

PhD Thesis Opinion

by Assoc. Prof. Irinka Atanasova Hristova, PhD

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A member of Scientific Jury, in accordance with Order No. P-109-475/18.12.2024

of The Rector of Medical University “Prof. Dr. Paraskev Stpoyanov” – Varna

Regarding: Dissertation titled: “Management of cardiac care in comorbid patients with acute myocardial infarction”

Field of higher education: 7. Healthcare and Sport, professional field 7.4. Public health and scientific specialty “Health care management”.

Author: Ivanka Atanasova Stoyanova, a full-time doctoral student, Medical University “Prof. Dr. Paraskev Stpoyanov” – Varna, Faculty of Public health

Academic Supervisors: Prof. Maria Negreva, MD, DSc

Prof. Silvia Borisova, PhD, DSc

Details of the procedure: By order of the Rector of MU–Varna No. P-109-522 dated 01.12.2021, Ivanka Atanasova Stoyanova was enrolled as a full-time doctoral student in the doctoral program “Health care management”. Based on the order of the Rector of the Medical University of Varna No. P-109-475 dated 18.12.2024, she was dismissed with the right to defend her dissertation.

Professional biography and career development

In 2013, Ivanka Stoyanova graduated from the Medical University of Varna with a Bachelor's degree in Nursing. In 2015, she obtained a Master's degree in Health care management. Her professional career began in 2009 as a nursing intern at the Medical University of Varna. Since 2013, she has been a nurse at the First Cardiology Clinic with ICU at the University Hospital “Saint Marina” Varna, and since 2021, she has held the position of Deputy Head Nurse in the same clinic.

She conducts practical exercises in the course “Nursing Care for Patients with Somatic Diseases” for the Nursing program at the Medical University “Prof. Dr. Paraskev Stoyanov” – Varna.

Characteristics of the dissertation research

Relevance of the dissertation

Given the increasing prevalence of cardiovascular diseases and the rising proportion of comorbid patients, the topic is highly relevant to modern medicine and public healthcare. The conducted research is based on a solid theoretical analysis and empirical data, which contributes to its significance. With the growing number of patients with comorbidities, the need for an integrated and personalized approach to medical care is becoming increasingly urgent. Comorbid conditions complicate the diagnosis, therapy, and long-term treatment of acute myocardial infarction (AMI), requiring a specific approach and individualized interventions. In this context, Ivanka Stoyanova's research is of vital importance, as it provides an in-depth analysis of the issues related to the care of these patients and outlines directions for

improvement. The dissertation is especially timely in light of the need to enhance the qualifications and competencies of nurses, who play a key role in managing the condition of comorbid patients with AMI.

Structure and characteristics of the dissertation

The total volume of the dissertation is 240 pages, structured into five chapters. It includes 35 figures, 18 tables, and 8 appendices. The bibliography consists of 247 sources, 6 of which are in Cyrillic, 241 in Latin script, half of which were published in the last 10 years.

The **first chapter** provides a comprehensive literature review that addresses the relevance and theoretical foundations of the issue. The following key aspects are discussed: the prevalence of cardiovascular diseases; risk factors for the development of acute myocardial infarction, including lifestyle, heredity, and comorbid conditions; specific challenges in the treatment of comorbid patients with AMI, as well as the need for individualized therapeutic approaches; the importance of the multidisciplinary team, including doctors, nurses, and other healthcare professionals, in the management of cardiological care is emphasized. The literature review is well-structured, with clearly presented data and contemporary sources, providing a solid scientific foundation for the subsequent analyses in the dissertation.

The **second chapter** defines the main research questions and the methods used. The methodology of the scientific research is presented, including the aim, objectives, working hypotheses, subject and object of the study, design and organization, and research methods. The chapter begins with a clearly formulated goal – to explore and analyze the main nursing activities and their role in the management of cardiological care for comorbid patients with AMI. The ultimate goal is the development of effective approaches to improve the quality, coordination, and individualization of nursing care. Seven specific tasks are outlined, and four working hypotheses are formulated. The stages of the research work are presented in a tabular form, reflecting the specific activities and their respective time frame for completion. The tools used are detailed. Overall, the second chapter of the dissertation is well-structured, clearly argued, and methodologically sound. It provides a solid foundation for the subsequent analyses and results of the study.

The **third chapter** of the dissertation presents the results of the empirical study and provides an in-depth analysis of the impact of lifestyle and medical care on the condition of comorbid patients with AMI. The main focus is placed on the characteristics of the studied healthcare professionals, the role of nurses in intensive cardiological care, and the factors for optimizing nursing interventions.

The study includes 223 medical specialists, among which 125 are nurses and 98 are physicians, working in various healthcare facilities across the country. The study also involves 200 comorbid patients with AMI, analyzing various demographic and clinical factors. The results show that patients with an unhealthy lifestyle have a higher risk of recurrent infarction and a worse prognosis. The study highlights the importance of training and further qualification of nurses in cardiology. A particularly valuable section is the research on the role of nurses in intensive care, as it emphasizes the practical contribution of nursing interventions. The results demonstrate how effective communication, proper monitoring, and targeted interventions can positively impact patient outcomes. Four key areas for improving nursing care have been identified: better coordination among medical specialists; implementation of standardized protocols – using checklists; improving monitoring and focusing on psychosocial support.

The **fourth chapter** is exceptionally comprehensive and detailed, covering a thorough analysis of the challenges in caring for comorbid patients with AMI and presenting practical frameworks for optimizing nursing activities. It begins with a summary of the key issues in the

management of cardiological care and defines five main aspects – integrated care, personalized approach, ensuring safety, continuous education, and the implementation of innovations. Based on this, the author develops integrated frameworks and tools for managing and monitoring the care process.

- ✓ The care management checklist for comorbid patients with AMI is an extremely valuable tool that can significantly improve the quality and safety of cardiological care. It is clearly structured, practically applicable, and meets international standards for nursing care.
- ✓ The nursing intervention guide is intended for nurses and provides standardized guidelines for managing nursing care for comorbid patients with AMI who require specialized and integrated care.
- ✓ The developed guidelines for monitoring and responding to acute conditions such as hypertensive crises or heart failure serve as action algorithms for critical situations. These guidelines are in line with the best clinical practices and play an important role in the timely response of the medical team in emergency situations. When implemented in practice, this document will ensure patient safety and ensure the application of optimal healthcare.
- ✓ For continuing education and enhancing competencies in nursing practice for comorbid patients with AMI, the doctoral student has developed two individual training programs for nurses: *Specialized Training in Nursing Care for Comorbid Patients with AMI* and *Rehabilitation and Nursing Care for Patients Post-Acute Myocardial Infarction in a Hospital Setting*, as well as two specialized training programs: “*Nurse for Cardiological Care in Comorbid Patients with Acute Myocardial Infarction*” and “*Nurse for Rehabilitation and Care of Comorbid Patients with Acute Myocardial Infarction*”.
- ✓ The developed Patient Education Program aims to enhance patients' understanding of the significance of risk factors and create conditions for active participation in the management of their own health. If implemented in practice, it would increase awareness and promote appropriate behavior for managing the risk factors of cardiovascular diseases.
- ✓ An organizational framework has also been created for conducting sessions on Care for Patients with Cardiological Diseases, targeted at the families and relatives of patients with AMI. This includes regular meetings where the multidisciplinary team provides practical guidelines and answers questions related to patient recovery.

This chapter of the dissertation presents an exceptionally in-depth and professionally developed analysis of the challenges and opportunities in nursing practice for comorbid patients with AMI. It is here that a high level of expertise, analytical precision, and practical applicability is demonstrated, which gives it an exceptionally valuable contribution to the scientific and clinical community. The doctoral student not only presents a comprehensive and structured view of contemporary cardiological care but also offers innovative solutions, standardized tools, and practical guidelines that can improve the effectiveness of medical care.

Chapter five of the dissertation represents a key conclusion of the study, in which the doctoral student makes in-depth conclusions based on the main results, formulates specific proposals for improving nursing care, and highlights the scientific and practical contributions of the work. This chapter collects, systematizes, and draws out the main scientific and practical achievements that could lead to a significant improvement in cardiological care for comorbid patients with AMI.

The doctoral student clearly identifies the contributions of her research in two main directions – theoretical-cognitive and applied-practical. I accept the report on the contributions,

reflecting real achievements as it is systematically presented by the doctoral student. These scientific contributions represent a significant added value to the existing knowledge in the field of cardiological care for comorbid patients with AMI.

The abstract consists of 89 pages, compiled in accordance with the requirements and reflecting the content of the dissertation. It is illustrated with tables and figures that present the information in a clear and specific manner.

In connection with the dissertation, 1 scientific publication has been presented.

Personal impressions – none.

Conclusion

The dissertation by Ivanka Atanasova Stoyanova is a significant scientific and practical study, with high value for both medical theory and clinical practice. The work is excellently structured, methodologically sound, and innovative, offering scientifically justified solutions for optimizing nursing care for comorbid patients with acute myocardial infarction. The objective of the dissertation study has been successfully achieved, and all tasks set have been completed. Based on a detailed analysis of the existing challenges in medical practice, this dissertation offers concrete practical solutions. The contributions of a theoretical-cognitive and practical-application nature of the study build upon existing scientific knowledge and provide real mechanisms for improving the quality of cardiological care in Bulgaria. The formulated conclusions are clearly argued, statistically supported, and practically applicable. The materials provided to me are sufficient to meet the criteria and requirements of the National Centre for Information and Documentation (NACID).

The dissertation by the doctoral student, with its relevance, scientific justification, and high practical value, deserves high academic recognition and praise.

All of this gives me a solid foundation to confidently provide a positive evaluation, and I believe that the dissertation by Ivanka Atanasova Stoyanova meets all the requirements for awarding the scientific and educational degree of “Doctor” in the field of higher education 7. Healthcare and Sport, professional field 7.4. Public health and scientific specialty “Health care management”.

06.03.2025

Ruse

Заличено на основание чл. 5,
§1, б. „В“ от Регламент (ЕС)
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Assoc. Prof. Irinka Hristova, PhD