Features of quality of life indicators in patients with pneumonia

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Absrtact: Over the past decade, there has been an increased interest in the study of quality of life (QOL) as a new integral indicator describing the most important human functions and allowing for a deep multidimensional analysis of changes in these functions during the development of the disease and their recovery against the background of treatment. Approaches to the study of the quality of life in various diseases have the necessary time intervals: short-term and long-term indicators of the quality of life. The analysis of the nearest parameters is mainly based on the subjective feelings of the patient. In this category, the symptoms of the disease, complaints, temporary disability are considered, which determine a short-term decrease in the quality of life. The assessment of long-term indicators depends on the survival rate of patients and the frequency of necessary hospitalizations. At the same time, symptoms and complaints affecting the long-term prognosis of the disease are analyzed (the rate of progression of the process, persistent disability, decreased life expectancy, loss of social activity, dependence on medications or constant medical monitoring, etc.).

Keywords: quality of life, functional abilities, general state of health, life satisfaction

INTRODUCTION

To assess QOL in clinical and population studies, it is advisable to identify 3 main components that characterize the medical aspects of quality of life:

1. Functional abilities are the ability to carry out daily activities, social, intellectual, emotional functions, and achieve economic security;

2. Perception is a person's views and judgments about the values of the above components, the perception of the general state of health, the level of well-being, life satisfaction;

3. Symptoms and their consequences - they are a consequence of the underlying or concomitant diseases, decrease or disappear as a result of intervention, may appear due to side effects of drugs or the progression of the process.

It is important to understand that with the help of QOL analysis, it is not the degree of violations that is assessed, but how a person tolerates the disease. The study of QOL can show an improvement in the emotional, psychological, social and physical status of the patient, but the disease does not regress and can even progress significantly. Thus, many experts consider the functional state to be an indicator of the quality of life, but it should be considered as the ability of an individual at a given time to perform a task or function that should have a specific result.

Traditionally, the criteria for the effectiveness of treatment in clinical trials are physical data and laboratory parameters. Despite the fact that standard biomedical parameters are often the main criteria for the effectiveness of treatment in clinical trials, they do not reflect the patient's well-being and his functioning in everyday life. In certain diseases, the patient's assessment of his condition is the most important indicator of health.

The purpose of the study. To establish the relationship between the severity of the disease and the level of quality of life in hospitalized patients with VP and to evaluate the clinical and economic effectiveness of therapy.

MATERIALS AND METHODS

It is generally recognized that QL is a multidimensional concept and reflects the impact of the disease and treatment on the well-being of the patient. The patient's QOL characterizes how the physical, emotional and social well-being of the patient changes under the influence of the disease or its treatment. In some cases, this concept also includes the economic and spiritual aspects of the patient's functioning. Currently, the patient's QOL is an important, and in some cases the main, criterion for determining the effectiveness of treatment in clinical trials, therefore, serious attention should be paid to the methods of its assessment and analysis. We used the methodology of quality of life research (International Society for Quality of Life Research -ISOQOL), which has passed scientific examination and is generally recognized. The main components to be studied during the development of the disease and the evaluation of the effectiveness of its treatment are the physical, psychological and social well-being of the patient. The obtained results became the basis for the development of recommendations for the standardization of treatment methods based on the QOL indicators of patients and the implementation of the principles of evidence-based medicine in clinical practice.

Acute and chronic nonspecific lung diseases (COPD) are accompanied by a violation of exercise tolerance due to prolonged tissue hypoxia. The palette of disorders in patients is quite diverse - it is a lack of energy, decreased vitality, a feeling of anxiety, increasing dependence on other people and a number of other psychological and social problems, including disability. The study of QOL in acute

and chronic heart failure provides important additional information about the effect of the disease and treatment on the patient's condition.

Comparison of indicators with those in healthy subjects allows us to assess the severity of the disease's effect on the physical, psychological and social functioning of the patient, helps to expand the range of standard parameters for evaluating the effectiveness of therapy and to more accurately and reasonably judge the effectiveness of the treatment.

Acute and chronic non-obstructive pulmonary diseases (CHF) are progressive diseases and, as a rule, are accompanied by a marked decrease in QOL indicators. The study of QOL in this category of patients allows us to evaluate both the positive results of therapy and its side effects.

Comparing the indicators of QOL in patients with NSL with those in healthy ones, we obtained ideas about the nature and severity of the disease's influence on the physical, psychological and social statuses of the patient. The results of the QL study indicate that compared with the general population, patients with NSL have a lower level of energy, physical activity and more pronounced sleep disorders.

The control group consisted of 25 people from a representative sample of the population of Samarkand, which corresponded by gender and age to the group of patients with community-acquired pneumonia (CAP).

QL was assessed using the SF-36 questionnaire. Patients independently filled out the SF-36 questionnaire at the following points:

❖ at the time of admission to the hospital, in the acute phase of the disease - before the start of treatment (1st point);

❖ 21 days after the start of treatment in the phase of early convalescence (2nd point);

❖ 2 months after the start of treatment in remission (3rd point).

RESULTS and DISCUSSION

Here are the results of studying the quality of life in 25 patients with CAP and healthy people obtained during our study. Men prevailed among the patients (69.3%), the average age was 44 ± 0.6 years, the vital capacity of the lungs was $56.3 \pm 14.8\%$, the volume of forced exhalation in 1 s was $49.7 \pm 6.9\%$ (of the proper values). All patients were admitted to inpatient treatment in the acute phase of the disease. During their stay in the clinic, all patients received standard therapy: antibiotics, expectorants, bronchodilators, inhalation bronchodilators. The lowest indicators of QOL on all scales of the questionnaire were before the start of treatment; the indicators of role functioning suffered more (RFF - 32.4 ± 5.4 points, FF - 38.2 ± 5.6 points, REF - 42.4 ± 5.7 points), to a lesser extent - related to the psychological component of health (SF - 44.7 ± 5.7 points, PP - 58.1 ± 5.7 points). 21 days after the start of treatment, all indicators of quality of life improved statistically significantly

($p < 0.01$). The most positive dynamics was characteristic of the schools of the Russian Federation (an increase of 2 times) and the REF (an increase of 1.5 times). In general, the indicators of the scales of the physical component of health (FF, B, RFF) on the 21st day of treatment significantly improved and were not inferior to the parameters of psychological health, with the exception of the 03 scale (this indicator was the lowest - 53.2 ± 5.7 points). After 2 months after the start of treatment, QL indicators continued to improve. Statistically significant changes compared to the previous point of the survey were obtained on all scales ($p < 0.01$; on the PZ -$p < 0.05$ scale), except for the OZ scale. Thus, in the course of treatment, there was a significant improvement in all parameters of quality of life. To a greater extent, against the background of therapy, the indicators of role functioning (RFF and REF) improved, which 2 months after the start of treatment reached the maximum value (92.1 ± 3.1 and 89.3 ± 3.5 points, respectively), as well as the FF scale index (increased by 1.8 times). To a lesser extent, the positive dynamics concerned the indicator 0Z, which after 21 days and after 2 months of treatment remained the lowest among all parameters of quality of life. In order to assess the severity of changes, the QOL indicators of patients were compared with those in the control group. In the active phase of VP, the QL indicators were significantly lower than in the control group (the differences are statistically significant on all scales). in the course of treatment, the role, psychological and social functioning of patients significantly improved. So, 2 months after the start of treatment, the indicators of the G, PZ, SF and 0Z scales became commensurate with those in healthy people, and role functioning, especially the RFF index, were higher than in the control ($p < 0.05$). Nevertheless, the FF index remained below the population norm after 2 months ($p < 0.01$, respectively). Thus, a study of the QOL of patients with VP using the SF-36 general questionnaire revealed a significant decrease in all indicators in the active phase of the disease: role functioning (RFF and REF) suffered more; indicators of physical health in general were worse than psychological. When compared with the control group, it was found that the disease worsens the quality of life of patients, affecting all spheres of life - physical, emotional, role-playing, psychological, social functioning. After 2 months of standard therapy, a number of QOL parameters significantly improved, and only the indicator of physical functioning remained lower than in the control group. Thus, individual monitoring of QOL should be carried out before the start of treatment, during treatment, as well as at the stages of early and late rehabilitation. Here there is a prognostic value of the results of the QOL assessment. The results obtained before treatment provide valuable information about the possible outcome of the disease when using a particular treatment method and thus help in choosing the right tactics for the management of the patient. The

assessment of QOL allows the doctor to conduct constant monitoring during the disease and, if necessary, to correct therapy.

CONCLUSION

So, the main directions of modern medicine, where QOL assessment can be applied, are: firstly, qualitative individual monitoring of the patient's condition; secondly, the development of prognostic models of the course and outcome of the disease; thirdly, the development of fundamental principles of palliative medicine; fourth, the development of rehabilitation programs; fifth, expertise new methods of treatment; sixth, conducting socio-medical population studies with the identification of risk groups and ensuring dynamic monitoring of risk groups and evaluating the effectiveness of preventive programs; seventh, the economic justification of treatment methods taking into account the indicators "price - quality", "cost - effectiveness".

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