

# OPINION

**By Assoc. Prof. Kalina Zlatkova Trifonova-Slaveykova, MD, PhD,**

Department of Otorhinolaryngology and Ophthalmology,

At Medical Faculty, Trakia University – Stara Zagora

On the basis of Order No. 109-411/22.11.24

by the Rector of Medical University-Varna

**Subject:** The dissertation of Dr. Silviya Nikolaeva Nikolova, PhD student in full-time education, at the Department of Eye Diseases and Visual Sciences at the Medical

University "Prof. Dr. Paraskev Stoyanov" - Varna on the topic:

"Approach to uveitis in Bulgaria" for the acquisition of an educational and scientific degree "Doctor"

in the scientific specialty "Ophthalmology",

professional field 7.1 "Medicine",

field of higher education 7. Health and Sports

with supervisor Assoc. Prof. Binna Nikolaeva Nencheva, MD, PhD

## **Information about the PhD student:**

Dr. Silviya Nikolaeva Nikolova completed her secondary education at "Ivan Vazov" Secondary School in Burgas in 2001. In 2009 she became a master of medicine in the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna. In 2018 she acquired a degree in Ophthalmology from the Medical University of Varna. Since 2021 she has been part-time assistant professor at the Department of Eye Diseases and Visual Sciences at MU-Varna, and at the end of the same year she became a full-time assistant for the specialty Medical Optician and began working as an ophthalmologist at the Hospital for Active Treatment in Varna. She is also part of the team of specialists at the Eye Medical Center Varna and Dr. Grupchevi Vision Center. Her research interests are focused on the treatment and follow-up of patients with uveitis, surgical treatment of the anterior eye segment and ocular adnexa, treatment and follow-up of patients with glaucoma. She speaks Russian and English and has very good computer skills.

### **Data on the preparation of the dissertation:**

The dissertation contains 212 pages, including 22 tables and 60 figures. The PhD student cited 217 literary sources. Five chapters are presented, corresponding to the set purpose and tasks which meet the requirements for the design of a dissertation.

### **Relevance of the problem:**

Dr. Nikolova has focused on the problem of uveitis, due to the multifaceted nature of the disease and the still open number of questions that are yet to be answered. The disease mostly affects the working-age population and can lead to permanent disability and blindness. Understanding the prevalence and etiology of uveitis in different regions would help clinicians in diagnosis and conducting proper treatment of patients.

**The literature review** is sufficiently detailed and covers all the important components in acquainting with a medical problem. The author begins with a description of the anatomy of the uvea and also considers the types of classifications, frequency, prevalence, risk factors, etiology, pathogenesis, diagnosis, treatment and complications of uveitis.

The **purpose** of the study conducted by Dr. Nikolova is to assess the socio-demographic characteristics, diagnostic and therapeutic algorithms and complications in patients with uveitis, based on retrospective analysis and prospective follow-up for a period of 8 years. The goal is correctly formulated, and 6 precisely set tasks are based on it.

The **study** was conducted on the territory of the University Specialized Hospital of Eye Diseases for Active Treatment – Varna for a period of 8 years. The study was divided into two periods – a retrospective analysis of medical documentation with a duration of 5 years and a prospective analysis with a duration of 3 years. 219 patients who have undergone treatment in the respective medical institution have been examined. The selection of patients is based on **precisely defined criteria**. The **sample** included in the study is large enough, given the average incidence of the disease. Patients have signed an **informed consent** to participate in the study.

The **statistical methods** for data analysis are well selected using dispersion, variation, correlation, regression, comparative analysis and risk assessment. The study integrates the analysis of medical documentation, with a questionnaire method and clinical studies of patients.

All **tasks** are completed in the results, which are **well illustrated** in graphs and tables. The **conclusions** drawn from the results are interesting. A trend towards an increase in the incidence and recurrence of uveitis has been established, with a rejuvenation of the disease mainly in men and people from rural regions. The male sex emerged as a risk factor (OR=3.9) for binocular involvement in patients with uveitis.

Idiopathic uveitis predominates, with the most common causes being herpes zoster (6.9%), ankylosing spondylitis (5.1%), herpes simplex (4.6%) and rheumatoid arthritis (2.3%). Rheumatoid arthritis, herpes simplex and ankylosing spondylitis have been identified as risk factors for recurrence of uveitis.

The greatest **contribution** of the dissertation is that the study is **the first of its kind conducted in Northeastern Bulgaria**. In addition, epidemiological data regarding age, sex and risk factors in patients with uveitis were reviewed. Contributions of a practical nature are also essential, which aim to improve the quality of medicine in our country and improve patient care. Algorithms for diagnosis and treatment of patients with uveitis have been established, a risk profile of patients with uveitis and prognosis of relapses have been created, as well as guidelines for general practitioners.

Valuable in the **discussion** is the comparison of the situation in the observed region with other countries in terms of frequency, etiology and socio-demographic indicators. Of interest is also the detailed analysis of the opportunities provided by artificial intelligence systems in the areas of diagnostics, raising awareness and patient tracking.

The main **drawback** of the study is its location, since in a large specialized eye hospital are treated mainly cases with severe clinical manifestation, which spoils the representativeness of the sample. In addition, there are no Bulgarian and Cyrillic authors cited in the study.

The PhD student has presented three **publications in relation to the dissertation** and she is the first author in all of them. Dr. Nikolova is constantly improving her qualifications by annually attending courses and conferences.

### **Conclusion**

The dissertation shows that the PhD student has in-depth theoretical knowledge and professional skills in the scientific specialty "Ophthalmology" by demonstrating qualities and abilities for independent scientific research. Based on the above, I propose to the Scientific Jury to vote **positively** for awarding of the educational and scientific degree "DOCTOR" to Dr. Silviya Nikolaeva Nikolova and I also vote positively.

Date: 10.12.2024

Signature: .....

/Assoc. Prof. Dr. Kalina Trifonova, PhD/

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