МЕДИЦИНСКИ УНИВЕРСИТЕТ - ВАРНА
„Проф. д-р Параскев Стоянов“
Ул.“Марин Дринов“ 55, Варна 9002, България
Тел. : 052/ 65 00 57, Факс: 052/ 65 00 19
e-mail: uni@mu-varna.bg, www.mu-varna.bg

MEDICAL UNIVERSITY - VARNA
“Prof. Dr. Paraskev Stoyanov”
55, Marin Drinov Str., 9002 Varna, Bulgaria
Tel.: +359 52/ 65 00 57, Fax: + 359 52/ 65 00 19
e-mail: uni@mu-varna.bg, www.mu-varna.bg

Fund “Nauka” Project № 17007 Resume – Competition-Based Session 2017:

“Visual, perceptual and cosmetic comfort – patient-reported outcomes by double-blind patients after surgical recovery of their vision of the one eye”

Project leader: Prof. Christina Nikolova Grupcheva MD, PhD, DSc

Bilateral blindness is a socially significant problem. Worldwide, the cataract is the leading cause of blindness. Theoretically, the problem can be solved with surgery lasting 20 minutes. However, the postoperative period could be compromised by many factors related to hygiene, pain, discomfort, psychological stress etc.

The **aim** of this project is twofold (clinical and non-clinical). In summary, the aim is to investigate the impact of blindness and restored vision on subjective health and well-being of the selected sample of bilaterally blind patients- before and after the application of an innovative surgical intervention (therapeutic contact lenses) for immediate vision restoration.

The specific **objectives** to achieve the aim are:

1. Assessment of the impact of vision on subjective health and well-being through a specific questionnaire;
2. Evaluation of the effect of surgery on one eye in patients with bilateral cataracts;
3. Evaluation of the vision after surgical intervention of advanced cataracts and innovative post-operative application of therapeutic contact lenses;
4. Evaluation of the morphological parameters after surgical intervention of advanced cataract and innovative post-operative application of therapeutic contact lenses;
5. Assessment of the importance of the care related to the rehabilitation period and the individual application of the questionnaire for subjective health and well-being;
6. Data analysis which can provide a scientific evidence for the public health insurance institutions regarding the economic effectiveness and social impact associated with the application and reimbursement of the therapeutic lenses.

The sampling process is defined by pre-defined inclusion and exclusion criteria. The study included up to 90 patients (over 18 years of age).

The following **methods** are applied:

1. Specific questionnaire-interview created especially for the study (due to visual impairments the questionnaire is filled in as an interview by the attending physician);
2. Clinical methods: operative method with application of therapeutic contact lenses; determining visual acuity for near and far; biomicroscopy with assessment of

morphological characteristics and photo documentation; ultrasound for prognostic purposes; biometrics to determine the dioptric strength of the implant;

3. Statistical methods – for analysis and interpretation of the data. The research protocol of the study has received expert approval from the Commission for Ethics of Research at the Medical University of Varna (Protocol № 72 of March 1, 2018).