### **STATEMENT**

by

## Prof. Silviya Borisova Dimitrova, PhD, DSc Head of the Department of Health Care Faculty of Public Health Medical University "Prof. Dr. Paraskev Stoyanov"- Varna

on dissertation for the award of educational and scientific degree "Doctor"
Field of higher education: 7. Health Care and Sport
Professional field: 7.4 Public Health
Speciality: Health Care Management

**Topic:** Nursing approach in patients with obstructive sleep apnoea - assessment of physiological changes and beneficial consequences

Author: Stoyanka Hristova Yancheva

Form of education: full-time form of study

Scientific Supervisors: Assoc. Prof. Mariana Nikolova Dimitrova, PhD and Prof. Dr. Mario

Petrov Milkov, PhD

#### 1. Procedure Details

In accordance with Order No. R-109-506 issued by the Rector of MU-Varna on November, 04, 2020, Stoyanka Hristova Yancheva was enrolled as a doctoral student in an full-time form of study to obtain an educational and scientific degree of "Doctor" in the area of higher education: 7. Healthcare and sports, Professional field 7.4 Public health, Speciality: Health Care Management. A protocol for successfully passing the doctoral exam has been submitted. Based on the decision of the Faculty Council of the Faculty of Public Health, Protocol No. 208 dated July 7th, 2023, regarding readiness for public defense and the appointment of a scientific jury, Stoyanka Yancheva has been enrolled with the right to defend with the Order of the Rector of MU-Varna No. R-109-351 dated July 7th, 2023.

The submitted set of documents complies with the Rules for the development of the academic staff at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna and includes a dissertation, abstract, autobiography, list of publications related to the topic of the dissertation, copies of publications, declarations, and other relevant documents.

## 2. Brief biographical data of the PhD student

Stoyanka Hristova Yancheva graduated with a degree in Nurse in 1987. After graduation, she started working as a nurse at University Hospital "Sveta Marina" - Clinic of Pneumology and Phthisiology.

Later graduated from Medical University-Pleven in the educational programs "Bachelor" and "Master" in "Health Care Management".

Stoyanka Yancheva began her career in university education in 2019, when she became an assistant in the Department of Health Care at Faculty of Public Health, Medical University-

Varna.

She has completed over 30 professional development courses nationally and internationally in health care. Stoyanka Yancheva has authored more than 14 academic publications and participated in national and international conferences.

## 3. Evaluation of Topic Relevance

Obstructive sleep apnea is a significant medical and social problem with worldwide relevance. The importance of the topic is determined by the severe consequences for individual and public health. Sleep medicine is a multidisciplinary field requiring special training, responsible teamwork and an individual approach to patients with sleep disorders. The prevention, diagnosis, treatment and follow-up of patients with obstructive sleep apnoea syndrome requires new competencies and responsibilities for health care professionals.

In her dissertation, the doctoral candidate examines the role of the nurse in providing somnological care in contemporary practice. The professional activities of the nurse to optimize care is a necessity for which changes must be made in the organization of modern practice. Taking and implementing actions, taking responsibility is a model of personalized nursing care, the basis of which are the individual needs of the patient.

In connection with the above facts, I believe that the topic chosen by Stoyanka Yancheva's dissertation topic is topical and of high scientific value.

The aim is adequately formulated in relation to the material included in the dissertation, the tasks are also fully and accurately set. The chosen topic allows to draw substantiated conclusions, proposals and to formulate contributory aspects.

The study of the nursing approach in the assessment of physiological changes and beneficial consequences among patients with obstructive sleep apnea in the dissertation work of Stoyanka Yancheva is relevant, promising and practically applicable to prove its scientific place in health care management.

### 4. Characteristics and Evaluation of the Dissertation

The dissertation, developed by Stoyanka Hristova Yancheva, is 162 pages long, structured according to the standard requirements, including: Introduction, Literature review, Methodology and organization of the research, Results of own studies, Optimization of care for patients with obstructive sleep apnea, Conclusions and contributions. It is richly illustrated with 95 figures and 10 tables and 4 appendices. The bibliographic reference includes 269 sources, 68 in Cyrillic and 201 in Latin.

The author provides an analytical review of the literature, examining historical aspects of the emergence of obstructive sleep apnea syndrome. In a logical sequence, Stoyanka Yancheva retrospectively discusses sleep medicine. The importance of the problem in economically developed countries and in our country is highlighted. The experience and knowledge of the doctoral student contribute to the correct and thorough analysis of the function, physiology and pathophysiology, as well as the emphasis on sleep disorders. Current aspects in the diagnosis, treatment and follow-up of patients with obstructive sleep apnea syndrome are analyzed. The profile of the sleep apnea patient is presented as well as care in contemporary nursing practice.

The logically structured literature review reveals the doctoral candidate's broad competences in the field of the problem under consideration.

The main goal and objectives are specifically formulated and reflect the precise research work carried out by Stoyanka Yancheva. The author uses a wide range of methods adequate to achieve the goal. The structure and content of the developed toolkit are subordinated to the specificity of the information gathered from the respective group of respondents. A conceptual design was developed for the organization of diagnosis, treatment and follow-up of patients with obstructive sleep apnea, as well as a card for the assessment and monitoring of medical changes in their condition.

Descriptive review and sociological research methods were used. In order to reveal the nature of the observed phenomena and their interdependencies, statistical methods of data analysis and interpretation were applied.

The survey instrument was self-developed and included questionnaires to explore the opinions of medical professionals and patients in medical institutions conducting research and treatment of obstructive sleep apnea. An in-depth interview questionnaire was developed to identify problems in the process of comprehensive care of patients with obstructive sleep apnea.

The dissertation presents results, logically structured and organized in chapter three. It presents the results of the research conducted on the approach to care in patients with obstructive sleep apnoea. Awareness and nursing activities regarding physiological changes and beneficial effects in care delivery are investigated. The role of the nurse in the diagnosis, treatment, and follow-up of the disease is defined.

The doctoral candidate analyzes the clinical and socio-economic implications of obstructive sleep apnoea for society and the individual. A prerequisite for successful autonomous nursing practice in the process of prevention, diagnosis and treatment is established. Despite high confidence in the nurse's competency, the results support the need to continually update and upgrade the nurse's knowledge and skills.

Skillfully, Stoyanka Yancheva explores the professional opportunities and competencies of the nurse for the care of patients with sleep apnea.

The doctoral student identifies the challenges facing the nursing profession - building confidence, independent practice, increasing competence, etc.

The opinion of medical specialists on the quality, effectiveness and opportunities for optimization of care in somnology practice was studied. According to them, the role of the nurse in the multidisciplinary team is that of a full member, with its own functions and responsibilities. The nurse can influence the patient in managing his or her own health.

Based on a comprehensive survey, the knowledge and skills required for both personal and professional care of patients with obstructive sleep apnea were identified. The competencies of the nurse in different areas - conducting polysomnography, polygraphy; health education; organization of patient follow-up, as well as effective communication, providing support for the patient and family, the environment are highlighted.

The results of this study set the groundwork for the development of conceptual designs for nursing care of patients with obstructive sleep apnea.

Idea projects are based on the main directions outlined in the study by Stoyanka Jancheva - Proactive approach to nursing care in patient education, Patient assessment card for conducting specialized sleep studies, Course for acquiring clinical and scientific knowledge in

the field of somnology. The PhD student discusses the findings and skilfully highlights them as deficits in practice.

The conceptual designs developed and proposed for implementation, presented by the Doctoral candidate, present and enable a nursing approach to patients with obstructive sleep apnea in an accessible way.

The statement of contributions presented with the dissertation reflects objectively the real achievements of Stoyanka Yancheva. The contributions in the dissertation are cognitivetheoretical in nature and practical-applied, which I accept.

The presented conclusions, clearly and accurately formulated, characterize in detail the results obtained from the fulfillment of the set tasks and purpose of the dissertation.

The formulated recommendations and contributions of the dissertation are made on the basis of the own data from the scientific study.

The dissertation is written in good language, precise in terms of terminology.

The abstract faithfully reproduces the content of the dissertation. It is written in clear, understandable language and in a scholarly style, reflecting the main points of the dissertation and giving a clear picture of the doctoral student's achievements.

# 5. Assessment of Publications and Personal Contribution of the Doctoral Candidate

The doctoral candidate has submitted three full-text publications on the topic of the dissertation in Bulgarian journals. In all three of them he is the first author, which reflects the contribution in the scientific developments.

## 6. Conclusion

Stoyanka Hristova Yancheva's dissertation is of high scientific and practical value, simultaneously contributing to quality improvement in the assessment of physiological changes and beneficial consequences for patients with obstructive sleep apnea and outlining the nursing approach in sleep medicine.

On the basis of the overall assessment of the documentation provided to me, I consider that Stoyanka Hristova Yancheva, fully meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulation for its Implementation, and the Regulation for the Development of the Academic Staff at the Medical University of Varna.

I give my affirmative vote for the award to the academic and scientific degree of Doctor Statement written by: Heccele
Prof. Silviya Borison to Stoyanka Hristova Yancheva

05.09.2023 Varna