

To the scientific jury
Determined by order No. R-109-408 / 27.09.2023 of the Rector
of MU “Prof. Dr. Paraskev Stoyanov” – Varna

OPINION

from

ASSOC. PROF. VLADISLAV ROSENOV DUNEV, MD, PhD

Head of the Department of Urology, Faculty of Medicine, MU - Pleven

on

the dissertation of DR. DOYCHIN GEORGIEV NIKOLOV

Assistant to the Department of Urology / Department of Surgical Diseases
MU “Prof. Dr. Paraskev Stoyanov” - Varna

on the topic:

**“ CHALLENGES FOR HOSPITAL UROLOGY PRACTICE IN THE
CONTEXT OF THE COVID-19 PANDEMIC ”**

for awarding the educational and scientific “PhD” degree in the field of higher education 7. “Healthcare and sports”, professional direction 7.1. “Medicine” in the scientific specialty “Urology”

The COVID-19 pandemic has caused significant changes and challenges in the field of healthcare worldwide, including in urological practice. To maintain the quality of medical care and patient safety, hospital services had to adapt to the new situation. Medical staff faced extremely difficult situations related to the treatment of patients with COVID-19, but continued to work on other medical pathology including surgical means. It is interesting to study the impact of the pandemic on urological hospitalizations and surgical treatment. There is not enough data in the world literature on the impact of the pandemic on planning and performing urological procedures, nor are there developed recommendations for improving urological practice in a pandemic.

Everything said so far underscores that Dr. Nikolov’s dissertation has a specific, current, and clear goal: to study and analyze the challenges of the impact of the COVID-19 pandemic on hospitalizations and surgical activity in hospital urological practice, proposing an algorithm for behavior after prioritizing patients with various urological diseases. It is evident that Dr. Nikolov has put a lot of effort and work into solving these new problems in urological practice.

The dissertation is presented on 126 pages and is structured according to the requirements as follows: introduction, literature review, goals and tasks, material

and methods, results from own research, discussion, conclusion, conclusions, applications, contributions, and bibliography. It is illustrated with 25 tables and 40 figures. The bibliography consists of 190 titles, of which 16 are in Cyrillic and 174 in Latin, sufficient for the problem under study. The majority of the publications are from recent years.

The literature review presented by the doctoral student demonstrates a very good knowledge of the existing information on the discussed topic in a historical plan and in modern times with accents on epidemiology, pathophysiology, clinical picture from various organs and systems including excretory and sexual system. The available information about the influence of the pandemic on the diagnosis and treatment of various urological diseases and their prioritization is presented. The data in the review are detailed and exhaustive.

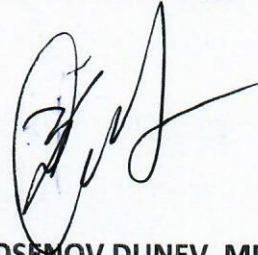
The goal of the study is clearly formulated and specific. For its realization, the doctoral student sets himself 6 feasible tasks, correctly formulated theoretically and practically, allowing for in-depth and targeted research. They correspond to his accumulated experience in this direction and summarize the questions posed in the literature review. In the chapter "Material and Methods" are considered for the period before COVID-19 (01.01.2018 to 13.03.2020) - 4230 patients and for the period from 14.03.2020 to 31.12.2021 (period during COVID-19) - 2794 patients. The number of patients is completely sufficient and allows for scientific development with obtained real results. Here it should be noted that Dr. Nikolov has personally participated in the diagnostic-treatment process with a large part of the patients. The statistical methods used are suitable for solving the set tasks and establishing the existing dependencies. In all sections of chapters "Results" and "Discussion" impress with extensive and in-depth discussions, comparisons of obtained results with those of other leading European centers and authors, comparison of made conclusions. Based on them Dr. Nikolov makes 7 summarized conclusions with significant scientific and practical value for surgical treatment and behavior in patients with urological diseases in a pandemic situation. The scientific contributions of the dissertation are 5 in number. The most significant one is: "A diagnostic and therapeutic algorithm has been developed that is consistent with the country's health system and suitable to serve as a model in future epidemic settings of a similar nature."

In conclusion I would like to underline that presented dissertation work by Dr. Doichin Nikolov is on a current topic and is a successful scientific study of work in urological clinics under pandemic conditions. The number of studied patients is sufficient to make scientifically justified conclusions. The use of modern methods, sufficient clinical material, correct interpretation of results are a sure prerequisite for good mastery of material and serious contributions to this problem. All this gives me moral grounds to recommend to members of

respected scientific jury to vote positively and award Dr. Doichin Georgiev Nikolov educational "PhD" degree.

16 oct. 2023

With respect:

A handwritten signature in black ink, appearing to be 'V. Dunev', written in a cursive style.

(ASSOC. PROF. VLADISLAV ROSENOV DUNEV, MD, PhD)