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**ASSESSMENT OF THE QUALITY OF LIFE OF PATIENTS WITH HEARING LOSS****G. Khaydarova***Researcher, Tashkent Medical Academy, Uzbekistan***ABOUT ARTICLE****Key words:** bilateral chronic sensorineural hearing loss, quality of life, SF-36 questionnaire.**Received:** 01.10.2023**Accepted:** 06.10.2023**Published:** 11.10.2023**Abstract:** The article presents the results of assessing the quality of life of 54 patients with bilateral chronic sensorineural hearing loss. The parameters of the SF-36 questionnaire were studied in patients with sensorineural hearing loss, depending on the degree of hearing impairment. The relationship between the quality of life of patients and the degree of hearing loss was revealed.**INTRODUCTION**

The problem of hearing loss is currently becoming increasingly relevant in the medical and social aspects. Despite some successes achieved in solving the problem in recent years, the number of people with hearing defects is increasing largely due to sensorineural hearing loss (SNHL). The importance of issues of prevention, diagnosis, treatment and rehabilitation of patients with hearing loss is largely determined by the fact that this pathology is socially significant and affects all age groups of the population [3]. Sensorineural hearing loss undoubtedly affects the quality of life of patients, and in recent years there has been a steady increase in the number of patients with this pathology.

In modern international clinical practice, quality of life indicators are determined for a comprehensive assessment of the patient's condition. In accordance with the new paradigm of clinical medicine, the patient's quality of life (QoL) is either the main or additional goal of treatment [7,9]. To assess the effectiveness of treatment in patients with sensorineural hearing loss, it is necessary to rely not only on objective data, but also on the patient's subjective assessment of his condition, to study the quality of life associated with his health.

The quality of life, as a social category, expresses the degree of satisfaction of all human needs in a society with certain cultural-historical, socio-psychological, moral and ethical traditions, lifestyle and economic development. From a medical point of view, QoL is characterized as an individual's ability to adequately function in society at a level determined by the complex of his medico-biological and socio-psychological qualities [1,6,7,].

In recent years, changes in QoL have been actively studied in oncology, in various diseases of the cardiovascular system, musculoskeletal system, in surgery, pediatrics [2,4,8,10].

In ENT, a study of QoL was conducted in patients with rhinosinusitis, otosclerosis, secretory otitis media [6,8].

The social significance of SNHL is due to the development of progressive hearing loss in a number of patients of working age, limiting professional fitness and social fitness [5,9].

The aim of the study was to assess the quality of life of patients with bilateral chronic sensorineural hearing loss of varying degrees using the 36-Item Short Form Survey (SF-36).

## **MATERIAL AND METHODS OF RESEARCH**

The study was conducted on the basis of the ENT department of the 2nd clinic of the Tashkent Medical Academy. We observed 54 patients with bilateral chronic sensorineural hearing loss. The age of the patients ranged from 19 to 58 years. The duration of the period of hearing loss in patients averaged  $12.2 \pm 10.2$  years. All patients underwent a comprehensive examination, including anamnesis collection and examination of ENT organs, audiological examination. The latter included a study of the perception of whispered and spoken speech, threshold tonal audiometry (by air and bone sound conduction), acoustic impedance measurement (tympanometry).

The examined patients with SNHL were divided into 4 groups depending on the degree of hearing loss according to the international classification. Thus, the first group consisted of 14 patients with grade I hearing loss, the second group - 14 patients with grade II, the third - 15 patients with grade III and the fourth - 16 patients with grade IV hearing loss. The quality of life of patients of all groups was assessed by means of a written questionnaire using the SF-36 questionnaire, where patients were able to answer the questions posed to them clearly and adequately on their own. SF-36 consists of 36 questions grouped into eight scales: physical functioning, role-based physical functioning, role-based emotional functioning, vitality scale, emotional state, social functioning, pain scale and general health status. The

indicators of each scale are compiled in such a way that the higher the value of the indicator (from 0 to 100), the better the score on the selected scale. Statistical data processing was carried out using the Statistica software version 6.0 (StatSoft, Inc., USA). Quantitative data are represented by the calculation of average values and standard deviation ( $M \pm s$ ).

### THE RESULTS OF THE STUDY AND THEIR DISCUSSION

As can be seen from Table 1, which presents the results of the survey, the level of quality of life of respondents in the study groups is average (50% and above) for almost all tested scales. Statistically significant differences ( $p < 0.05$ ) of 5 out of 8 indicators of the questionnaire scales were registered in all groups: scales of physical functioning, role-based physical functioning, role-based emotional functioning, scales of emotional state, social functioning (Table 1).

Table 1  
The results of assessing the quality of life according  
to the questionnaire SF-36 ( $M \pm s$ )

Scale	Indicators of the SF-36 questionnaire scales in points				
	Group				
	I	II	III	IV	P
Physical functioning	88,8 ± 17,7	82,2 ± 4,6	75,4 ± 14,3	65,7 ± 13,3	<0,05
Role-based physical functioning	81,6 ± 24,8	74,1 ± 34,2	57,9 ± 25,3	55,8 ± 22,7	<0,05
Role-based emotional functioning	83,8 ± 23,6	76,8 ± 6,4	51,8 ± 26	49,8 ± 0,7	<0,05
Viability scale	69,7 ± 18	63,7 ± 14,5	62,8 ± 15,6	58,6 ± 17,2	1,0
Emotional state	76,3 ± 18,5	73,1 ± 17,4	69,8 ± 11	54,3 ± 14,5	<0,05
Social functioning	77,4 ± 19,9	75,4 ± 26,1	63,7 ± 17,2	52,5 ± 14,5	<0,05
Pain Scale	89 ± 17,7	87,5 ± 16,8	78,6 ± 17,5	76,3 ± 18,5	0,8
General health status	66,6 ± 16,8	64,8 ± 11,7	55,4 ± 15,4	52 ± 16,5	0,5

In group III, IV, patients have more pronounced unmotivated fatigue, decreased performance, complaints of insomnia, which can be explained by their stressful and depressive state. With chronic SNHL of the 3rd and 4th degrees, QoL was more reduced than with the 1st and 2nd degrees of hearing loss. The presence of ear noise (tinnitus) significantly reduced QoL in patients, i.e. autism, impaired emotional reactivity, communicative behavior, and decreased initiative were often observed.

Thus, we have studied the possibility of using the Uzbek-language version of the SF-36 questionnaire in assessing the quality of life in patients with bilateral chronic sensorineural hearing loss. The testing methodology is simple, does not require special training and allows a comprehensive assessment of the quality of life of patients.

It was revealed that prolonged hearing loss forms changes in the mental status of the patient, which can manifest itself in the form of isolation, anxiety, and sometimes aggressiveness, self-doubt, pathological shyness. Hearing impaired people develop to a certain extent social isolation and maladaptation, which is a form of chronic mental stress. Violations in the communicative sphere negatively affect the personality. Difficulties in communication lead a patient with hearing impairment often lead to depression and increased anxiety, as well as violations of communicative communication and ability to work.

## **CONCLUSIONS**

Analysis of the results showed that the scale of the psychological component of health significantly differs in groups of patients with sensorineural hearing loss, depending on the degree of hearing impairment. It was found that in patients with grade 4 hearing loss, the quality of life is much lower than in patients with grade 1 and 2 hearing loss.

The use of the adapted Uzbek-language version of the SF-36 quality of life questionnaire is recommended in patients suffering from bilateral chronic sensorineural hearing loss to assess the general psychoemotional state and to choose adequate therapy for patients.

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