

## **REVIEW**

**by Assoc. Prof. Anna Petrova Georgieva, Public Health Dr.,  
Department of Health Care,  
Faculty of Public Health,  
Medical University Varna  
internal member of a scientific jury**

**of the dissertation of Zhaneta Vasileva Stoyanova**

**on topic**

**"MODERN ASPECTS IN PROVIDING A SAFE HOSPITAL ENVIRONMENT IN  
THE PRACTICE OF NURSES"**

**for awarding the educational and scientific degree "doctor"**

**in the field of higher education 7. Healthcare and sports, professional direction 7.4.**

**Public health,**

**scientific specialty: Health Care Management**

**Research supervisor: Prof. Sonya Toncheva, Dr.P.H. Sc.**

### **Procedure data**

I present this opinion in my capacity of a member of the Scientific Jury, determined by Order No. R-109-120 of 02.15.23 of the Rector of the Medical University - Varna for providing a procedure for the defense of a dissertation work on the topic "Modern aspects of providing a safe hospital environment in the practice of nurses" by Zhaneta Vasileva Stoyanova, a doctoral student in the "Health Care" Department. According to Protocol No. 1/28.02.2023 of the first meeting of the Scientific Jury, I was appointed to present a review for the dissertation work and I was elected as the chairman of the Scientific Jury.

By order of the Rector of the Medical University – Varna No. R-100-43 of 31.01.2020, Zhaneta Vasileva Stoyanova was enrolled as a full-time doctoral student in the "Health Care" Department for the acquisition of the educational and scientific degree "Doctor" in field of higher education 7. Health care and sports, professional direction 7.4. Public health, in the scientific specialty "Health care management". A protocol was presented for a successfully passed exam to meet the doctoral minimum in the "Health care management" major, based on orders No. R-109-141/13.04.2021, No. R-109-141/13.04.2021 and No. R-109-142/13.04.2021. Another protocol was presented for a successfully passed exam to meet the doctoral minimum under foreign language, according to orders No. R-100-30/19.01.2021 and No. R-100-296/18.05.2021. Based on the decision of the departmental council of the Department of Health Care on the readiness for public defense and a proposal for a Scientific Jury with protocol No 259 of 26.01.2023, Zhaneta Vasileva Stoyanova was dismissed with the right of defense by Order of the Rector of the MU-Varna No. R-109-120 of 15.02.23.



The presented administrative documents and materials have been prepared and presented in exact accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for its Application, as well as with the Regulations on the Development of the Academic Staff of the Medical University - Varna.

### **Biographical data and career development of the doctoral student**

Zhaneta Vasileva Stoyanova was born on December 31, 1969 in the city of Varna. In 1987, she completed her secondary education at the 5th Unified secondary polytechnic school - city of Varna. In 1989, she acquired the "Nursing" major at Medical College - city of Varna. In 1989, she obtained a bachelor educational and qualification degree in "Health Care Management" at the Medical University - Sofia. She successively graduated with a Master EQD in "Public Health" in 2003 and a Master EQD in "Health Care Management" in 2011 at the Medical University - Varna.

Zhaneta Vasileva Stoyanova began her professional career at the Multipurpose hospital for active treatment (MPHAT) - Varna at the Military Medical Academy (MMA) in 1998 as a nurse in the emergency department, and from 1993 she moved to work in a cardiology room. From 2001 to the present, on the basis of a winning competition, she has held the position of head nurse of the MPHAT - Varna at the MMA. Zhaneta Vasileva Stoyanova was elected as the chairperson of the National Council of Head nurses, which is an indisputable proof of her high and valuable professionalism.

Along with her managerial activities, Zhaneta Stoyanova conducts educational and practical classes on Nursing care for patients with somatic diseases for students majoring in "Nursing" and participates as a mentor in the pre-graduate internship of EQD "Bachelor" and "Master" in the "Health Care Management" major.

The numerous publications of Zhaneta Stoyanova, her participation in scientific forums, in research projects and in various forms of continuing training prove her continuous pursuit of professional and scientific development and improvement.

### **General characteristics of the dissertation work**

The dissertation work developed by Zhaneta Stoyanova has a total volume of 147 pages. In terms of methodology and composition, it is built according to the adopted standard requirements in the field, it is presented in 5 chapters and includes: introduction, literature review, scientific research methodology, results of own research on the safety of the hospital environment, practical approaches to optimize the process to ensure of a safe hospital environment involving nurses, conclusions, suggestions, recommendations, references and appendices.

The dissertation submitted for review is illustrated with 47 figures, 34 tables and 5 appendices. At the beginning of the dissertation, the used abbreviations are given, which makes it easier to understand the content.

The bibliographic reference is correctly presented and includes 260 sources, of which 66 are in Cyrillic and 194 are in Latin.



### **Relevance of the topic**

The relevance of the presented dissertation work is indisputable, because in the recent years, modern healthcare defines the issue of safety as a global priority, and many countries respond with a study of safety in the provision of health care . A number of international studies prove that hospitals are not as safe as they should be. In order to change this situation, in recent years, a large number of medical facilities around the world have turned their attention to issues related to the safety and quality of health services. The priority is to identify the causes and factors that put patients at risk of harm and develop programs to prevent and control this risk.

Providing a safe hospital environment is an important aspect of nursing practice. In this regard, the problems related to determining the role and contribution of nurses in the process of providing a safe hospital environment, as a condition for quality and safe care, determines the need of thorough research and formulation of adequate solutions.

Everything stated so far determines the topic dedicated to the modern aspects of providing a safe hospital environment in the practice of nurses, considered in the dissertation work, as particularly relevant and significant.

### **Knowing the problem**

Zhaneta Vasileva Stoyanova shows broad scientific awareness, competence and deep scientific knowledge of the problem to which she has directed her interest as a researcher. The author's theoretical reasoning stems from the detailed analysis of 260 sources of which 66 in Cyrillic and 194 in Latin. The studied literary material was evaluated critically and creatively, as a result of which an in-depth analysis of the theoretical statements was made. These facts give me reason to believe that the doctoral student is very well informed about the issues under consideration.

### **Evaluation of the content of the individual structural parts of the dissertation work**

In **the introduction** , the topicality of the chosen topic is substantiated.

**The first chapter** of the dissertation has a conceptual-theoretical character and is a literary overview of the researched issues, presented at 30 pages. It is logically structured and systematized and demonstrates in-depth theoretical knowledge on the developed topic and skills for independent conduct of scientific research by the doctoral student. The exposition is presented in an accessible and concise manner, in a high scientific style.

A detailed and thorough review was made of the available scientific literature and documents concerning the problem of "safe hospital environment ". An essential part of the literature review is the study and analysis of the main aspects of the concept of the safe hospital environment, as a guarantee of the quality of health care. In this regard, the doctoral student initially appropriately focuses on research and analysis of views on the concepts of quality, safety, safety culture and on modern developments of theory and practice related to the safe hospital environment.

The safe hospital environment and patient safety are studied and considered by the author as part of the global priority quality and safety of health care . In this regard, in the context of the



analysis of the joint efforts of experts on the issue under consideration, a special emphasis is placed on adopted Global Plan of Action for patient safety 2021-2030, in which WHO calls for urgent actions by countries and partners around the world to reduce harm to patients.

The comparative analysis of the policies and the normative regulation of the process of providing a safe hospital environment in our country and in other countries and the analysis of international initiatives in the field of patient safety and the hospital environment deserve a high rating. Based on an in-depth analysis, the conclusion is reached that at the national level no concept has been developed for the development of a system for the safety of hospital environment, as legislative initiatives in this direction exist and act independently, without looking for the connection between them so that the safety issue be comprehensively addressed and developed.

Based on the fact that infections related to medical care are among the most frequent adverse events occurring in the provision of health services, the doctoral student pays special attention to the importance of their control in the process of providing a safe hospital environment. Based on this, the main components of the prevention and control of healthcare-associated infections, as well as challenges and gaps in their implementation, are analyzed.

The study of the concept of a safe hospital environment in nursing has a significant contribution. In this regard, the author makes a historical review of the emergence and development of the concepts of the importance of a safe hospital environment in the practice of nurses. The skillful parallel made between the conceptual framework of Nightingale's environmental theory and the development of scientific thought and practices aimed at solving the problem under consideration from Nightingale's time to the present day has a high scientific value. Based on it, the PhD student concludes that "Although more than a century has passed between Nightingale and the publication of the IOM reports, too little attention has been paid to creating a safer hospital environment".

A practical implementation of the concept of a safe hospital environment , with an emphasis on its components and models, is also explored . Based on the conceptual model of nursing practice, adapted by the author , it is emphasized that providing a safe hospital environment in nursing practice is a complex process that covers many areas, with many interrelated elements. Justified is the need for presenting a comprehensive evidence-based model so that it can be implemented and evaluated as a system approach to a safe environment for nurses.

Emphasis is placed on the importance of safe care in nursing and the modern role of the nurse for their implementation. The main aspects of good nursing practice and responsibilities in the process of providing a safe hospital environment are studied .

Based on the literature review, the doctoral student reaches conclusions that convincingly justify the need and importance of the research presented in the dissertation and point to its goals and objectives. Thematically focused, logically built on serious sources, the literature review, along with its independent meaning, is a very good basis for building an adequate methodology of one's own research.



**The second chapter of the dissertation presents the methodology of the scientific research.**

**The aim of the research** is to investigate the modern aspects of providing a safe hospital environment with the participation of nurses and, on this basis, to develop optimal practical approaches guaranteeing safety. To achieve the goal, five tasks related to different aspects of the safe hospital environment have been set.

**The goal and tasks are precisely and clearly defined, aimed at solving the research problem.** Three working research hypotheses are formulated. The object, the subject and the scope of the study are presented in detail and precisely.

The methodology was developed according to all the rules for modern scientific research, taking into account the specificity of the object. The applied methods for collecting and processing the information are adequate to the tasks set: documentary method, quantitative methods (direct individual survey among 100 patients and 145 nurses from multidisciplinary hospitals in the system of the Military Medical Academy) and qualitative methods (semi-structured interview with 20 university lecturers and in-depth interview with 20 experts). The statistical methods for evaluating the results in the dissertation work are skillfully selected and correctly applied.

The research toolkit was also carefully prepared - questionnaires for surveying the opinion of patients and nurses, a questionnaire for a semi-structured interview with university lecturers and a questionnaire for an in-depth interview for expert evaluation by head nurses, health care professionals with acquired major in "Hospital hygiene, prevention and control of infections" and epidemiology physicians. The organization of the study is adequately developed and well presented. **Zhaneta Stoyanova shows very good possibilities for planning scientific research work, for which the role of her scientific supervisor Prof. Dr. Sonya Toncheva, D. P. H.Sc. is indisputable.**

**The third chapter of the dissertation presents the results of own studies of the safe hospital environment in the practice of nurses.**

In the first part of the third chapter, an analysis of nursing theories is made in the context of the process of providing a safe hospital environment in the practice of nurses, contributing to the determination of the specificity of nursing care in the depth of the researched problem. In chronological order, the main concepts of nursing theorists are presented and their point of contact, namely placing the environment at the focus of their theories and conceptual models, is emphasized. As a result of the analysis, the conclusion is reached that, regardless of the time of the formulation of the theories, a framework has been set for the relationship of care for the health and well-being of people and society with their surrounding environment and the processes that arise from this relationship.

In the second part of the third chapter, the dissertation presents an analysis and discussion of the results of the scientific study. A characterization of the studied groups of respondents was made according to a number of skillfully selected signs of observation, which, based on statistical processing, help to achieve quality, reliability and credibility of the results obtained and the conclusions drawn.

The level of awareness of nurses regarding the process of providing a safe hospital



environment, in terms of different areas of knowledge, was studied by means of a direct individual anonymous survey, using a five-point Likert scale. The nurses' self-assessment shows an even distribution of the relative shares with close values among "excellent", "very good" and "good" degree of awareness on the indicated topics. The results confirm the high importance of senior nurses (44.8%) and head nurses (33.8%) as the main sources of information. Data from the study of attitudes to learning about Safe Hospital Environments in Nursing Practice strongly suggest that almost all of the surveyed nurses expressed a desire to participate in training (89%). The results are gratifying, showing a significant attendance of educational forms by most nurses.

Particularly valuable and informative for clarifying the research problem is the comparative characterization of the opinion of the respondents regarding the role of nurses in the process of providing a safe hospital environment. For this purpose, the doctoral student very skilfully integrated quantitative and qualitative analysis when interpreting the opinions of nurses, patients, university lecturers and experts in the field of safe hospital environments. The majority of nurses, patients, university lecturers and all experts positively evaluate the contribution and role of nurses in providing the process of a safe hospital environment. More than half of all four groups of respondents believe that a nurse should be an active member of the team in the process of providing a safe hospital environment, thereby contributing to its effective course.

Of contributory nature is the study of the need to optimize nurse's participation in the process of providing a safe hospital environment. According to the results obtained, a significant part of nurses (87.6%), all university lecturers (100%) and all experts (100%) believe that a well-trained nurse could help optimize the process of providing safe hospital care environment. A large part of nurses (90.3%) expressed readiness to implement new models in their practice.

In this regard, the opinion of university lecturers was studied, through which the main elements that must be contained in the models for providing a safe hospital environment (leadership, organizational culture, staff training, control and risk management, scientific research, registration of deviation and development of indicators), as well as the areas for improvement in relation to the successful implementation of new approaches/models in the process of optimizing the safe hospital environment in nursing practices (culture, leadership, staffing, systemic vision, strategy and resources) were outlined.

Based on the fact that patients have the potential to provide valuable data on quality and safety and data on their improvement at a micro level, the PhD student focused on exploring their opinion about their safety as part of the process of providing a safe hospital environment. The patients' overall assessment of the safety of the hospital environment was summarized as good and very good. According to the majority of respondents, the process of providing a safe hospital environment in nursing practices is important and the role of nurses in it is significant. At the same time, the majority of respondents believe that the mentioned process can be improved.

A high scientific contribution is also the study of the opinion of experts, by means of an in-depth interview, regarding the need to optimize the process of providing a safe hospital environment. Based on the analysis of the data, the doctoral student brings out two main groups of statements around which the experts are united: the first is that the role of the nurse in the process of providing a safe hospital environment is key and should be affirmed, and according to the



second, the process of providing a safe hospital environment in nursing practice can be optimized by introducing new models and continuous training. Experts also point to the barriers that can make this process difficult – staff shortages, ineffective communication, lack of micro-management of adverse safety events, lack of team support.

**The presented results and their discussion fully correspond to the objectives and tasks and hypotheses set by the doctoral student.** The presentation of the obtained data and their discussion are carried out precisely, with rich graphical/tabular presentation and, where applicable, are statistically substantiated. All this is proof of the doctoral student's ability to handle the data from the conducted research, to reflect them correctly, to appropriately apply the appropriate methods of analysis and to thoroughly interpret the obtained results.

**The conclusions** are skillfully formulated, directly related to the research objective, tasks and working hypotheses. Correctly and in a synthesized form, they reflect the results of the scientific study.

Based on them and studied good practices, Zhaneta Stoyanova develops **practical approaches to optimizing the process of providing safe hospital environment with the participation of nurses.** Through a precise theoretical and strategic rationale, a Model for optimizing the process of providing safe hospital environment with the participation of nurses is presented. It is based on the three components of good professional models established and confirmed during the research: competences, professional relationships and values, as well as the main objectives of the process to optimize and provide a safe hospital environment. In the strategic rationale of the model the leading strategic objectives, expected and final results are laid down.

Of high practical-applied contribution is the organizational framework developed by the doctoral student to improve the process of providing safe hospital environment, a cycle for developing and maintaining leadership in the process of providing safe hospital environment in the practice of nurses, the measures proposed to improve the culture of safety, the outlined roles and responsibilities of the various entities in the process of providing safe hospital environment, as well as the presented mechanism for applying new models to optimize the process of providing safe hospital environment in the practices of nurses.

The developed Model for optimizing the process for providing safe hospital environment in nursing practice is proposed for expert evaluation, with the aim of introducing it into nursing practice, after adequate implementation and acceptance by the relevant institutions. A significant part of the experts (96.0%) have no comments and recommendations and consider that the Model for Optimizing the Process of Providing Safe Hospital Environment in Nursing Practice is applicable in nursing practice

**The contributions** of the dissertation work are presented in eleven points. Six of them are of a theoretical-cognitive nature and five of them are of a practical-applied nature.

I agree with the main contributions of the dissertation of a theoretical-cognitive and practical-applied nature indicated in the work.

**The formulated recommendations** are valuable and with precise addressees - at national level: to the Ministry of Health, Medical Universities, the Bulgarian Association of Healthcare Professionals and at the level of a medical institution: to hospital management.



Included in the five **appendices** are all the instruments used in the course of the research, as well as excerpts from expert comments from the in-depth interview conducted.

**The submitted abstract meets the regulatory requirements.** It precisely and clearly outlines the content of the dissertation work.

Three scientific publications and two scientific announcements at national and international scientific forums have been made in connection with the topic of the dissertation work.

I have no critical remarks on the presented dissertation work. It contains essential contributions to theory and practice. The overall work of Zhaneta Stoyanova is a proof of her possibilities for carrying out independent scientific work.

**Given the ever-increasing topicality of the issues presented and the possibility of further development, expansion and popularization of the research results, I recommend to Zhaneta Stoyanova that the work be published as a monograph.**

### **Personal impressions**

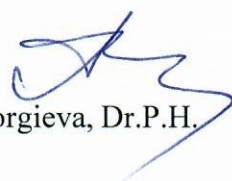
My personal impressions of Zhaneta Stoyanova were acquired from my contacts with her in connection with our joint activity on the organization and implementation of the training of students majoring in the "Nurse" specialty in the "Health Care" Department. She is a respected and loved teacher and colleague, possessing valuable personal qualities, such as positivity, dedication, responsibility, organization, precision, correctness, motivation and purposefulness. In addition, the knowledge, skills and high professionalism of Zhaneta Stoyanova characterize her as an excellent specialist, manager and educator, and at the same time a well-established researcher with significant theoretical knowledge and practical experience in the relevant field, mastering research methods when conducting scientific studies.

### **Conclusion**

Zhaneta Stoyanova's dissertation work is up-to-date and innovative. It has all the characteristics of a complete, in-depth academic study of an established problem and meets the requirements for an independent scientific work, according to the provisions of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Application and the Rules for the Development of the Academic Staff of a Medical University - Varna.

In conclusion, I have in mind the merits of the presented dissertation work and taking into account the indisputable authorship and the intended contribution points, I confidently give my positive vote and suggest to the respected members of the Scientific Jury to vote positively for the awarding of the educational and scientific degree "Doctor" to Zhaneta Vasileva Stoyanova in the scientific specialty "Management of health care", field of higher education 7. "Health and sport", professional direction 7.4. " Public Health".

03.04.2023  
city of Varna

Review prepared by:   
Assoc. Prof. Anna Georgieva, Dr.P.H.