Pursuant to Protocol of the Faculty Council (FC) No. N 60 / 14.02.2022 and Order No. R-109-88/23.02.2022 2302 of the Rector of Medical University – Varna

This is a **REVIEW** of a dissertation thesis for the awarding of the educational and scientific degree "**Doctor/PhD**" in the scientific specialty "**Nephrology**" to Dr. Aleksandra Borislavova Stavreva, MD from Medical University "Prof. Dr. Paraskev Stoyanov" – Varna, Faculty of Medicine, Department "Second Department of Internal Diseases".

Topic: "Analysis and Evaluation of Psychological Factors in Patients with Chronic Kidney Disease in Pre-dialysis and Dialysis Stages"

By Prof. Emil Paskalev Dimitrov, MD, DSc.

Summary of the Dissertation and Findings

A significant characteristic in nephrology is **Chronic Kidney Disease (CKD)**, which has a direct bearing on the health of every person. When kidney function is impaired, disorders occur in all organs of the human body. A crucial moment in the development of chronic kidney disease is the onset of the need for **Kidney Replacement Therapy (KRT)**—dialysis treatment or kidney transplantation.

This moment is a turning point for all patients. They face a serious dilemma related to the change in treatment. The new treatment is highly significant for the preservation and continuation of their lives. It is very important to adapt correctly and promptly to new therapies.

In addition to these characteristics, patients experience new changes to which they must adapt, leading to concerns and disorders such as **anxiety** and **low spirits/depression**, which often persist for a very long period. The doctoral student has focused her attention on these characteristics of patient behavior. These behavioral characteristics are always present when the type of treatment changes and are of great importance for proper and rapid adaptation to new treatment.

The doctoral student sets a significant goal: to analyze and characterize the **psychological factors** in patients in the pre-dialysis and dialysis stages, and their influence on the **psychoemotional status** and **survival** in dialysis treatment. The doctoral student's approach is significant also with regard to the survival of patients on dialysis treatment. She sets **six main tasks**, clearly formulated to achieve the goal.

Dr. Aleksandra Borislavova Stavreva has good knowledge of these patients, has utilized a fully sufficient number of literary sources on the topic, and accepts as a **hypothesis** that patients in

the stage of dialysis treatment are more subjected to stress and depressive conditions. To achieve and prove her hypothesis, she makes use of a significant literature review in Cyrillic and Latin.

To achieve her goal, Dr. Stavreva, MD studied a large cohort of patients—90 in number, divided into two groups: 30 patients in the pre-dialysis stage and 60 patients undergoing dialysis treatment. She correctly defined inclusion and exclusion criteria and used specialized software for statistical processing.

The results prove **higher stress levels** in patients on dialysis treatment, and **significantly higher levels of depressive conditions** in patients before starting dialysis treatment. Patients in the pre-dialysis stage have significantly higher levels of indicators for **social support**. In patients on hemodialysis (HD), there is a stronger positive correlation with anxiety, fatigue, and a difficult correlation (due to a potential typo in the source, this may mean a *weak* or *hard-to-establish* correlation). In patients diagnosed with CKD, there is a strong direct proportional relationship in the manifestations of social support.

Contributions of the Dissertation Thesis

Scientific Contributions:

- Psychological factors are compared for the first time between patients in pre-dialysis and dialysis stages.
- The relationship between the signs of subjective acceptance of stress and depressive conditions in the pre-dialysis and dialysis stages is investigated for the first time.
- The significance of the factors stress, depressive conditions, and social support in dialysis patients is evaluated for the first time in our country.

Practical Contributions:

- Implementation of activities and detailed explanatory programs related to the prevention of the development of psychological conditions that affect the psychoemotional status of patients during the staging of CKD and at the moment of starting dialysis treatment.
- Implementation of programs for psycho-emotional screening.

Conclusion and Recommendation

In connection with the topic of the dissertation thesis, Dr. Aleksandra Borislavova Stavreva, MD has **four publications** in scientific journals. The materials presented for the procedure comply with the requirements for the development of academic staff in the Republic of Bulgaria and the

Rules for the Development of Academic Staff of the Medical University of Varna for the awarding of the scientific degree "Doctor/PhD".

Based on this, I recommend to the members of the esteemed jury to award Dr. Aleksandra Borislavova Stavreva, MD the educational and scientific degree "Doctor/PhD" in the scientific specialty "Nephrology" in professional field 7.1. Medicine from the field of higher education 7. Healthcare and Sports.

Sofia, 25.10.2025

Prof. Emil Paskalev, MD, DSc.

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