



QUALITY OF LIFE OF ELDERLY PEOPLE WITH VISUAL IMPAIRMENT IN RELATION TO THE DEGREE OF VISUAL IMPAIRMENT

Original scientific paper

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ABSTRACT

The main goal of this study was to examine the differences in the quality of life of the elderly with impaired vision in relation to the degree of visual impairment. The research included a total of 40 elder respondents, visually impaired, both genders, located and accommodated in the Public Institution “Retirement Home” in Tuzla and the retirement home “Vita Nostra” in Bihac. The analysis of the obtained results indicates that the degree of visual impairment has an impact on the quality of life of the elderly with impaired vision, people with severe visual impairment have the poorest quality of life.

Keywords: *quality of life, visually impaired elders, degree of visual impairment*

INTRODUCTION

Senility is often referred to in the literature as the third age. The third age includes the last third or quarter of life, depending on where the limit is set (Radzo Alibegovic and Kuduzovic, 2018).

In the literature on quality of life we find about a hundred definitions and models. The World Health Organization defines quality of life as a personal perception of a position in a specific cultural, social, and environmental context (World Health Organization, 1997).

Vuletic and Mujkic (2002), based on the definition of the World Health Organization, came to the conclusion that quality of life is primarily a psychological category, and that it does not automatically arise from meeting some basic needs, but from the overall psychological structure of the individual interacting with physical and the social environment in which he/she lives.

One of the most comprehensive definitions of quality of life is given by Felce and Perry (1993). They define quality of life as an overall, general well-being that includes objective factors and subjective evaluation of physical, material, social and emotional well-being,

including personal development and purposeful activity. Every aspect of this definition is observed through a personal value system of the individual. Health plays a very important role in the quality of life. The term health most often implies the absence of disease. An integral part of an individual's quality of life related to health is the quality of their vision (Brown, 1999).

Thus, it was confirmed that the visual impairment has a markedly negative effect on the functioning of persons with visual impairment (Kuyk et al., 2008), reducing the quality of daily life activities (Brenner et al., 1993; Stelmack, 2001), affecting the level of independence and movement (Esteban et al., 2008; Kuyk et al., 2008; Nutheti et al., 2006), thus causing a decline in physical and mental functioning with an increased risk of depression (Brenner et al., 1993; Stelmack, 2001). It can be concluded that visual impairment generally has a negative effect on an individual's quality of life (Kuyk et al., 2008).

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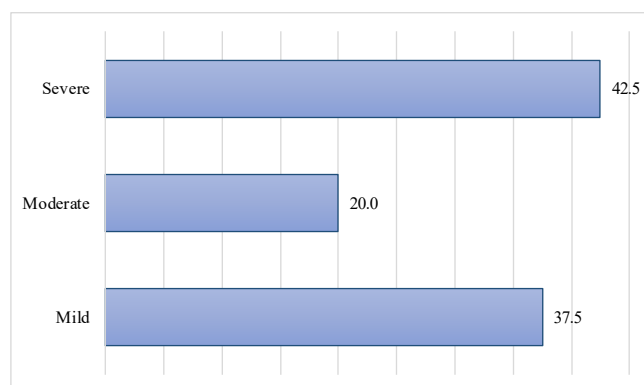
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METHODOLOGY

The research included a total of 40 elderly respondents, visually impaired, both genders, located and accommodated in the Public Institution “Retirement Home” in Tuzla and the retirement home “Vita Nostra” in Bihać.

Graph 1 shows the distribution of respondents in relation to the degree of visual impairment. The results show that 15 or 37.5% respondents have a mild degree of visual impairment, 8 or 20% respondents have a moderate degree of visual impairment and 17 or 42.5% respondents have a severe degree of visual impairment.



Graph 1. Distribution of respondents in relation to the degree of visual impairment

Variables

There are two groups of variables: anamnestic variables and quality of life testing variables.

METHODS

The research was conducted in the Public Institution “Retirement Home” in Tuzla and the retirement home “Vita Nostra” in Bihać, with the prior consent of the institutions in which the research was conducted. Respondents were previously acquainted with the method of research, where the method of examination was presented in detail. All respondents joined the research voluntarily. The examination was conducted

individually with each respondent in a separate room and in a pleasant environment, in accordance with the propositions of the test. The surveying was anonymous.

Measuring instruments

The quality of life assessment was performed using the Visual Functioning Assessment Questionnaire, National Eye Institute Visual Functioning Questionnaire 25 (NEI-VFQ 25).

The NEI-VFQ-25 questionnaire contains 25 questions related to vision-related quality of life. The questions were divided into 12 subgroups. The score for each subgroup is converted to a score between 0 and 100, with higher values meaning better quality of life associated with vision (Mangione et al., 1998).

The analysis of medical documentation was used to collect data on age, gender and the degree of visual impairment.

Data processing methods

The obtained results were processed by descriptive analysis, t-test, Univariate analysis of variance, and Scheffe-Test in the statistical package SPSS 20. for Windows.

RESULTS

In order to determine significant differences in relation to the degree of visual impairment and quality of life in the elderly, the Univariate analysis of variance was applied. Table 1 shows the results of descriptive statistics, i.e. measures of central tendency and dispersion of quality of life in relation to the degree of visual impairment. The highest arithmetic mean of quality of life is in respondents with mild visual impairment (61.85 ± 19.77), where the minimum and maximum results range from 21.91 to 86.27. The lowest values of the arithmetic mean are in respondents with severe visual impairment (21.65 ± 9.50) where the minimum and maximum results range from 8.8 to 43.55.

Table 1. Descriptive indicators of quality of life according to the degree of visual impairment

Degree of visual impairment	M	SD	SE	MIN	MAX
Mild	61.85	19.77	5.11	21.91	86.27
Moderate	58.76	9.77	3.45	47.27	69.00
Severe	21.65	9.50	2.30	8.18	43.55

Table 2 shows the results of the Univariate analysis of variance. Based on the obtained results of Fisher’s test (F), it can be concluded that at the level of statistical significance of 0.05 there is a difference in relation to the quality of life and the degree of visual impairment.

Since the results of the Univariate analysis of variance showed that there are statistically significant differences, and in order to see where these differences are most pronounced, the Scheffe-Test was applied and the results are shown in Table 3.

Table 2. F-Test results in relation to quality of life

Group	SK	Df	PSK	F	p
Between groups	15010.10	2.00	7505.05	36.61	.000
Within the groups	7585.73	37.00	205.02		
Total	22595.83	39.00			

Table 3. Results of the Scheffe-Test

(I) Degree of visual impairment	(J) Degree of visual impairment	Difference	SE	p
Mild	Moderate	3.08	6.26	.886
	Severe	40.19*	5.07	.000
Moderate	Mild	-3.08	6.26	.886
	Severe	37.10*	6.13	.000
Severe	Mild	-40.19*	5.07	.000
	Moderate	-37.10*	6.13	.000

Based on the obtained results shown in Table 3, it can be concluded that at the level of statistical significance of .01, quality of life is worse in respondents with severe visual impairment compared to respondents with mild and moderate visual impairment.

DISCUSSION

The analysis of the results of this paper indicates that the degree of visual impairment has an impact on the quality of life, i.e. that people with severe visual impairment have the poorest quality of life. A similar conclusion was reached by Jablan and associates in 2016, who examined the quality of life of visually impaired adults. The sample included 44 respondents divided into two age groups: respondents aged 18 to 35 and respondents aged 35 to 60. Data on the quality of life of persons with visual impairments were collected using the National Eye Institute Visual Functioning Questionnaire-25 (VFQ-25). The results of the research showed that a statistically significant difference was found between the degree of visual impairment and the quality of life. It was also concluded that blind adults are more dissatisfied with the quality of life than the adults with mild visual impairments.

Sarlija (2012) came to the same results, examining indicators of the quality of life of blind and partially sighted people. The sample included 142 adults. Based on the data collected by the Questionnaire Personal Wellbeing Index - Adult or Personal Quality of Life Index - for adults, it was concluded that there is a difference in quality of life with regard to vision status, i.e. that blind people have lower subjective quality of life compared to people with milder visual impairments.

Nutheti et al. (2006) examined a sample of 7.398 respondents, aged 16 and above, examining the impact of impaired vision and eye disease on quality of life, using the World Health Organization's QOL (WHOQOL) instrument adapted to the instrument (HRQOL) assessing quality of life related to health,

came to the conclusion that there is a difference in quality of life in relation to the degree of visual impairment, i.e. blind people had worse quality of life. Also, Crewe et al. (2011), examining the quality of life of visually impaired people, on a sample of 156 respondents, aged 19 to 97, came to the conclusion that there is a statistically clear difference between the quality of life of blind respondents and respondents with mild visual impairments, that is, that the degree of visual impairment is associated with the better or worse quality of life.

Quality of life decreases with declining visual acuity and quality of other visual functions (Jablan et al., 2016). The same statement is made by Brown, who in his research on the relation between visual functioning and quality of life, found that poorer quality of life is directly affected by a decrease in the degree of visual function in the eye with better visual acuity (Brown, 1999). In further determining the relationship between quality of life and refractive state, Vitale et al. (2000) proved that the quality of functioning decreases with the increase of diopter.

Research conducted in Spain, included respondents over the age of 64, concluded that deteriorating quality of life is associated with visual function and the degree of visual impairment (Esteban et al., 2008).

CONCLUSIONS

Examining the differences in the quality of life of the elderly with impaired vision in relation to the degree of visual impairment, it was determined that there is a difference in relation to the quality of life and the degree of visual impairment. At the level of statistical significance, the quality of life is poorer in respondents with severe visual impairment, compared to respondents with mild and moderate visual impairment.

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