

STATEMENT

By Assoc. Prof. Miglena Asenova Kolarova - Dimitrova, MD, PhD
Department of Hygiene and Epidemiology
Faculty of Public Health, Medical University – Varna
Member of the Scientific Jury, according to Order No. R-109-261/28.07.2026 of the Rector of
Medical University – Varna

Regarding the Dissertation thesis on the Topic: "Infection Prevention and Control - Public Health Challenges and Priority Solutions Through the 'One Health' Approach", for the award of the educational and scientific degree of "Doctor" (PhD) in the Field of Higher Education: 7. Healthcare and Sports, Professional Field: 7.4. Public Health, Scientific Specialty: "Public Health Management", candidate Dragomir Tsvetanov Ivanov, full-time PhD student at the Department of Social Medicine and Healthcare Organization, Faculty of Public Health, Medical University – Varna, with academic supervisors: Prof. Desislava Vankova, MD, PhD, DSc and Prof. Tsonko Paunov, MD, PhD.

General Presentation of the Procedure and the PhD Candidat

By Order No. R-109-261/28.07.2026 of the Rector of Medical University – Varna, I have been selected as a member of the Scientific Jury, and based on Protocol No. 1/ 10.08.2026, I have been designated to prepare a statement (in Bulgarian and English) regarding the procedure for acquiring the educational and scientific degree "Doctor" (PhD) with candidate Dr. Dragomir Ivanov, full-time PhD student at the Department of Social Medicine and Healthcare Organization, Faculty of Public Health, Medical University – Varna.

Data on the Procedure

All administrative documents regarding the procedure required by the Act on Development of the Academic Staff in the Republic of Bulgaria (ADASRB), its Implementing Rules, and the Regulations for Development of the Academic Staff of MU-Varna have been submitted. Dr. Dragomir Ivanov was dismissed with the right to defense by Order No. R-109-63/27.01.2026 of the Rector of Medical University – Varna.

Biographical Notes

Dr. Ivanov was born in the town of Vidin. He graduated from the University of Forestry, Faculty of Veterinary Medicine, Sofia, with honors in 2003. He completed a Postgraduate Specialization in Veterinary Epidemiology and Infectious Diseases (2006–2007). Since 2019, he holds a Master's degree in Public Health and Health Management from Medical University – Pleven. He serves as an Assistant Professor at the Department of Social Medicine and Healthcare Organization, Medical University "Prof. Dr. Paraskev Stoyanov" – Varna.

Professional Experience and Activities

- **Founder and Chairman**, "ONE HEALTH" Association – Bulgaria (since 2023) – a non-profit organization focused on training human and veterinary medicine specialists.
- **Liaison Officer and National Coordinator One Health**: EU JAMRAI 2 – European Joint Action on Antimicrobial Resistance and Healthcare-Associated Infections, funded by the European Commission (2024–2027).

- **Independent Consultant, Auditor, and Trainer** in Infection Prevention and Control – "Health Point | #thinkPrevention" and "RSR Infection Prevention and Control" initiatives (2021).
- **Innovator and Manager** in the business sector, with a focus on prevention and control of healthcare-associated infections (HAIs) (2009–2025).
- **Veterinary Practice** – small animals (2003–2006).
- **Licensed Private Practitioner Veterinarian** – livestock/production animals (2009–present).
- **Research Fellow III degree**, National Diagnostic and Research Veterinary Medical Institute, Sofia (2003–2006).

Interests and Focus "ONE HEALTH"

- Interconnecting human, animal, and environmental health through the "One Health" concept.
- Advancing infection prevention and control and combating antimicrobial resistance across human and veterinary medicine.
- Combining scientific expertise with innovative business solutions to enhance public health.
- Professional goal: to contribute to safeguarding human and animal health through scientific research, international collaboration, and sustainable prevention strategies.

Relevance of the Topic

Sustainable management of infection prevention and control, as well as effective containment of AMR, require an interdisciplinary and coordinated approach, most adequately realized through the "One Health" (OH) concept.

Over the past two decades, the "One Health" (OH) approach has gained key significance in global health policy. It represents a concept rooted in the principle that the health of humans, domestic and wild animals, plants and natural ecosystems are intrinsically linked. The main goal of the "One Health" approach is to support the maintenance and improvement of human health and well-being through prevention, early detection, and mitigation of risks arising from the interaction between humans, animals, and the environment. This is especially vital in the context of growing challenges related to zoonoses, antimicrobial resistance and the consequences of ecosystem changes that cannot be managed effectively within isolated individual sectors. For this reason, the effective management of infectious risks and AMR cannot be confined solely to human medicine; it requires integrated measures across both sectors, which share common mechanisms of infection control, epidemiological and epizootiological challenges, alongside a need for systemic capacity building. Training professionals from various disciplines (medicine, veterinary medicine, ecology, and social sciences) fosters a common terminology and shared working methods. This approach acknowledges that most infectious diseases, including emerging and re-emerging pathogens, are products of complex interactions between humans, animals, and ecosystems. Numerous studies demonstrate that effective IPC programs require multimodal interventions involving training, monitoring, behavioral changes, communication, and leadership within healthcare structures.

From a "One Health" perspective, effective interaction between the human and veterinary fields requires not only information exchange, but also the integration of resources, procedures, and operational protocols that enable joint action in the prevention, diagnosis, and risk management of public health threats. In this context, differences in participant responses

indicate a lack of clearly institutionalized coordination mechanisms that extend beyond formal communication lines, despite the principles of "One Health" being recognized as correct. Therefore, the need for a scientific analysis of knowledge, attitudes, and practices among professional communities in Bulgaria is essential for developing adequate and sustainable policies.

The presented results indicate that communication between specialists exists, yet it fails to translate into effective operational coordination. To realize the true potential of "One Health," it is necessary to build an integrated framework that ensures interoperability and effective inter-institutional collaboration during real-world health challenges.

This dissertation thesis demonstrates that although communication among specialists is not entirely absent, current mechanisms fail to convert this exchange into effective coordination and action. Achieving the true potential of "One Health" requires not only maintaining information channels, but also building an integrated framework that provides operational compatibility and effective inter-agency cooperation when facing actual public health threats.

The "One Health" approach represents a strategic framework for the effective management of modern health challenges stemming from human-animal-environmental interactions. It demands interdisciplinary collaboration across public health, veterinary medicine, and environmental sciences for more effective disease prevention, detection, and control.

General Characteristics of the Dissertation Thesis

The dissertation thesis prepared by the PhD candidate Dragomir Ivanov consists of 151 pages and is illustrated with 54 figures and 12 tables. It includes the following chapters: Introduction, Literature Review, Aim and Objectives, Materials and Methods and Study Organization, Results and Discussion, Conclusions, Contributions, Conclusion, and Published Articles, Conference/Congress Presentations in Bulgaria, International Forums, and Self-organized Events and Activities. The bibliography includes 350 literature sources, of which 8 are in Cyrillic and 342 in Latin script.

Literature review is focused, thorough, and well-structured. It demonstrates the candidate's ability to critically evaluate, summarize, systematize, and interpret scientific literature.

The aim of the dissertation is clearly and precisely defined. The 5 established tasks are well-formulated and correspond directly to the stated aim.

Methodology: I highly appreciate the methods used for the conducted studies, because a complete set was used, which explores the versatility of the problem and corresponds to the set goals and objectives.

Documentary Method: A deep analysis of accessible sources was conducted, including publications, articles, books, and textbooks related to the subject matter;

Sociological Method: A study was conducted using a structured questionnaire (direct individual survey distributed in hard copy) containing 24 and 21 questions respectively. The questionnaire includes closed-ended and semi-open questions. It covers knowledge, attitudes, and practices across two professional groups—human medical specialists and veterinary physicians—in the areas of IPC, HAIs/VHAIs, zoonoses, AMR, and "One Health" principles. To compare and analyze knowledge, attitudes, and practices, the questionnaire items were grouped into 7 (seven) modules;

Statistical Methods: Descriptive and inferential statistics were used. Descriptive statistics presented quantitative data via percentage distributions and statistical metrics—calculating measures of central tendency (mean, median, mode) and variability (standard deviation, dispersion range)—as well as comparing subgroups within the studied population. Non-parametric correlation analysis (Spearman's rank-order correlation) and the Chi-squared test for

proportions were applied to assess the statistical significance of differences in relative shares (%) of qualitative variables. The level of statistical significance was set at $p < 0.05$.

Graphical Methods: To ensure clarity and accessibility of the statistical information, key results are presented through visual tables and figures.

Results: The findings directly follow the set objectives and are presented in three main groups: group surveys of veterinary specialists, surveys of medical and non-medical specialists, and a comparative analysis of knowledge, attitudes, and practices between human and veterinary medicine.

Conclusions: The 15 **conclusions** drawn are correctly formulated. They correspond to the set goals and objectives and logically follow the results and statistical analysis. The comparative analysis used between individual medical institutions and professional groups creates an opportunity to identify specific institutional and professional differences that influence the level of awareness, commitment and participation of specialists. The need for the development of interdisciplinary training programs and strengthening cooperation between human and veterinary medicine is emphasized.

Based on the formulated conclusions and recommendations for improving infection prevention and control, limiting antimicrobial resistance and integrating the One Health approach, two conceptual models have been proposed: a model for integrating the One Health approach at national and institutional levels and a process-factor model for increasing the effectiveness of IPC and limiting AMR through the One Health approach. The integration of training modules focused on the One Health principles could improve communication between different professional groups and support the development of more effective infection control mechanisms.

The abstract faithfully reproduces the content of the dissertation. It is prepared in a volume of 85 standard pages and accurately presents the structure and content, contributions, participations and publications on the dissertation.

In connection with the dissertation, the doctoral student has presented 4 publications

In **conclusion**, the dissertation meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria. The work is presented in a completed form. The content of the dissertation is legally and thoroughly developed, well illustrated and presented in good professional language. Technically, the dissertation is formatted according to the requirements.

I give a **positive evaluation** to the dissertation thesis "*Infection Prevention and Control - Public Health Challenges and Priority Solutions Through the 'One Health' Approach*" and cast my **positive vote** for awarding **Dr. Dragomir Ivanov** the educational and scientific degree of "**Doctor**" (PhD) in Higher Education Field: 7. Healthcare and Sports, Professional Field: 7.4. Public Health, Scientific Specialty: "Public Health Management".

10.09.2026

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

Prepared by:

Varna /Assoc. Prof. Dr. Miglena Kolarova - Dimitrova, MD/