

**STATEMENT**

**by Prof. Dr. Plamen Stoyanov Bozhinov, MD, PhD, DSc**

**Research Institute, Medical University – Pleven,**

**BHI, University Hospital “Heart and Brain” – Pleven,**

**on a dissertation on the topic**

**"HEALTH RELATED QUALITY OF LIFE IN PATIENTS WITH DISC  
DISEASE"**

**For the award of the educational and scientific degree "Philosophy Doctor"**

**In the field of higher education 7. Health and Sports, the professional field 7.1  
medicine and the scientific specialty "Neurology",**

On the basis of Order No. R-109-102/ 28.01.2025 of the Rector of MU - Varna and Protocol No. 1/06. 02. 2025, I am appointed as a member of the Scientific Jury with the presentation of an Statement regarding: dissertation work of Dr. Rositsa Gancheva Krasteva, doctoral student of study in the doctoral program "Neurology", enrolled with Order No. R-109-254/01.08.2019 at the Department of "Neurology and Neurosciences" of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna on the topic "Health related quality of life in patients with disc disease" for the award of the educational and scientific degree "Philosophy Doctor" with scientific supervisor Prof. Dr. Ara Garabed Kaprelyan, MD, PhD, DSc. This Statement has been developed and presented in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of this Law and the Regulations for the Development of the Academic Staff at the Medical University - Varna.

**Brief biographical data, qualifications and specializations**

Dr. Rositsa Gancheva Krasteva was born in 1972 in the town of Pavlikeni, completed her secondary education in the town of Ruse, at the AEG "Geo Milev" in 1991. In 1997, she graduated with very good results from the Medical University - Pleven as a Master in the specialty "Medicine" (Higher Education Diploma "Master", MES No. 000117 series MIEN 97, Reg. No. 003497/1997). In 2008, Dr. R. Krasteva acquired a specialty in "Neurology" at the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna (Certificate of recognized specialty No. 2668, Reg. No. 013603/20.06.2008, Series MUV – 2008). In 2009, he acquired additional

qualification for highly specialized activity in neurology – electroencephalography, and in 2015, respectively, for electromyography and ultrasound Doppler sonography.

### **Professional Achievements**

Dr. Krasteva's professional path began in 1998 as a physician in the Emergency Department and Emergency Admissions Department at the United Regional Hospital - Ruse. From 2002 to 2013, she was a resident physician in the First Neurology Department at the Ruse Hospital. From 2013 to 2014, she worked as a resident physician in the Cardiology Department at the MEDIKA Ruse Hospital, and from 2014 to the present, she has been the Head of the Department of Neurology at the MEDIKA Ruse Hospital. Since 2019, Dr. Krasteva has been an assistant professor at the “Angel Kanchev” University of Ruse, Department of Health Care, Faculty of Public Health and Health Care.

Dr. R. Krasteva is a member of the Bulgarian Society of Neurology and the Bulgarian Medical Union, a member of the Management Board of the Regional College of the Bulgarian Medical Association - Ruse for the terms of 2019 - 2021, 2021-2024, and for the term of 2024 - 2027 she is the Chairperson of the Control Commission of the Regional College of the Bulgarian Medical Association - Ruse. She is a member of the standing committees on Ecology and Health and Social Policy at the Municipal Council, Ruse, with the term of 2023 - 2027.

### **Completeness and structure of the dissertation**

The dissertation is dedicated to a current problem - the quality of life related to health in patients with disc disease. It is structured according to the standards adopted in our country for the award of the educational and scientific degree "Philosophy Doctor" and is presented in a form and volume corresponding to the requirements of the primary unit. The volume is 178 pages and contains 94 figures and 31 tables. The bibliography covers a total of 257 literary sources, of which 12 in Cyrillic and 245 in Latin, with over 80% of the citations being from the last 10 years. It has the following structure: introduction (1 page), literature review (48 pages), aim, tasks and hypotheses (1 page), clinical contingent and methods (2 pages), own results and discussion (80 pages), conclusions (3 pages), contributions (2 pages), bibliography (25 pages) and a list of publications related to the dissertation work (1 page).

The **literature review** is comprehensive, logically structured and concludes with a critical analysis of the data from the available literature. It presents the main epidemiological, pathophysiological and clinical characteristics of patients with herniated discs and highlights the differences in their profiles compared to patients



with non-specific low back pain or neck pain. The lack of similar research among the Bulgarian population is established, as well as the insufficient and fragmented research published in foreign scientific literature on the topic. The author pays special attention to neuropathic pain, which he considers to be a significant negative factor on the quality of life of patients with herniated discs. The conclusions from the literature review support the need for conducting such a scientific study in Bulgaria.

**The goals and objectives** are clearly formulated and are based on the conclusions from the literature review.

### **Clinical contingent and methods**

A total of 120 patients with herniated discs, aged 18 to 65 years, were included in the study, divided into groups by gender (64 men and 56 women), age (5 age groups), place of residence (70 urban and 50 rural residents) and localization of the herniated disc (76 with lumbar disc herniation and 44 – in the cervical region). The study was approved by the Research Ethics Committee at the Medical University of Varna with Protocol/Decision No. 135/28.09.2023. A survey method was used with a total of seven questionnaires for self-assessment of pain, disability, depression and health-related quality of life. The results obtained were processed with modern and appropriate statistical methods.

**Results and Discussion:** The results are presented in six sections, respectively sociodemographic characteristics and analysis of the study population, from the second to the fifth section – results and analysis of the results obtained from the questionnaires for pain intensity, level of depression, degree of disability and health-related quality of life. The last section presents the summarized correlation analysis of all the results obtained.

**The conclusions** are formulated according to the results obtained. I believe that the most important of them are:

1. The localization of the herniated disc is related to gender and place of residence, respectively. cervical herniated disc is more common among women, and lumbar herniated disc is more common among the rural population.
2. No statistical relationship is found between the localization of the herniated disc and the socio-demographic factors gender, place of residence and age.
3. Regarding depression, a statistical relationship has been established between place of residence and higher levels of depression in rural residents.

4. A relationship is found between gender and pain perception, with women with cervical and lumbar herniated disc having higher levels of pain compared to men, regardless of the other factors studied.

5. Certain factors such as gender, age, location of herniated disc and place of residence affect different domains of mental and physical health, and do not affect other domains.

6. The location of the herniated disc affects physical functioning, which is worse in those studied with lumbar DD, gender also affects this domain of quality of life, which has lower values in men.

7. Women have worse indicators in terms of energy and fatigue and there is a statistically significant relationship between gender and this domain.

8. Regarding health-related quality of life, it is found that pain and depression have a strong negative impact on all separate domains of mental and physical health.

**The contributions** are adequately formulated in accordance with the tasks set and the conclusions of the dissertation. I believe that the most important of them are the following:

1. A current and adequate study of the health-related quality of life of patients with disc disease among the Bulgarian population was conducted, with a comparative analysis of the individual domains of quality of life.

2. The relationship between pain, depression and disability in individual groups of patients was considered, depending on the localization of the disc herniation and certain demographic factors such as age, gender and place of residence.

3. It is proven that disc disease has a negative impact on the health-related quality of life, with a greater impact on physical than on mental health.

4. A negative correlation between age and General health and the development of depressive symptoms in patients with disc herniation is established.

5. The connections of the female gender with the lower pain threshold and with the cervical localization of the disc herniation are confirmed.

6. The strong correlation between depression and pain is confirmed, which has the greatest impact on disability and all indicators of health-related quality of life.

**Publications** related to the dissertation: Dr. R. Krasteva has presented three full-text publications related to the topic of the dissertation in Bulgarian periodicals, for the period 2021 - 2024.

**CONCLUSION:**

The presented dissertation is current and original and has theoretical and practical value for neurological science. Assessing the significance of the summaries made and the importance of the indicated contributions, I propose to the esteemed Scientific Jury to award the educational and scientific degree "Philosophy Doctor" to Dr. Rositsa Gancheva Krasteva, doctoral student at the Department of Neurology and Neurosciences of the Faculty of Medicine at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

05.03.2025  
DSc

Prof. Dr. Plamen Stoyanov Bozhinov, MD, PhD,

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