



DOI: <https://doi.org/10.32652/spmed.2022.2.3-6>

Monitoring of the effectiveness of health-enhancing and rehabilitation activities in the sanatorium “Almaty Resort” based on the assessment of the quality of life of vacationers

**Zh. M. Andasova¹, S. Sh. Bisembayeva²,
S. D. Essengaraeva¹**

¹ Kazakh Medical University, Republic of Kazakhstan

² Sanatorium Almaty resort, Republic of Kazakhstan

Abstract. Sanatorium-resort treatment is a type of recovery and rehabilitation, which is based on the use of natural healing factors. Health center “Okzhetpes” “Almaty Resort” is a modern multifunctional health-resort complex. The resort is located 3 km from Almaty, at the foot of Trans-Ili Alatau, at an altitude of 1052 m above sea level. The following therapeutic factors are used here: climate, mineral waters, therapeutic mud, physiotherapy, drug rehabilitation, psychological rehabilitation, physical therapy, kinesiotherapy, rational daily routine, and dietary nutrition. The most important task of the health-resort sector is to maintain the expected level of therapeutic effect and patient satisfaction.

Objective. The aim of the study was to analyze the effectiveness of health-resort treatment through the assessment of the dynamics of quality of life indicators. **Methods.** Analysis of scientific and methodological literature, survey. **Results.** In the scientific and methodological literature, there are not enough studies on the effectiveness of health-resort treatment. A number of authors reported the results of studies on determining the dynamics of subjective and objective health indicators, economic aspects of increasing work capacity after treatment in health-resort facilities, as well as there were several studies on the use of quality of life questionnaires.

The effectiveness of health-resort treatment is evaluated subjectively and objectively by the attending physician, mainly based on the improvement of the functional state of the body's main systems, reduction of complaints, and individual clinical indicators.

There is a need for tools and methods of quantitative and qualitative assessment of the effectiveness of health-resort treatment. For specialists working in this field, it is important to determine the advanced criteria for assessing the level of health and functional status.

Keywords: health-enhancing activities, sanatorium “Almaty Resort”, assessment of quality of life.

Моніторинг ефективності оздоровчо-реабілітаційних заходів в санаторії «Алмати Резорт» на основі оцінювання якості життя відпочиваючих

Ж. М. Андасова, С. Ш. Бісембаєва, С. Д. Есенгараєва

¹ Казахський медичний університет, Республіка Казахстан

² Санаторій «Алмати Резорт», Республіка Казахстан

Анотація. Санаторно-курортне лікування – вид оздоровлення та реабілітації, заснований на використанні природних лікувальних факторів. Оздоровчий комплекс «Окжетпес» «Алмати Резорт» – сучасний багатофункціональний санаторно-курортний комплекс. Курорт розта-

шований за 3 км від міста Алмати біля підніжжя Зайлійського Алатау на висоті 1052 м над рівнем моря. Тут використовують такі лікувальні фактори: клімат, мінеральні води, лікувальні грязі, фізіотерапія, наркологічна реабілітація, психологічна реабілітація, лікувальна фізична культура, кінезитерапія, раціональний режим, дієтичне харчування. Найважливішим завданням санаторно-курортної індустрії є підтримання очікуваного рівня терапевтичного ефекту та задоволеності пацієнтів.

Мета. Аналіз ефективності санаторно-курортного лікування з оцінювання динаміки показників якості життя. **Методи.** Аналіз науково-методичної літератури, опитування. **Результати.** У науково-методичній літературі недостатньо робіт, де розглянуто ефективність санаторно-курортного лікування. Ряд авторів представили результати робіт з визначення динаміки суб'єктивних і об'єктивних показників здоров'я, економічних аспектів підвищення працездатності під час лікування в санаторно-курортних закладах, а також кілька робіт з використання опитувальників якості життя.

Оцінювання ефективності санаторно-курортного лікування проводиться суб'єктивно і об'єктивно лікуючим лікарем, в основному за поліпшенням функціонального стану провідних систем організму, зменшенням скарг, за індивідуальними клінічними показниками.

Виникла потреба в засобах, методах кількісного та якісного оцінювання ефективності санаторно-курортного лікування. Для фахівців, які працюють у цій галузі, важливо визначити перспективні критерії оцінювання рівня здоров'я, функціонального стану.

Ключові слова: оздоровчо-реабілітаційні заходи, санаторій «Алмати Резорт», оцінювання якості життя.

Sanatorium and spa treatment are a type of recovery and rehabilitation based on the use of natural healing factors. The health-improving complex "Okzhetpes" "Almaty Resort" is a modern multifunctional sanatorium-resort complex. The resort is located 3 km from the city of Almaty, at the foot of the Zailiysky Alatau, at an altitude of 1052 m above sea level. Almaty Resort uses the following therapeutic factors: climate, mineral waters, therapeutic mud, physiotherapy, drug rehabilitation, psychological rehabilitation, therapeutic physical culture, kinesitherapy, rational regimen, dietary nutrition. The most important task of the spa industry is to maintain the expected level of therapeutic effect and patient satisfaction.

In the scientific and methodological literature, there are not enough works on evaluating the effectiveness of sanatorium treatment. A number of authors presented the results of works on determining the dynamics of subjective and objective health indicators, economic aspects of increasing working capacity during treatment in sanatoriums, as well as several works on the use of the questionnaires life quality [1, 2, 3, 4].

Evaluation of the sanatorium-and-spa treatment effectiveness is carried out subjectively and objectively by the attending physician, mainly by improving the functional state of the body's leading systems, reducing complaints, according to individual clinical indicators.

There is a need for tools, methods for quantitative and qualitative assessment of the effectiveness of spa treatment. For specialists working in this industry, it is important to identify promising

criteria for assessing the level of health, functional state.

The purpose of the study is to analyze the effectiveness of sanatorium treatment with an assessment of the dynamics of life quality indicators.

Tasks:

1. To conduct a patient survey upon admission to the sanatorium.

2. To present a clinical and statistical characteristic of the patients' health state and a subjective assessment of the patients' clinical and functional states severity before admission to the sanatorium.

Materials and methods of research: analysis of scientific and methodological literature, questioning of the sanatorium Almaty resort's vacationers according to the questionnaire "Assessment of the quality of life SF-36". The study covered 2785 vacationers, with 65 % of 65 years old.

Research results. The World Health Organization has approved the following criteria for the quality of life: physical, psychological, level of independence, social life, environment, spirituality [1].

In modern scientific works, including clinical studies, standardized questionnaires are used to study the quality of life. Questionnaires should be simple, short, but at the same time multidimensional.

The 36 items of the questionnaire are grouped into eight scales: physical functioning, role-playing, bodily pain, general health, vitality, social functioning, emotional state, and mental health. The scores on each scale range between 0 and 100 (100 is full health).

TABLE 1 – The structure of the incidence of patients of the sanatorium Almaty resort for the period from September 2021 to April 2022

№	Name of the disease	Total patients	
		human	%
1.	Circulatory diseases	853	30.6
2.	Diseases of the nervous system	9	0.30
3.	Diseases of the musculoskeletal system	1145	41.1
4.	Diseases of the respiratory system	410	14.7
5.	Diseases of the endocrine system	14	0.5
6.	Diseases of the digestive system	349	12.5
7.	Diseases of the genitourinary system	5	0.20

TABLE 2 – The results of the survey of patients in the sanatorium Almaty resort for the period September 2021–April 2022 in dynamics

Health Components	Health indicators	Average values, %	
		at the beginning	upon completion of treatment
The physical component of health	Physical Functioning	69	55
	Role-Physical Functioning	73	67
	Pain intensity (Bodily pain)	70	45
	General Health	61	47
Mental component of health	Vitality	62	50
	Social Functioning	67	60
	Role functioning due to emotional state	69	53
	Mental Health	62	55

The results are presented in the form of scores on 8 scales, compiled in such a way that a higher score indicates a higher level of quality of life. The following indicators are quantified:

- 1) Physical functioning,
- 2) Role functioning,
- 3) Intensity of pain,
- 4) General health,
- 5) Vital activity.

The scales are grouped into two indicators: “physical component of health” and “psychological component of health”. Physical health – reflects the activity of the individual, or limitation of activity due to illness. Mental health is determined by the emotional state and social activity.

Characteristics of vacationers in the sanatorium. For the period from September to April 2021–2022, 2785 patients were treated in the sanatorium. The structure of diseases in patients of the sanatorium is presented in Table 1.

According to the statistical processing of the survey results, the average health level of the survey participants was 67 points (from 0 to 100). The results of the survey are presented in table 2.

Restriction of physical activity, due to the state of health, averaged 69 points, a high level of physical activity in 1263 people (45 %) examined, below 50 in 637 people, which amounted to 22 %.

Daily activities are significantly limited by the physical condition of the patient in 751 people (score 50 or less).

Pain intensity averaged 70 points, 584 people note that pain significantly limits activity, and only 697 people noted the absence of pain.

The assessment of the state of their own health averaged 61 points, with 640 people (23 %) noting it as low, and only 195 people showed a high assessment of their health level.

A third of the respondents noted a decrease in vital activity (779 people; 28 %), 187 people feel full of energy.

Deterioration of the physical and emotional state leading to the restriction of social contacts is noted by 835 people (30 %).

The emotional state is assessed as high by 1531 people (55 %), deterioration is noted by 835 people (30 %).

The overall indicator of positive emotions, mental well-being averaged 62 %, the presence of anxiety and mental ill-being was detected in 807 people (29 %).

Thus, the average indicator of the quality of life of the examined, including the physical and mental components, was 67 %, of which 90 and above, i.e. high rating in 111 people (4 %), low rating in 362 people (13 %), while 1364 (49 %) people noted the quality of life is below average (from 51 to 75 points).

In the dynamics for 14 days of treatment, there was a significant improvement in both physical and mental health. Indicators of vitality and emotional state significantly improved. Patients noted a decrease in pain and an increase in the volume of physical activity. The general state of health increased from 5 to 14 points.

Conclusions:

1. Clinical and functional changes in patients who have undergone health-improving treatment are presented based on an assessment of the life quality and health components, such as physical, mental, social and the degree of satisfaction with the quality of life.

2. Diagnosis of the health level and quality of life made it possible to identify the effectiveness of medical and recreational activities carried out in the sanatorium, and based on the results of further improvement of health programs.

3. The use of indicators of life quality in monitoring the effectiveness of treatment,

including indicators of physical, mental and social health, will make it possible to individualize the forms and means of sanatorium treatment used in the rehabilitation of patients.

Literature

1. Nizamov IG, Sabirov LF. Issues of a comprehensive assessment of the effectiveness of sanatorium care. Modern problems of science and education. 2012; 1; URL: <https://science-education.ru/ru/article/view?id=5359> (date of access: 07/07/2022).

2. Kaisinova AS, Efimenko NV, Bilyukin YuN, Glukhov AN, Gvozdev NN. Organization of the work of sanatorium-resort organizations in the provision of paid medical services. Resort Medicine. 2017; 2:120-125.

4. The research results make it possible to regulate the activities of doctors and specialists in the field of medical rehabilitation in order to improve the quality of the sanatorium and resort services provided.

3. Gladkova SN, Methods of self-assessment of the level of health: author. dis. for the competition scientist step. k. b. n.: specialty 14.03.11. [Ros. NC restores. medicine and balneology of Roszdrav]. Moscow, 2012.

4. Gorbunova NE, Quality of life as a criterion for evaluating the effectiveness of medical and social rehabilitation. [Electronic resource]. Moscow: Book Laboratory, 2012. The resource is available in the Digital Library of the National Library of Russia. 111 p.

andasova@yandex.kz

Надійшла 20.03.2022