Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

CC BY NC ND

QUALITY OF LIFE OF PATIENTS AFTER SURGICAL INTERVENTION AT THE CLINIC FOR EYE DISEASES TUZLA

KVALITETA ŽIVOTA PACIJENATA NAKON OPERATIVNOG ZAHVATA NA KLINICI ZA OČNE BOLESTI TUZLA

Saša Koca[1], Dženana Radžo Alibegović[2]

[1]Clinic for Eye Diseases, Department for the Treatment of Amblyopia and Strabismus, UKC Tuzla

[2]Faculty of Education and Rehabilitation,University of Tuzla

Univerzitetska 1, 75000 Tuzla, Bosnia and Herzegovina

Original Scientific Article

Received: 13/05/2024
Accepted: 28/06/2024

ABSTRACT

Visual impairment negatively affects the quality of life of people and it is an important parameter of the outcome of treatment of patients diagnosed with cataracts, glaucoma, strabismus or injuries. The goal of the research was to assess the psychological aspects of the quality of life of patients with the above-mentioned diagnoses.

The research included 99 patients of both sexes, who, after surgery at the Clinic for Eye Diseases Tuzla, were monitored on an outpatient basis in the Clinic's Specialist Outpatient Clinic. For the purposes of the research, the Vision Questionnaire (NEI VFQ-25), version 2000, was used.

The age of the respondents ranged from 5 to 78 years. The majority of respondents were men 50 (50.50%). The average chronological age of male respondents is 47.50±21.56 years, and female respondents 50.12±20.85. In the total sample, 45.5% of respondents have cataracts, 29.3% glaucoma, 11.1% strabismus and 14.1% have an eye injury. Of these 99 respondents, 47.5% consider their health to be average, 44.4% consider it to be above average, while 8.1% of respondents consider it to be below average. A higher percentage of male respondents have glaucoma (38%) and injuries/trauma (20%) compared to female respondents. A higher percentage of female respondents (55.1%) state that their quality of life is above average, while the percentage of male respondents is 34%. The quality of life is average for 56% of male respondents and 38.8% of female respondents. The results of the chi-square test showed that there is no statistically significant difference in relation to the gender and quality of life of the respondents ($\chi 2= 4.48$; df= 2; p= 0.106). The results of the univariate analysis of variance in relation to the cause of visual impairment, and the vision problems experienced

[1]**Correspondence to:**
Saša Koca, Clinic for Eye Diseases, Department for the Treatment of Amblyopia and Strabismus
E-mail: sasa_krasnic@hotmail.com

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

by the subjects showed that there is a statistically significant difference between the subjects in relation to the cause of visual impairment. In relation to the overall results of vision problems, it may be concluded that subjects with cataracts and glaucoma at the statistical significance level of 0.05 state that they have more vision problems compared to subjects with strabismus and injury. Subjects with cataracts at the significance level of 0.05 state that they have more vision problems compared to subjects with glaucoma.
Although the self-assessment of the psychological and spiritual components of the quality of life of the subjects gave satisfactory results, it is necessary to provide specific support in order to prevent and eliminate negative reactions to the postoperative condition of operated patients.

Keywords: quality of life (QoL), NEI VFQ-25 questionnaire, visual impairment.

SAŽETAK

Oštećenje vida negativno utiče na kvalitetu života osoba i važan su parametar ishoda lječenja bolesnika sa dijagnozom katarakte, glaukoma, strabizma ili povrede. Cilj istraživanja bio je procjena psiholoških aspekata kvalitete života bolesnika sa navedenim dijagnozama.
Istraživanjem je bilo obuhvaćeno 99 pacijenata oba spola, koji su nakon operativnog zahvata na Klinici za očne bolesti Tuzla, ambulantno praćeni u Specijalističkoj ambulanti Klinike. Za potrebe istraživanja korišten je Anketni upitnika za vid (NEI VFQ-25), verzija 2000.
Starost ispitanika kretala se od 5 do 78 godina. Većinu ispitanika činili su muškarci 50 (50,50%). Prosječna hronološka dob ispitanika muškog spola iznosi 47,50±21,56 godina, a ženskog spola 50,12±20,85. U ukupnom uzorku 45,5% ispitanika ima kataraktu, 29,3% glaukom, 11,1% strabizam i 14,1% ima povredu oka. Od njih 99 ispitanika, 47,5% smatra da je njihovo zdravlje prosječno, 44,4% smatra da je iznad prosjeka, dok 8,1% ipitanika smatra da je ispod prosjeka. Veći procenat ispitanika muškog spola ima glaukom (38%) i povrede/trauma (20%) u odnosu na ispitanike ženskog spola. Veći procenat ispitanika ženskog spola (55,1%) navodi da im je kvaliteta života iznad prosjeka, dok procenat kod ispitanika muškog spola iznosi 34%. Kvalitetu života kao prosječnu ima 56% ispitanika muškog spola i 38,8% ispitanika ženskog spola.
Rezultati hi kvadtat testa su pokazali da ne postoji statistički značajna razlika u odnosu na spol i kvalitet života ispitanika ($\chi 2$= 4,48; df= 2; p= 0,106). Rezultati univarijatne analize varijance u odnosu na uzrok oštećenja vida, te problema sa vidom sa kojim se susreću ispitanici pokazali su da postoji statistički značajna razlika između ispitanika u odnosu na uzrok oštećenja vida. U odnosu na ukupne rezultate problema sa vidom može se zaključiti da ispitanici sa kataraktom i glaukomom na nivou statističke značajnosti 0,05 navode da imaju više problema sa vidom u odnosu na ispitanike sa strabizmom i povredom. Ispitanici sa kataraktom na nivou značajnosti 0,05 navode da imaju više problema sa vidom u odnosu na ispitanike sa glaukomom.
Mada su samoprocjenom psihološke i duhovne komponente kvaliteta života ispitanika dobijeni zadovoljavajući rezultati, neophodno je obezbijediti specifičnu podršku u cilju prevencije i otklanjanja negativnih reakcija na postoperativno stanje operisanih pacijenata.

Ključne riječi: kvalitet života, anketni upitnik NEI VFQ-25, oštećenje vida.

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

INTRODUCTION

In literature, there is a broad spectrum of definitions of quality of life (Moons P, 2006). Despite its widespread use, the concept of quality of life is often not clearly defined or explained, nor is there consensus on its definition, and consequently, there is no standard measurement of quality of life (Vanleerberghe P, 2017). Defining quality of life has proven to be challenging, and there are many approaches to defining it (Karimi M, 2016). Quality of life consists of four main domains: objective environment, behavioral capacities, perceived quality of life, and psychological well-being (including satisfaction in life) (Baumann I.,2010). Nowadays, quality of life is an important aspect in assessing clinical interventions. Quality of life (QoL) is the subjective assessment of the effects of disease or therapeutic procedures on a patient's health, and several patients with the same objective condition may have different qualities of life. This includes not only disease symptoms but also the entire range of daily activities such as social and physical activities, practical and emotional issues, and the patient's feelings towards their illness (Naraghi M, 2012). Quality of life is a complex concept that everyone evaluates based on their own criteria regarding physical health, mental state, level of independence, social relationships, and so forth. Quality of life related to vision can be defined as an individual's satisfaction with their visual ability in the context of performing activities in daily life (Adigun K, 2014). According to the World Health Organization, blindness affects 39 million people worldwide, while visual impairment affects 246 million people to some extent (Naraghi M, 2012). Vision impairment problems lead to various public health, social, and economic issues. Assessing the impact of vision impairment on daily activities, emotional state, social participation, and mobility is highly valuable as it enables us to better understand and provide higher quality healthcare services to patients with impaired vision.

The aim of the research is to investigate the association between the quality of life of individuals with visual impairment and their current lifestyle and loss of activities in their relationships with the environment in which they live. It aims to assess the level of assistance provided to individuals with impaired visual acuity in fulfilling daily activities, examine the relationship between visual impairment and an individual's mental health, and explore the association between impaired visual acuity and the social relationships of the respondents with their environment.

RESPONDANTS AND METHODS

The respondents were patients hospitalized at the Clinic for Eye Diseases, University Clinical Center (UKC) Tuzla, those who first pass through specialized outpatient clinics. The study included 99 respondents. Before conducting the research, the purpose and objectives of the study were explained, verbally and in writing, to the respondents through informed consent. Responses were provided during the ophthalmological examination. For the purpose of the study, a questionnaire was used, which, in addition to sociodemographic data, also consisted of a Vision Questionnaire (NEI VFQ-25), 2000 version. The Vision Questionnaire is provided by the National Eye Institute, and the first page of the questionnaire contains instructions stating that written permission for its use is not required. The study was conducted from November 1st to November 30th, 2023. The questionnaire consists of 25 questions divided into three areas related to the general assessment of the respondents' health,

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

vision, eye pain, activities at a distance or nearby.

The second part of the questionnaire covers areas related to the association between vision characteristics and behavior in society, mental health, dependence on the assistance of others, difficulties in performing tasks, driving, color perception, and peripheral vision. The number of points for a specific category is calculated as the average number of points per individual questions in that category. In some categories, there were questions for which no response was recorded, for example, questions in the driving category. Such questions were not considered when calculating the points for that category. Categorical data are presented as absolute and relative frequencies. Numerical data are described by the median and interquartile range boundaries. Differences in categorical variables were tested using the $\chi 2$ test. Univariate analysis of variance was used to test for normal distribution, equality of variances, and differences between multiple groups.

RESULTS

In a sample of 99 patients, 50 were male, and 49 were female. Expressed as a percentage, 50.50% of male respondents and 49.49% of female respondents took part in the study. The average age of male respondents was 47.50±21.56 years, and the average age of female respondents was 50.12±20.85 years. The youngest patient was 5 years old, while the oldest was 78 years old.

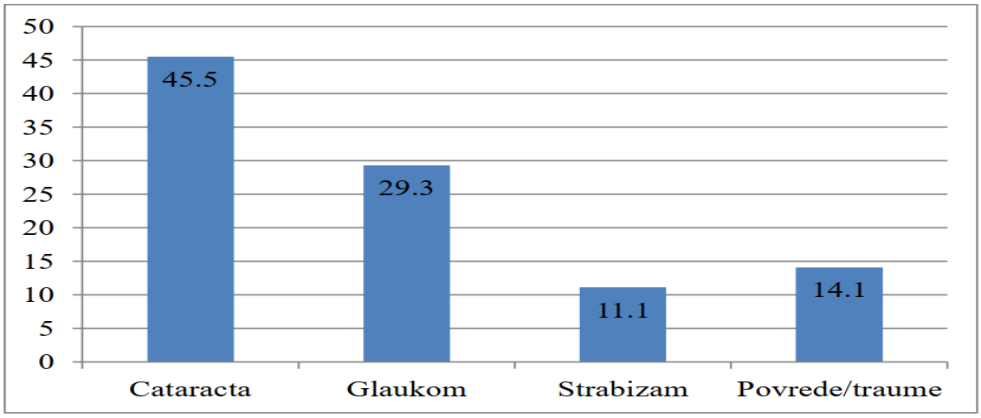
The results of the t-test showed that there was no statistically significant difference in age between male and female respondents (t= -0.61; p= 0.540).

Table 1. Average respondent age by gender

Gender	N	AS	SD	SG	p*
Male	50	47.50	21.56	3.04	.540
Female	49	50.12	20.85	2.97	

*t= -0,61

The results in Figure 1 show that 45.5% of respondents (N=45) have cataracts, 29.3% (N=29) have glaucoma, 11.1% (N=11) have strabismus, and 14.1% (N=14) of respondents have an injury/trauma.

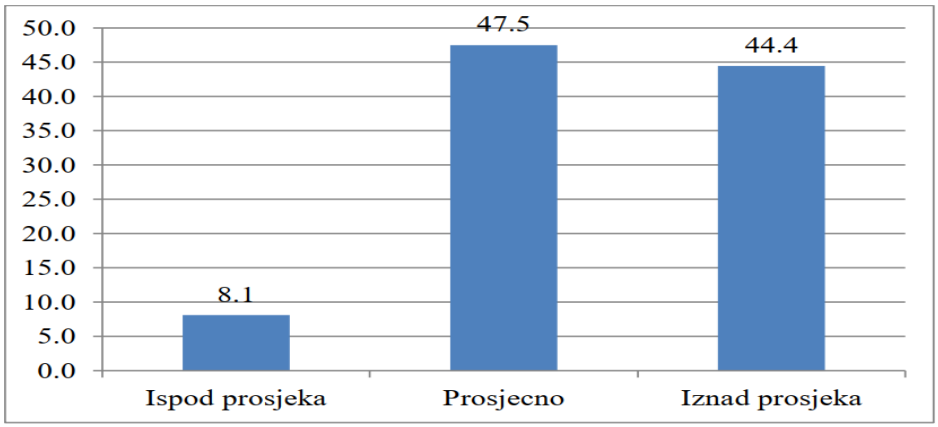


Grafikon 1. Distribucija ispitanika prema dijagnozi

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

Figure 1. Distribution of respondents by diagnosis

The results in Figure 2 show that 47.5% of respondents believe their health is average, 44.4% believe it is above average, while 8.1% of respondents believe it is below average.



Grafikon 2. Distribucija odgovora ispitanika u odnosu na tvrdnju "Uopsteno, da li bi ste za svoje zdravlje rekli da je"

Figure 2. Distribution of respondents' answers to the statement "Overall, would you say that your health is"

Table 2 displays the distribution of respondents based on gender and the cause of visual impairment. From the table, it can be observed that a higher percentage of female respondents have cataracts (59.2%) and strabismus (12.2%) compared to male respondents. A higher percentage of male respondents have glaucoma (38%) and injuries/trauma (20%) compared to female respondents. The results of the chi-square test showed that there is a statistically significant difference in terms of gender and the cause of visual impairment. Upon examination of the obtained results, it can be concluded that cataracts as the cause of visual impairment are more common among female respondents at a significance level of 0.05.

Table 2. Distribution of respondents based on gender and cause of visual impairment

Variables			Diagnosis				Total
			Cataracts	Glaucoma	Strabismus	Injury/trauma	
Gender	Male	N	16	19	5	10	50
		%	32.0%	38.0%	10.0%	20.0%	100.0 %
	Female	N	29	10	6	4	49
		%	59.2%	20.4%	12.2%	8.2%	100.0 %
Total		N	45	29	11	14	99
		%	45.5%	29.3%	11.1%	14.1%	100.0 %

$\chi 2$= 9,20; df= 3; p= 0,027

Table 3 presents the distribution of respondents according to quality of life and gender. A higher percentage of female respondents (55.1%) report their quality of life to be above

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

average, while the percentage among male respondents is 34%. The quality of life is rated as average by 56% of male respondents and 38.8% of female respondents. The results of the chi-square test showed that there is no statistically significant difference in terms of gender and the quality of life of the respondents ($\chi 2= 4.48$; df= 2; p= 0.106).

Table 3. Distribution of respondents based on gender and quality of life

Variables			Overall, would you say that your health is			Total
			Below average	Average	Above average	
Gender	Male	N	5	28	17	50
		%	10.0%	56.0%	34.0%	100.0%
	Female	N	3	19	27	49
		%	6.1%	38.8%	55.1%	100.0%
Total		N	8	47	44	99
		%	8.1%	47.5%	44.4%	100.0%

$\chi 2= 4,48$; df= 2; p= 0,106

Table 4 presents the results of the univariate analysis of variance regarding the cause of visual impairment and the difficulties encountered by the respondents. Based on the results shown in Table 4, it can be concluded that there is a statistically significant difference in all applied variables of visual difficulties among respondents based on the cause of visual impairment. These variables include: "Overall, would you say that your health is", "How much difficulty do you have reading printed texts (such as books, newspapers)?", "How much difficulty do you have engaging in activities or hobbies that require good near vision?", "Due to your vision, how much difficulty do you have finding things on a crowded shelf?", "How much difficulty do you have descending stairs or edges of sidewalks at night or in dim light?", "How much difficulty do you have noticing objects to the side while walking?", "How difficult is it for you, due to your vision, to notice people's reactions to what you say?", "How difficult is it for you, due to your vision, to choose and coordinate your own clothing?", "How much difficulty do you have, due to your vision, socializing with people in their homes, at gatherings, and in restaurants?", "How difficult is it for you, due to your vision, to go to the cinema, theater, or sporting events?".

To explore within which causes of visual impairment there is a significant difference, the Scheffe test was applied. However, due to space rationalization, the results are not presented in a tabular format. Based on the results of the Scheffe test, it can be concluded that respondents with cataracts, glaucoma, and injury/trauma have a significantly better quality of life compared to respondents with strabismus at a significance level of 0.05. Respondents with strabismus have significantly fewer difficulties reading texts compared to respondents with cataracts, glaucoma, and injury/trauma at a significance level of 0.05.

Respondents with cataracts have significantly more difficulty reading texts compared to respondents with injury/trauma at a significance level of 0.05.

Respondents with strabismus have significantly fewer difficulties engaging in activities or hobbies that require good near vision and finding things on a crowded shelf compared to respondents with cataracts, glaucoma, and injury/trauma at a significance level of 0.05. Respondents with cataracts and glaucoma have significantly more difficulty finding things on

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

a crowded shelf compared to respondents with injury/trauma at a significance level of 0.05. Respondents with strabismus have significantly fewer difficulties descending stairs or edges of sidewalks at night or in dim light and noticing objects to the side while walking compared to respondents with cataracts, glaucoma, and injury/trauma at a significance level of 0.05. Respondents with cataracts and glaucoma have significantly more difficulty descending stairs or edges of sidewalks at night or in dim light and noticing objects to the side while walking compared to respondents with injury/trauma at a significance level of 0.05.

Respondents with strabismus have significantly fewer difficulties noticing people's reactions to what

they say and in choosing and coordinating their own clothing compared to respondents with cataracts and glaucoma at a significance level of 0.05. Respondents with cataracts and glaucoma have significantly more difficulty noticing people's reactions to what they say and in choosing and coordinating their own clothing compared to respondents with injury/trauma at a significance level of 0.05.

Respondents with strabismus have significantly fewer difficulties socializing with people in their homes, at parties, and in restaurants compared to respondents with cataracts, glaucoma, and injury/trauma at a significance level of 0.05. Respondents with cataracts and glaucoma have significantly more difficulties socializing with people in their homes, at parties, and in restaurants compared to respondents with injury/trauma at a significance level of 0.05.

Respondents with strabismus have significantly fewer difficulties going to the cinema, theater, or sporting events compared to respondents with cataracts and glaucoma at a significance level of 0.05. Respondents with cataracts and glaucoma have significantly more difficulties going to the cinema, theater, or sporting events compared to respondents with injury/trauma at a significance level of 0.05.

Table 4. Results of univariate analysis of variance regarding the cause of visual impairment

Variables		SK	df	PSK	F	p
Overall, would you say that your health is excellent, very good, good, average, poor?	Between groups	15.85	3.00	5.28	21.77	**.000**
	Within groups	23.06	95.00	0.24		
How much difficulty do you have reading printed texts (such as books, newspapers)?	Between groups	33.22	3.00	11.07	30.24	**.000**
	Within groups	34.78	95.00	0.37		
How much difficulty do you have engaging in activities or hobbies that require good near vision?	Between groups	20.40	3.00	6.80	9.56	**.000**
	Within groups	67.56	95.00	0.71		
Due to your vision, how much difficulty do you have finding things on a crowded shelf?	Between groups	35.14	3.00	11.71	40.67	**.000**
	Within groups	27.36	95.00	0.29		

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

How much difficulty do you have with reading street and traffic signs or the names of stores?	Between groups	42.91	3.00	14.30	33.10	**.000**
	Within groups	41.05	95.00	0.43		
How much difficulty do you have descending stairs or edges of sidewalks at night or in dim light?	Between groups	41.80	3.00	13.93	47.31	**.000**
	Within groups	27.98	95.00	0.29		
How much difficulty do you have noticing objects to the side while walking?	Between groups	56.75	3.00	18.92	74.95	**.000**
	Within groups	23.98	95.00	0.25		
How difficult is it for you, due to your vision, to notice people's reactions to what you say?	Between groups	44.36	3.00	14.79	37.30	**.000**
	Within groups	37.66	95.00	0.40		
How difficult is it for you, due to your vision, to choose and coordinate your own clothing?	Between groups	41.89	3.00	13.96	76.83	**.000**
	Within groups	17.08	94.00	0.18		
How much difficulty do you have, due to your vision, socializing with people in their homes, at gatherings, and in restaurants?	Between groups	29.24	3.00	9.75	42.34	**.000**
	Within groups	21.87	95.00	0.23		
How difficult is it for you, due to your vision, to go to the cinema, theater, or sporting events?	Between groups	73.30	3.00	24.43	73.44	**.000**
	Within groups	31.61	95.00	0.33		

In Table 5, the results of univariate analysis of variance regarding the cause of visual impairment and the visual problems encountered by the respondents are presented. Based on the obtained results shown in Table 5, it can be concluded that there is a statistically significant difference in all applied variables of visual difficulties among the respondents regarding the cause of visual impairment. To further examine within which causes of visual impairment there is a significant difference, the Scheffe test was applied. The results showed that respondents with strabismus never achieve less due to their vision at a significance level of 0.05, and their vision does not limit them in performing tasks compared to respondents with cataracts, glaucoma, and injury/trauma.

Respondents with cataracts and glaucoma achieve less due to their vision at a significance level of 0.05, and their vision limits them in performing tasks compared to respondents with injury/trauma.

Respondents with strabismus, at a significance level of 0.05, are not prevented by pain and

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

discomfort from doing what they would like compared to respondents with glaucoma and injury/trauma. Respondents with glaucoma, at a significance level of 0.05, are prevented by pain and discomfort from doing what they would like compared to respondents with injury/trauma. Respondents with glaucoma, at a significance level of 0.05, are not prevented by pain and discomfort from doing what they would like compared to respondents with cataracts. Respondents with cataracts, at a significance level of 0.05, are not prevented by pain and discomfort from doing what they would like compared to respondents with injury/trauma.

Respondents with cataracts, glaucoma, and injury/trauma, at a significance level of 0.05, spend most of their time at home due to their vision compared to respondents with strabismus. Respondents with glaucoma, at a significance level of 0.05, spend most of their time at home due to their vision compared to respondents with cataracts and injury/trauma.

Respondents with cataracts and glaucoma, at a significance level of 0.05, feel more frustrated due to their vision and have less control over what they do compared to respondents with strabismus. Respondents with cataracts and glaucoma, at a significance level of 0.05, feel more frustrated due to their vision compared to respondents with injury/trauma.

Respondents with cataracts and glaucoma, at a significance level of 0.05, rely more on what others tell them due to their vision compared to respondents with strabismus. Respondents with glaucoma, at a significance level of 0.05, rely more on what others tell them due to their vision compared to respondents with injury/trauma.

Respondents with cataracts and glaucoma, at a significance level of 0.05, need more assistance from others due to their vision compared to respondents with strabismus. Respondents with cataracts, at a significance level of 0.05, need more assistance from others due to their vision compared to respondents with injury/trauma.

Respondents with cataracts, at a significance level of 0.05, are more concerned about doing something embarrassing due to their vision compared to respondents with strabismus.

Regarding the overall results of visual problems, it can be concluded that respondents with cataracts and glaucoma, at a significance level of 0.05, report having more visual problems compared to respondents with strabismus and injury/trauma. Respondents with cataracts, at a significance level of 0.05, report having more visual problems compared to respondents with glaucoma.

Table 5. Results of univariate analysis of variance regarding the cause of visual impairment

Variables		SK	df	PSK	F	p
Do you achieve less than usual due to your vision?	Between groups	61.26	3	20.42	89.60	**.000**
	Within groups	21.65	95	0.23		
Does your vision limit you in terms of time when working or during other activities?	Between groups	77.77	3	25.92	73.35	**.000**
	Within groups	33.58	95	0.35		
How much do pain and discomfort in the eye area (for example,	Between groups	192.81	3	64.27	209.03	**.000**

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

itching, burning sensation) prevent you to do what you would like?	Within groups	29.21	95	0.31		
I spend most of my time at home due to my vision.	Between groups	59.92	3	19.97	40.06	**.000**
	Within groups	47.37	95	0.50		
I often feel frustrated due to my vision.	Between groups	16.89	3	5.63	15.09	**.000**
	Within groups	35.43	95	0.37		
I have much less control in what I am doing due to my vision.	Between groups	38.78	3	12.93	26.90	**.000**
	Within groups	45.66	95	0.48		
Due to my vision, I depend too much on what others tell me.	Between groups	34.77	3	11.59	17.46	**.000**
	Within groups	63.07	95	0.66		
I need a lot of help from others due to my vision.	Between groups	31.55	3	10.52	21.26	**.000**
	Within groups	46.99	95	0.49		
I worry that I might do something to humiliate myself and others due to my vision.	Between groups	7.05	3	2.35	4.30	**.007**
	Within groups	51.45	95	0.55		
Total vision difficulties	Between groups	3014.29	3	1004.76	160.18	**.007**
	Within groups	595.89	95	6.27		

DISCUSSION

The conducted research has provided insight into the association between the quality of life and visual impairment of the respondents. The results of this study confirmed differences between groups of patients with various levels of visual impairment and diagnoses (cataract, glaucoma, strabismus, trauma/injury). Findings from individual studies on quality of life and visual impairments were low for individuals with severe visual impairments, which is understandable. However, some patients with poor vision still had high scores, explaining that only visual impairment cannot account for low quality of life (Adigun K, 2014). One's quality of life depends not only on the advantages or disadvantages one may experience but also on their ability to compensate for shortcomings and utilize the advantages they have (Vuletić G, 2015). A study conducted in Zagreb in 2018 confirmed that levels of visual impairment affect the quality of life in the area of reading and access to information, and to a slightly lesser extent, in the areas of mobility and independence. Patients with lower visual

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

acuity usually remain more active, thus experiencing fewer problems than patients with higher visual acuity who become less active (Runjić T, 2018).

Since visual impairment is perceived as a physical problem, the psychological consequences of visual impairment may sometimes be inadequately recognized. To improve outcomes, a better understanding of the mechanisms linking visual impairment and poor mental health is needed. It is also essential to develop better interventions and expand access to services to improve the detection and treatment of mental health problems in individuals with impaired vision. The research showed that patients with better visual acuity have fewer difficulties in social interactions, i.e., in perceiving reactions of people around them and in social encounters. In other words, reduced visual acuity negatively affects the social life of the respondents. Vision loss is one of the main causes of loss of quality of life. Patients with reduced visual acuity experience a diminished quality of life in the context of social life and mental health. Similar results have been obtained in numerous other studies where patients themselves confirm that their visual impairment negatively affects the quality of their social life (Ansuman Panigrahi G, 2021). The contribution of this research pertains to insight into the quality of life of individuals with visual impairment, with the aim of understanding patients and educating and adapting by defectologists, typhlopedagogues of the Clinic for Eye Diseases at the University Clinical Center Tuzla. Further research should be conducted to improve various aspects of the quality of life of individuals with visual impairments, where the role of educator-rehabilitators is of crucial importance.

CONCLUSION

The results of this study show that according to traditional psychometric methods, the translated version of the NEI VFQ-25 questionnaire is a valid and reliable instrument for assessing vision-related quality of life in our population. Ophthalmic diseases examined in this study significantly negatively affect vision-related quality of life, affecting various aspects of daily functioning, not only those closely related to central and peripheral vision. There is also a possible association with quality of life related to general health. Based on the conducted research and the obtained results, it is possible to conclude that reduced visual acuity, besides its impact on the quality of life of the respondents, partially affects the mental health of individuals as well as negatively influences their social life. It is also noteworthy that individuals with impaired visual acuity require assistance in meeting basic human needs. Eye surgery is one in a series of surgical interventions that can be associated with negative consequences on the quality of life of individuals. Eye surgeries significantly improve vision-related quality of life. In line with the benefits resulting from cataract, glaucoma, strabismus, and injury surgeries, it is necessary to ensure easier access to ophthalmic examination with the aim of timely referral for eye surgery.

REFERENCES

1. Adigun K, Oluleye TS, Ladipo MM, Olowookere SA. Quality of life in patients with visual impairment in Ibadan: A clinical study in primary care. J Multidiscip Healthc.2014;

Research in Education and Rehabilitation 2024; 7(1): 126-137. **DOI**: 10.51558/2744-1555.2024.7.1.126

7: 173-178
2. Ansuman Panigrahi G, Nageswar R, Kumari Konar A. Vision-Related Quality of Life and Its Sociodemographic Correlates Among Individuals With Visual Impairments. Journal of Visual Impairment & Blindness. 2021; 115(4): 319-328
3. Baumann I. Quality of life before and after septoplasty and rhinoplasty. GMS Curr Top Otorhinolaryngol Head Neck Surg. 2010;89(1):35-45
4. Karimi M, Brazier J. Health, Health-Related Quality of Life, and Quality of Life: What is the Difference? PharmacoEconomics. 2016;34(7), 645–649.
5. Moons P, Budts W, De Geest S. Critique on the conceptualisation of quality of life: A review and evaluation of different conceptual approaches. Int J Nurs Stud. 2006; 43(7):891–90
6. Naraghi M, Amirzargar B, Meysamie A. Quality of life comparison in common rhinologic surgeries. Allergy Rhinol (Providence). 2012;3(1) : e1-e7
7. Runjić T, Novak Lauš K, Vatavuk Z. Utjecaj oštećenja vida na kvalitetu života bolesnika s glaukomom. Acta clinica Croatica, 2018; 57(2): 243-249
8. Vanleerberghe P, De Witte N, Claes C, Schalock RL, Verté D. The quality of life of older people aging in place: a literature review. Qual Life Res. 2017:26(11):2899– 2907
9. Vuletić G, Mujkić A. Što čini osobnu kvalitetu života: Studija na uzorku Hrvatskegradske populacije. Liječnički Vjesnik. 2012; 124(2): 64-70
10. Vuletić G. i sur. Kvaliteta života i zdravlje. Osijek: Hrvatska zaklada za znanost. 2011.