

Original article



## QUALITY OF LIFE OF PATIENTS WITH DIMINISHED VISION

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### ABSTRACT:

The eye diseases cause sufferings, affect the quality of life of the patient, and decrease the level of his/her well-being. The disability, related to the diminution of vision, is an indicator for the medical condition of the population, state of morality and ethics in the society, and it may be corrective in the work of healthcare professionals. The aim of the study is an analysis of the significance and extent of the problem with reference to the quality of life of patients with poor vision. The task is an exploration of the quality of life in connection with eye disability, which to assist in selecting appropriate measures regarding the problem. The glaucoma is a serious, socially significant disease, which may lead to considerable loss of vision and to blindness if left untreated. A study of the primary disability during the period from the year 2005 to 2012, in Eastern Bulgaria, demonstrated that the glaucoma is a leading cause of bilateral blindness. The degree of vision reduction causes a considerable impact on the quality of life. The factor age influences negatively the quality of life in patients with loss of vision. The poorest quality of life (QoL) had the oldest, and the persons below 40 years of age. The assessment of the disability, and of the worsened QoL for patients with eye diseases and their families, as well as for the Bulgarian society, is of primary significance for the creation of positive practices as performing of screening programs, etc.

**Keywords:** quality of life, loss of vision, glaucoma, disability

### INTRODUCTION.

The eye diseases cause sufferings, affect the quality of life of the patient, and decrease his/her well-being. The attitude towards people with poor vision or blindness involves several bioethical principals. Every human has his/her own individuality, and that is why the attitude towards the disability varies. The attention to the disability, and to the problems resulting from it, increased during the last few decades. The disability, related to loss of vision up to a level of blindness, is an indicator for the health condition

of the population, the state of morality and ethics in the society, and maybe corrective in the work of healthcare professionals. [1, 2, 3]

The dignity and rights of a human with vision impairment require an obligation of the others around to treat him/her with respect regardless of the physical or physiologic limitations of his/her disease. The disability deprives the opportunity for independence in making of decisions and limits the perimeter of the possibilities. All this affects the quality of life. The general assessment of the quality of life (QoL) is a result of the overall evaluation of the individual, which reflects a wide circle of factors. [4, 5]

Regardless of the fact that ophthalmology has gained the benefits of studies on the pathogenetic significance of a series of biological and social factors, and of a series of studies, devoted to the early diagnosis and methodics in the medicinal and surgical treatment of diabetic retinopathy, glaucoma, cataract, etc., for the last 30 years, these diseases are still a leading cause of blindness in the developed countries. [6, 7, 8]

### AIM AND TASKS

The aim of the study is to analyze the significance and dimension of the problem of quality of life of patients with poor vision and blindness. The task of the study is exploring the quality of life in connection with the reduction of vision, which to assist in selecting appropriate measures regarding the problem.

### RESULTS OF THE STUDY.

#### *Significance and Dimension of the Problem*

The glaucoma is a serious, socially significant disease, which may lead to considerable loss of vision and to blindness if left untreated. Based on statistical data more than 67 million people suffer from glaucoma on a global scale, and more than 55,000 - in Bulgaria. According to a study of Quigly and Broman, the number of patients with glaucoma will increase up to 79.6 million by the year 2020; i.e. more than 10 million new patients. The bilateral blindness will increase from 8.4 million in the year 2010 to up

to 11.2 million in the year 2020. Even in the most developed countries, half of the patients are not aware of their disease. In connection with the demographic situation in Bulgaria, an increase of the severe eye diseases in the following years is to be expected. [2, 8, 9]

The glaucoma is one of the primary causes of blindness and impaired vision; at the same time, the blindness as a result of glaucoma is significant. According to the World Health Organization, the glaucoma is in the second place in the world as a cause for blindness after the cataract. Because the blindness from cataract is surgically curable, glaucoma remains in the first place as a cause for incurable blindness. [3, 5]

Blindness from glaucoma is a consequence of the cellular death of nerve cells, and impairment of the optic nerve. A primary risk factor is the increased intraocular pressure. It impairs the optic nerve, which sends signals to the brain, perceived by us as images. Due to the impairment, some signals may not reach the brain. That leads to a diminution of vision, and - if left untreated - to complete blindness. It is also possible the intraocular pressure to change saltatorily - to be normal at a given moment, and increased at another one. Frequently the small paroxysms subside spontaneously, however, in the course of 10-15 years, the disease progresses, and the vision is significantly impaired. The disease develops slowly, and patients do not feel any changes over a period of some years. Some patients complain of vision with difficulty upon decreased illumination, blurring of vision, frequent change of spectacles, unusual headache or pain in the eyes, the occurrence of colour circles around light sources. At the beginning of the disease, the visual functions remain preserved for a surprisingly long period. The patient does not observe any changes in his/her vision, because they occur slowly and he/she adapts to them. Defects in the peripheral vision occur with the progression of the condition. Although patient does not realize them, these defects may be found by an ophthalmologist. When a patient finds the loss in the visual field, the disease is already in an advanced stage due to death of a huge number of nerve cells. That makes glaucoma so dangerous. [7,10,11,12]

#### ***Assessment of the Quality of Life in People with Loss of Vision***

The factors, which determine the QoL in persons with eye disability, are: age, education, marital status, employment, and degree of vision impairment. The data from the literature point that the QoL covers many and different spheres, spiritual and material, including and reflecting the physical health and functioning, the psycho-social well-being of patient, the social support and available social resources, the independence and the sense of control over one's life, the material and financial conditions, etc. [4, 6]

A study on the primary disability for the period from the year 2005 to 2012 demonstrates that the glaucoma is a leading cause of bilateral blindness in Eastern Bulgaria. The inquiry - performed among persons with eye disability in the latter region - demonstrates self-assessment for the poor quality of life; at the same time, the poorest indi-

cators were found in persons with cataract and glaucoma (Nenkova B., Pandova M.). The results of the study quoted to confirm the data from the literature that the type of disease is not among the leading factors for the level of quality of life, while significance has the degree and type of impairment of vision (central or peripheral). [12, 13, 14]

The age is one of the primary risk factors for the development of eye pathology resulting in blindness. The results of the assessment of the overall quality of life demonstrate a considerable difference between the particular age groups. The persons in the young age group (below 40 years of age) show poor quality of life regarding the distant vision, mobility, reading, fine work and performing of activities of daily living. The same level of poor quality of life is observed among persons above 80 years of age. Those results may be explained with difficult adaptation to the environment in the presence of the above-mentioned disease in young people, while in older ones it is rather related to the slower and more difficult performing of activities. [5, 8, 15]

The low educational degree has to do with the quality of life. The better education offers a higher level of awareness regarding the eye diseases, and the higher level of responsibility for one's own health. The education is an important factor in the health care condition and disability.

Better results - regarding the quality of life - are observed among the married representatives, because they can rely on the family support. In terms of the type of coexistence, the best quality of life is observed for persons, who live together with their spouses, and the poorest - those who live with their children. The probable reason is that the latter perceive that coexistence as a burden which loads financially and psychologically their children. [10, 12, 16]

Among the widowers, the sudden loneliness affects negatively the quality of life, which may be explained with the fact that the widowers have changed their way of life with no prior psychological preparation, which inevitably affects their adaptation to the situation. Those persons must cope on their own with the occurring problems by contrast with the family who relies on the support from their relatives.

Although no considerable difference was found regarding the time of validity and the period of the diagnosis made, and the quality of life, it may be maintained that the persons with time of validity of up to 5 years, and duration of therapy administered/performed no longer than one year, reported of better quality of life than those who had time of validity of the diagnosis made of more than 15 years, and the period of treatment of more than 6 years. That may be explained by the fact that, in the beginning, persons did not comprehend the diagnosis made and the perspective of them. The persons with longer time of validity of the diagnosis of disease had the possibility of gradual adaptation to the therapeutic regimen, while those with longest time of validity of the diagnosis of disease have the poorest quality of life in comparison with the rest, because with advance of age other age-related diseases occur as well, each of them requiring observation of therapy

administration regimen, and - at the same time - the local administration of medicines places them in an especially difficult position (Nencheva B.). [1, 16]

A study of B. L. Lee (1998) reported that 82% of persons with glaucoma had difficulties in connection with seeing in the dark; the percentage was 32% as regards the control group. The mobility was also affected. Many studies ascertain that persons with glaucoma walk more slowly. The reduced vision, the changes in the visual field in combination with the necessity of treatment, correlate with the poor quality of life in patients with that disease. Making of that diagnosis is a fact that causes enough stress. The chronic character of the disease, the need for constant follow-up by an ophthalmologist, the functional losses, the incompatibility of the administration of medicines with the official engagements, the side effects - general and local - of the used medicines, and the applied surgical treatment affect negatively the QoL. [13, 15]

The final result of the therapy depends on a series of factors as: timely diagnosis, the degree of impairment, correct choice of treatment. That is why undertaking of screening programs for early detection of socially significant eye diseases, outpatient registration, and systematic monitoring, are appropriate. The efforts in connection with patients, who (based on one or another reason) had an unfavorable outcome of the therapy, and who come in the group of disabled, must be directed to the improvement of the quality of life. The legislation of Bulgaria has provided a series of privileges and alleviations, which allow the individuals to lead a relatively independent life, as well as realization of the residual working capacity, but that cannot solve all of their problems. The lack of work, the low incomes, the isolation from social life, etc. reflect their mental health and quality of life. [9, 11, 14]

## CONCLUSIONS

1. The degree of reduction of vision causes a significant impact on the quality of life.

2. The factor age affects negatively the quality of life in patients with loss of vision. The QoL is worst in the oldest patients and in persons below 40 years of age.

3. The tendency, that is shown by persons of some degree of disability, is that they consider their own condition passively.

4. The assessment of the disability and of the worsened QoL of patients with eye diseases and their families, as well as for the Bulgarian society has main significance for the development of positive practices.

5. Performance of screening programs may help in significant reduction of the number of people with eye disorders, which will prevent or slow the problems related to blindness.

## Final Statement

The diminished eyesight and blindness are among the important components of health, that have a high social price and ethical side. The use of different assisting devices contributes to formation of more in number and in quality spatial mental pictures of a human with impaired vision, and are a base for stable skills for independent orientation and moving, independence, control on one's own life, increase of the possibilities, overcoming of the fear from space and the sense of inferiority, building of good self-esteem, easy performing of the activities of daily living, better education, and providing a possibility for social realization.

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*Please cite this article as:* Dimitrov Ts, Mihaylova Ts, Todorova D. Quality of life of patients with diminished vision. *J of IMAB*. 2018 Apr-Jun;24(2):1998-2001. DOI: <https://doi.org/10.5272/jimab.2018242.1998>

Received: 11/12/2017; Published online: 31/05/2018



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