

## STATEMENT OF OPINION

By Assoc. prof. Desislava Vankova, MD, MPH, PhD, DSc

Regarding the PhD thesis

**"Infant mortality in Bulgaria -  
health policy and cultural-historical aspects"  
by Nadezhda Mihaylova-Georgieva**

a PhD candidate in a doctoral program, specialty "Public Health Management"  
(enrolled by Order No. 109-567/11.12.2018), professional direction 7.4 "Public  
Health", field of higher education 7. Healthcare and sports

**, Scientific supervisor: Prof. Dr. Klara Dokova, MPH, PhD**

I present this statement of opinion in my capacity as a member of the Scientific Jury, appointed by Order No. R 109-23/29.01.2024 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. Based on Protocol No. 1 of 08.02.2024. I have been assigned to prepare a statement of opinion on the evaluation of the dissertation work of Nadezhda Mihailova-Georgieva - a PhD candidate in the Department of "Social Medicine and Organization of Health Care", Faculty of Public Health, Medical University of Varna, with a supervisor Prof. Dr. Klara Dokova. The dissertation work was discussed and proposed for defense by an extended departmental council of the Department of "Social Medicine and Health Care Organization" at the Medical University of Varna (January 10, 2024).

### **Brief biographical data of the PhD candidate:**

Nadezhda Mihailova-Georgieva graduated from the legendary Varna French High School. Her higher education took various useful directions until she successfully defended the Master's Degree in Public Health at Medical University-Varna (2018). In fact, Nadezhda Mihailova's research interests in the study of health and health inequalities are predetermined, and the work on the dissertation "Infant mortality in Bulgaria - health policy and cultural-historical aspects" is a natural continuation of her education and personal development. Nadezhda Mihailova-Georgieva has a multi-field career path that has given her the opportunity to look at health from many angles. Currently, Nadezhda Mihailova-Georgieva is an administrative coordinator at the Department of Nursing and Midwifery, and at the same time a part-time tutor at the Department of Social Medicine and Health Care Organization in the disciplines "Introduction to Public Health", "Information Systems and Technologies" and "Introduction to Health Informatics". Since 2023, Nadezhda Mihailova has been enrolled in the Master's program "Artificial Intelligence in Biomedicine" at the Medical University-Varna.

**General description of the dissertation:** The dissertation contains 155 pages. It is structured in four main chapters, illustrated with 10 tables and 19 figures. There are 6 appendices. The Reference list includes 218 sources, of which 79 are in Cyrillic and 139 in Latin.

**Relevance of the dissertation:** The relevance of the dissertation topic "**Infant mortality (IM) in Bulgaria – health polity and cultural-historical aspects**" is indisputable. Indicators of IM are among the most sensitive measures of the social progress. Despite the great decrease in IM in our country over the last 100 years, we are far behind the other EU countries. Therefore, the data and analyzes from the dissertation of the health polity, demographic, socio-economic and ethno-cultural determinants of IM in Bulgaria could be used to attract European attention to support scientific and field projects aimed at overcoming health inequalities in the EU community.

**Chapter One. The literature review** represents original theoretical-historical research, structured in ten sections: 1. IM - historical view; 2. First attempts to measure IM. Retrospective calculations of IM for the era before mandatory registration of vital events; 3. Philosophy and development of the "child" concept and attitude to child health and IM; 4. Registration of live births and deceased children - new practice; 5. IM - indicator of social and health well-being. Indicator dynamics by country; 6. Combating IM - organizations, institutions, individuals; 7. The contribution of medical science to reducing IM; 8. Determinants influencing the level of IM; 9. The fight against IM in Bulgaria 1920-1944; 10. Contemporary studies of IM in an international and national context.

The used literary sources are sufficient in number and quality. They represent scientific publications of Bulgarian and foreign researchers and the sources are accordingly. The Literature review is interesting, reflecting the PhD candidate's in-depth knowledge of the discussed issues and the scientific terminology. The way the literature review is presented shows the ability of the PhD candidate to systematize and analyze scientific information, convincingly arguing the relevance of the thematic focus, as well as the methodology of scientific research.

**Chapter Two. Aim, objectives and hypothesis:** they are defined clearly and concretely. The overall aim is "To study the dynamics of child mortality in Bulgaria in a health polity context for the period 1950-2020 and to assess the role of cultural and organizational factors in achieving favourable trends." The research objectives are five, directly related to the achievement of the aim, clearly formulated. Six hypotheses are presented, which find their confirmation in the Summary (discussion) at the end.

**Material and methods** - the four own studies are described accordingly.

- **First study:** theoretical-historical - to establish historical trends in the IM in connection with the development of the child concept during the years;

- **Second study:** analysis of IM in Bulgaria in European context - to track trends in IM, as follows - general and age-specific for Bulgaria in a comparative aspect with selected European countries for the period 1950-2020 and the differences between regions in the country us (NUTs 2);



- **Third study:** a structured online survey - to assess mothers' readiness for childbirth and care for the child in the period up to 1 year of age. A survey method was applied, with an original developed instrument with 30 questions, four of which were open (Appendix 4);

- **Fourth study:** a qualitative study (in-depth) of the importance of ethno-cultural factors, investigating cultural specificity in prenatal behaviour, and early childhood care among mothers of Roma origin (nests, settlements or neighborhoods are predefined, specifically Dulgopol and the Varna districts of Vladislavovo, Maksuda, Asparuhovo);

It is important to note that the quantitative and the qualitative study are part of a research project that was granted by the institutional "Nauka" Fund on the topic "Infant mortality in Bulgaria - a source of new approaches for optimizing children's health care". The studies received ethical approval.

**Chapter Three. Results and discussion.** This part of the dissertation is precisely framed and illustrated in four sections that correspond to the aim and objectives. Each of the sections is extremely well structured, the results are thoroughly presented, discussed and summarized. The presentation of the results and their discussion reflect Nadezhda Mihailova's ability to handle scientific data, apply appropriate methods of analysis and interpret thoroughly. In this part of the PhD thesis, the broader framework in which IM is considered deserves special attention. The analysis includes not only the classical indicators, the cultural and historical context, but also the contemporary civil movements in the context of human rights, the opportunities for equal and equitable access to healthcare.

**Chapter Four: Conclusions, Contributions.** The dissertation conclusions are synthesized in twelve points, as well as the main contributions such as theoretical-cognitive and practical-applied, and methodical. I accept their formulation, which is supported by the solid results and competent analyzes in the dissertation. It is important to note that the view of the still important problem of IM is adequate to the situation in the 21st century, which includes a strong reduction of the indicator and, at the same time, potential threats of an increase among vulnerable social groups. Qualitative research among the Roma community deserves special attention.

It can be summarized that the PhD thesis points out the lessons learnt by history while opening research windows of opportunity for future studies.

Nadezhda Mihailova-Georgieva presents **three full-text publications**, in which she is first or independent author.

**Short dissertation:** It is written on 86 pages, structured according to the requirements, synthesizing the main results achieved in the dissertation.

## CONCLUSION

The dissertation has indisputable theoretical-cognitive, methodological and practically applied results, which are an original contribution to science and meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (The Law), the Regulations for the Implementation of the Law and the Regulations of the Medical University of Varna. The presented materials and dissertation results fully correspond to the specific requirements adopted in connection with the Regulations of the Medical University of Varna for the application of the Law. The dissertation shows that the PhD candidate Nadezhda Mihailova-Georgieva possesses thorough theoretical knowledge and professional skills, and demonstrates qualities for independent conduct of scientific research.

This gives me the reason to confidently give my **positive assessment** of the scientific research in the dissertation work of Nadezhda Mihailova-Georgieva with a supervisor Prof. Dr. Klara Dokova.

I propose to the honourable scientific jury to award **the educational and scientific degree "Doctor of Philosophy" (PhD) to Nadezhda Mihailova-Georgieva** in the doctoral program of the specialty "Public Health Management", professional direction 7.4 "Public Health", field of higher education 7. Health care and sports.

24.04.2024

Varna

Reviewer:

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

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