral student has presented two full-text **publications**, respectively in the journal "Varna Medical Forum" and in "Scripta Scientifica Medica". No participation in scientific forums is indicated.

The abstract is 54 standard pages long and faithfully reproduces the structure and content, conclusions, proposals, contributions and publications of the dissertation.

Conclusion. The Nela Kalpakchieva has successfully completed the doctoral program in "Nursing care Management". The dissertation work she presents is in a complete and well-formed reflecting knowledge and skills for scientific and research activity of the author, and potential for scientific development. The work demonstrates Nela Kalpakchieva's serious interest and professional motivation for the topic under consideration. Her training and many years of professional experience as a dental clinician allow her to research and analyze the problems in depth.

All this gives me reason to positively evaluate the dissertation work "Knowledge, attitudes and practices related to the control of cross-infections in dental laboratories" and to **propose the awarding to Nela Georgieva Kalpakchieva the educational and scientific degree "Doctor" in the field of higher education: 7. "Healthcare and Sports", professional field: 7.4. "Public Health", scientific specialty: "Management of nursing care"**.

23.03.2026

Prepared the statement:

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

(Prof. Stoyanka Popova MD, PhD)