

Opinion

by Assoc. Prof. Dr. Stanislava Kostova Ivanova, PhD

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Regarding: defense of the doctoral dissertation of Dr. Ivelina Yordanova Pitakova, Department of Ophthalmology and Visual Sciences, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, for the acquisition of an educational and scientific degree "Doctor" in the field of higher education "Healthcare and Sports" /code 7.1/, professional direction "Medicine", in the scientific specialty "Ophthalmology" /code 03.01.36/, on the topic " Visual Rehabilitation for Low Vision People with Socially Significant Eye Diseases "

By order of the Rector of the Medical University of Sofia, No. R109-2/06.01.2023 and the decision of the scientific jury, I have been appointed to prepare a position on the above-mentioned topic /as an external member of the jury/ for the acquisition of an educational and scientific degree "Doctor" by Dr. Ivelina Pitakova.

The doctoral dissertation represents a systematic and in-depth analysis in the field of modern possibilities for visual rehabilitation of low vision patients. A selection of 80 patients with impaired vision, meeting the criteria for low vision, including patients with socially significant eye diseases and visual acuity equal to or less than 0.3, has been made. The participants in the study are divided into four groups: the 1st group with ARMD, the 2nd with Glaucoma, the 3rd with Diabetic Retinopathy, and the 4th heterogeneous group. The study was conducted at the Sveti Nikolay Chudotvoretz University Hospital - Varna for a period of 3 years.

Dr. Ivelina Pitakova's doctoral dissertation is written on 152 standard typewritten pages, including: introduction - 1 page, literature review - 44 pages, aim and objectives - 1 page, materials and methods - 9 pages, results - 35 pages, discussion - 21 pages, summary and recommendations - 3 pages, conclusions - 2 pages, contributions - 1 page, bibliography - 10 pages. The literature review is clearly and purposefully written. The selected literature reflects the research on the topic from both chronological and historical, as well as modern points of view. Of the 166 sources cited, 35 are in Cyrillic and 131 are in Latin script. The doctoral dissertation is excellently illustrated with 42 tables and 51 figures. This work demonstrates the author's good knowledge of the topic of the doctoral dissertation and in-depth research in this field.

The topic of the dissertation "Visual Rehabilitation for Low Vision People with Socially Significant Eye Diseases" is relevant and its development is beneficial both for eye specialists and for the patients themselves.

The purpose is clearly formulated as " Visual Rehabilitation for Low Vision People with Socially Significant Eye Diseases ", allowing for thorough and significant development of the topic.

The tasks are well presented and demonstrate the approaches for achieving the purpose:

1. To make a literature review on the topic of blindness, low vision and the possibilities of visual rehabilitation, as well as to study innovative technologies for compensating and improving visual deficits.
2. To study the awareness of the population, as well as the opinion of medical specialists on the topic of blindness and low vision.
3. To study the adaptation of low-vision patients with socially significant eye diseases - ARMD, DR and glaucoma to their prescribed devices to support vision and satisfaction with their use.
4. To analyze the means for visual rehabilitation and the results of their use in children-students with impaired vision.
5. To develop an algorithm for the selection and prescription of the optimal visual aid by ophthalmologists - specialized for working with the visually impaired.
6. To create a model of an integrated approach for patients with impaired vision and different degrees of blindness.

The contributions are presented in three categories using a commonly accepted approach:

1. Contributions of a cognitive nature

- 1.1. A detailed literature review was made, covering Bulgarian and world literature and accessible databases, dedicated to blindness and the visually impaired
- 1.2. A systematic theoretical review was carried out on the topic of visual support for children with impaired vision
- 1.3. An analysis of the visual rehabilitation of adult patients with socially significant eye diseases was carried out

2. Contributions of a scientific and original character at the national level

- 2.1. First-ever long-term follow-up of low-vision patients and an analysis of magnifiers used in children and adults for visual rehabilitation

2.2. For the first time in Bulgaria, the opinion of patients, healthy people and medical specialists on the subject of blindness and low vision has been studied, and the current regulations in the Republic of Bulgaria regarding visual rehabilitation have been analyzed

2.3. An algorithm for working with patients with impaired vision was developed and proposed by a multidisciplinary team of specialists specialized in applying the innovative achievements of optics and medicine to compensate reduced or missing vision in these patients

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2.4. Barriers and difficulties in the implementation of visual rehabilitation were studied and defined, and a model of integrated care for patients with impaired vision was built.

3. Contributions of a confirmatory nature

3.1. The initial hypothesis that the awareness of the population and medical professionals is unsatisfactory on the issues of blindness and low vision was confirmed

3.2. The use of optical magnifiers for visual rehabilitation has been shown to improve residual functional vision

3.3. Weaknesses and shortcomings in integrated care for the visually impaired were identified and pointed out

Conclusion:

The presented dissertation work is on a relevant topic and utilizes modern research methods. The research work is well-structured and has scientific and practical value.

Given the above, my evaluation is positive and I confidently recommend to the esteemed members of the Scientific Jury of the Department of Ophthalmology and Visual Sciences at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, to award Dr. Pitakova the educational and scientific degree of "Doctor" in the medical specialty Ophthalmology (code 03.01.36).

Sofia,

March 16, 2023



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