FIMEK

Journal of Agronomy, Technology and Engineering Management
ISSN 2620-1755

Article

Rehabilitation After Acute Myocardial Infraction: Analysis of Patient Experiences and Satisfaction

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Received: 15 January 2026; Accepted: 30 March 2026

Abstract: Cardiovascular diseases represent one of the leading causes of morbidity and mortality in modern society, and acute myocardial infarction has significant consequences for the physical and psychological condition of patients. Therefore, the rehabilitation process plays a key role in recovery and in improving the quality of life of affected individuals. The aim of this paper is to examine the level of patient satisfaction with the rehabilitation process following acute myocardial infarction, as well as to identify the factors that influence the perception of the quality of healthcare services. The research included patients who completed a cardiac rehabilitation program, and various aspects of the rehabilitation process were analyzed, including the quality of medical treatment, physiotherapy, the attitude of medical staff, the equipment of the healthcare institution, and the quality of life after rehabilitation. The methodological approach is based on descriptive, analytical, and comparative methods, with the application of statistical analysis of the collected data. The results of the study indicate the importance of a multidisciplinary approach in the rehabilitation of patients after myocardial infarction, as well as the need for continuous improvement in the quality of healthcare services. Particular importance is attributed to patient education, adequate physiotherapy, and the support of medical staff, which significantly contribute to the success of rehabilitation and the improvement of patients' quality of life.

Keywords: *Acute myocardial infarction; cardiac rehabilitation; patient satisfaction; quality of healthcare services; quality of life.*

1. Introduction

Cardiovascular diseases represent the leading cause of morbidity and mortality in the modern world, and acute myocardial infarction is among the most significant causes of death in the adult population [1]. Myocardial infarction occurs as a result of a sudden interruption of blood flow through the coronary arteries, leading to ischemia and necrosis of the heart muscle. The most common cause of this process is atherosclerosis and rupture of an atherosclerotic plaque with thrombus formation, which results in occlusion of the coronary artery [2]. Modern diagnostic methods, including electrocardiography, laboratory biomarkers such as troponins, and various imaging techniques, enable timely diagnosis and the initiation of appropriate treatment [3]. Despite

significant advances in the field of cardiology, acute myocardial infarction still represents a major public health problem. It is estimated that millions of new cases are recorded worldwide each year, while a significant number of patients die within the first hours after the onset of symptoms or during the first year following the infarction [4]. The introduction of modern therapeutic approaches, such as reperfusion therapy, percutaneous coronary interventions, and improved prehospital care, has contributed to a reduction in mortality; however, there is still a need for continuous improvement in healthcare services and patient rehabilitation [5]. Cardiac rehabilitation has a particularly important role in the recovery process, as it involves a multidisciplinary approach aimed at improving functional capacity, quality of life, and preventing recurrent cardiovascular events. Within the rehabilitation team, nurses and medical technicians play an important role by monitoring patients' health status, implementing educational activities, and providing psychological support during recovery [6]. Their knowledge of the causes, symptoms, and complications of myocardial infarction, as well as their ability to communicate with patients and team members, significantly influences the success of the rehabilitation process. The aim of this paper is to present the basic aspects of the anatomy and physiology of the heart, the pathophysiology of acute myocardial infarction, and contemporary approaches to the rehabilitation of patients after myocardial infarction, with particular emphasis on the role of healthcare professionals in the recovery process.

2. Literature review

Contemporary research indicates that cardiovascular diseases are the leading cause of mortality worldwide, with acute myocardial infarction representing one of the most common manifestations of coronary heart disease [7]. The development of modern diagnostic methods, such as electrocardiography, laboratory analysis of cardiac biomarkers, and various imaging techniques, has significantly improved the possibilities for early diagnosis and the timely initiation of therapy [8]. The literature particularly emphasizes the importance of reperfusion therapy and percutaneous coronary intervention in the treatment of acute myocardial infarction. These methods enable the rapid restoration of coronary blood flow and the reduction of myocardial damage, which directly contributes to decreased mortality and improved long-term prognosis for patients [9]. Additionally, studies indicate that biomarkers such as troponins are crucial for the early identification of myocardial injury and for distinguishing myocardial infarction from other forms of acute coronary syndrome [10]. A large number of studies confirm that risk factors such as hypertension, smoking, dyslipidemia, diabetes mellitus, and obesity play a significant role in the development of atherosclerosis and coronary heart disease [11]. Furthermore, genetic predisposition and age represent important non-modifiable risk factors that significantly influence the occurrence of myocardial infarction [12]. Contemporary research suggests that modification of risk factors through lifestyle changes, proper nutrition, and increased physical activity can significantly reduce the incidence of cardiovascular diseases [13]. In recent decades, increasing attention has been devoted to the rehabilitation of patients after acute myocardial infarction. Cardiac rehabilitation involves a multidisciplinary approach that includes medical therapy, physical activity, patient education, and psychological support [14]. Studies show that rehabilitation programs contribute to reduced mortality, improved functional capacity, and enhanced quality of life in patients [15]. Early mobilization and individually tailored physical activity programs have a significant impact on improving cardiovascular function and preventing recurrent cardiovascular events [16].

Furthermore, patient education regarding healthy lifestyle habits and risk factor control represents an important component of secondary prevention [17]. Nurses and physiotherapists play a particularly important role in the rehabilitation process, as they actively participate in monitoring patients' health status and implementing rehabilitation programs [18]. Their role also includes educating patients about healthy lifestyles and providing psychological support during the recovery process [19]. Modern trends in cardiac rehabilitation include the use of digital technologies, telemedicine, and personalized physical activity programs, which enable continuous patient monitoring and better control of risk factors [20]. According to available research, the integration of modern technologies into the rehabilitation process can contribute to improved patient adherence to therapy and long-term improvements in health outcomes [21]. Numerous studies also highlight the importance of an interdisciplinary approach in the treatment and rehabilitation of patients after myocardial infarction [22]. Collaboration among cardiologists, physiatrists, nurses, physiotherapists, and psychologists contributes to a better understanding of patients' needs and more effective implementation of rehabilitation programs [23]. Research also shows that cardiac rehabilitation programs reduce the risk of recurrent myocardial infarction and improve patients' long-term prognosis [24]. In addition, continuous patient education and the promotion of healthy lifestyle habits have a significant impact on the prevention of cardiovascular diseases [25]. Based on the review of the available literature, it can be concluded that timely diagnosis, adequate treatment, and comprehensive rehabilitation play a crucial role in reducing mortality and improving the quality of life of patients after acute myocardial infarction [26–30].

3. Materials and Methods

This section presents the methodological framework of the research, as well as the basic characteristics of the respondents included in the analysis. The aim of this chapter is to clearly present how the research was designed, the methods used for data collection, and the selection of scientific methods applied in both the theoretical and practical analysis of the topic. In this way, the scientific validity, verifiability, and objectivity of the obtained results and conclusions are ensured. Considering the nature of the topic and the defined objectives, the paper has a theoretical-research and review character, with elements of a case study. The research is based on the analysis of relevant professional and scientific literature, as well as the analysis of specific clinical cases that illustrate the rehabilitation process of patients after acute myocardial infarction. This approach enables the connection between theoretical knowledge and practical experiences from clinical practice, thereby providing a more realistic understanding of the effects of rehabilitation treatment. The research was conducted in the period from January 15 to March 1, 2026. The study included adult patients in whom the diagnosis of acute myocardial infarction was confirmed by electrocardiographic findings (ECG), laboratory analyses of cardiac enzymes (troponin and CK-MB), and, when necessary, angiography. During the selection of respondents, risk factors such as hypertension, obesity, smoking, physical inactivity, and the presence of atherosclerotic changes were also taken into consideration. Exclusion criteria included patients with unstable angina pectoris, as well as patients with severe comorbidities that prevent participation in the rehabilitation program or represent a contraindication for physiotherapy treatment. The identity of the respondents was fully anonymized, and the research was conducted in accordance with the ethical principles of medical research, the Declaration of Helsinki, and the principles of Good Clinical Practice. The following scientific methods were applied

in this study: Descriptive method – used for the systematic description of the phenomenon of acute myocardial infarction, its causes, clinical presentation, and rehabilitation methods, as well as for presenting theoretical and empirical findings from relevant literature. Analytical and synthetic methods – applied in the process of breaking down complex concepts and processes into their constituent elements (e.g., phases of rehabilitation, types of therapeutic procedures) and subsequently integrating them into a unified whole. Inductive and deductive reasoning methods – used to derive conclusions based on general theoretical knowledge and individual clinical examples, and to connect empirical findings with general principles of cardiac rehabilitation. Comparative method – used to compare findings from the literature with practical experiences and results obtained from the analyzed clinical cases. The application of these methods enabled both theoretical and practical analysis of the proposed hypotheses related to the connection between demographic and socioeconomic characteristics of patients and their perception of satisfaction with rehabilitation treatment. Although the research did not include a large empirical sample, carefully selected cases enabled a deeper understanding of the individualized approach to rehabilitation and the importance of a multidisciplinary team in the patient recovery process. Relying on contemporary approaches from the fields of physiotherapy, cardiology, and occupational therapy, the paper combines theoretical analysis and practical experience with the aim of highlighting the importance of timely, comprehensive, and continuous rehabilitation for patients after acute myocardial infarction. The subject of the research refers to the examination of patient satisfaction with the rehabilitation process following acute myocardial infarction, with a particular focus on patient experiences during rehabilitation, the quality of medical treatment and physiotherapy, satisfaction with medical staff, the equipment of the healthcare institution, and the quality of life of patients after the completion of the rehabilitation process. The primary objective of the research is to determine the level of patient satisfaction with various aspects of the rehabilitation process after acute myocardial infarction and to identify the factors influencing the perception of rehabilitation quality. The secondary objectives include examining differences in satisfaction with rehabilitation in relation to gender, age, marital status, level of education, employment and financial status, as well as the place of residence of patients. In addition, the study aims to analyze the relationship between satisfaction with rehabilitation and quality of life after acute myocardial infarction, and to provide recommendations for improving the quality of services in rehabilitation centers in Serbia. Based on the defined objectives, the following research hypotheses were formulated: H0: There is a statistically significant difference in satisfaction with rehabilitation in relation to the gender of the patients. H1: Patient age influences the perception of satisfaction with rehabilitation, particularly regarding the equipment of healthcare institutions. H2: The marital status of patients significantly affects quality of life after rehabilitation. H3: The level of education, employment and financial status, as well as the place of residence of patients, do not significantly influence satisfaction with rehabilitation.

3. Results

A total of 106 respondents participated in the study, of whom 44 were male and 62 were female (Table 1). The majority of respondents were between 46 and 60 years of age (51.9%), married (48.1%), and had predominantly higher (43.4%) or secondary education (40.6%). Most participants were employed (66%), with monthly income predominantly up to 65,000 RSD (50%), and the largest proportion of respondents came from the Western Serbia and Šumadija region (35.8%) (Table 1).

Table 1. Sociodemographic characteristics of the respondents.

	f	**[%]**
Gender		
Male	44	41.5
Female	62	58.5
Age of the Respondents		
Less than 30 years	5	4.7
30 to 45 years	6	5.7
46 to 60 years	55	51.9
Over 60 years	40	37.7
Marital Status		
Married	51	48.1
Single	18	17.0
Divorced	29	27.4
Widowed	8	7.5
Level of Education		
Secondary education	43	40.6
Higher education / college	46	43.4
University degree	17	16.0
Employment Status		
Employed	70	66.0
Unemployed	16	15.1
Student	3	2.8
Retired	17	16.0
Monthly Income		
Up to 65,000 dinars	53	50.0
From 65,001 to 120,000 dinars	26	24.5
More than 120,001 dinars	27	25.5
Place of Residence		
Belgrade and surrounding area	28	26.4
Region of Vojvodina	29	27.4
Region of Šumadija and Western Serbia	38	35.8
Region of Southern and Eastern Serbia	11	10.4

Based on the responses of the participants presented in Table 2, it can be concluded that the highest level of satisfaction was reported for support and motivation throughout the entire rehabilitation process (M = 4.80, SD = 0.40) and for the organization of therapy and its adaptation to the patient's health condition (M = 4.40, SD = 0.79). The lowest level of satisfaction was related to being informed about their health condition and progress (M = 1.96, SD = 0.90).

Table 2. Patients' Experience During Rehabilitation.

	AS	**SD**
The admission process to the rehabilitation center was quick and efficient.	3.92	0.82
I received clear information about my treatment plan.	2.76	0.57
The rehabilitation services meet my needs.	3.87	0.97
The therapy is well organized and adapted to my health condition.	4.40	0.79
I had support and motivation throughout the entire rehabilitation process.	4.80	0.40
The physical exercises during rehabilitation are adequate and safe.	3.52	0.90
Psychological support during rehabilitation was available when I needed it.	2.34	0.71
I feel informed about my health condition and progress.	1.96	0.90
It was easy for me to adapt to the rehabilitation program.	2.40	0.62

Based on the responses of the participants presented in Table 3, it can be concluded that the highest level of satisfaction with medical treatment and physiotherapy was related to progress achieved through regular therapies (M = 3.78, SD = 0.85), while the lowest level of satisfaction was associated with monitoring progress by medical staff and the need for changes in treatment (M = 1.52, SD = 0.50).

Table 3. Satisfaction with medical treatment and physiotherapy.

	AS	**SD**
The quality of medical procedures during rehabilitation was at a high level.	3.76	0.68
Physiotherapy services contributed to my recovery.	3.65	0.92
I feel progress thanks to regular therapies.	3.78	0.85
The therapies were adapted to my health condition and abilities.	3.50	0.84
Medical staff monitored my progress and adjusted the treatment when necessary.	1.52	0.50

Based on the responses of the participants presented in Table 4, it can be concluded that the highest level of satisfaction with medical staff was related to the sense of safety during the entire treatment (M = 4.18, SD = 0.58), while the lowest level of satisfaction was associated with receiving answers to the questions asked (M = 1.97, SD = 0.98).

Table 4. Satisfaction with medical staff.

	AS	**SD**
The medical staff was polite and professional.	3.66	0.56
All questions received clear answers.	1.97	0.98
A sense of safety was present during the entire treatment.	4.18	0.58
The staff had enough time for each patient.	2.66	0.72
Confidence in the expertise of the doctors and therapists was present.	3.72	0.56

Based on the responses of the participants presented in Table 5, it can be concluded that the highest level of satisfaction with the equipment and facilities of the healthcare institution was related to providing adequate physical activity and space for exercise (M = 4.47, SD = 0.67) and the availability of sufficient equipment for all patients (M = 3.71, SD = 0.74). The lowest level of satisfaction was related to providing sufficient space within the institution to ensure patient privacy (M = 2.09, SD = 0.53).

Table 5. Equipment of healthcare institutions.

	AS	**SD**
The rooms where rehabilitation is conducted are clean and well maintained.	2.18	0.95
The institution has modern medical equipment.	2.77	0.79
There is sufficient equipment for all patients.	3.71	0.74
The patient accommodation rooms are comfortable and functional.	2.42	0.59
The nutrition provided in the institution is of good quality and adapted to patients' health conditions..	3.38	0.66
Adequate physical activity and exercise spaces are provided.	4.47	0.67
The institution provides sufficient space for patient privacy.	2.09	0.53

Based on the responses of the participants presented in Table 6, it can be concluded that the highest level of satisfaction with patients' quality of life after acute myocardial infarction was related to the support of family and friends (M = 4.85, SD = 0.35) and the level of energy during the day (M =

4.71, SD = 0.46). The lowest level of satisfaction was associated with the overall quality of life after rehabilitation (M = 3.19, SD = 0.74).

Table 6. Quality of life of patients after acute myocardial infarction.

	AS	**SD**
I can perform daily activities without major difficulties.	4.47	0.60
I feel that I have enough energy during the day.	4.71	0.46
I have a positive attitude toward my recovery.	4.66	0.48
I have good support from family and friends.	4.85	0.35
I have sufficient information about my health condition and recommendations for further treatment.	4.19	0.74
Fear of another heart attack makes it difficult for me to function normally.	4.57	0.50
I am satisfied with the quality of my life after rehabilitation.	3.19	0.74
Rehabilitation helped me recover psychologically from the heart attack.	3.23	0.76
After rehabilitation, I feel more prepared to take care of my health.	4.19	0.98

Within the research, it was examined whether there were significant differences in patients' experiences during rehabilitation, satisfaction with medical treatment and physiotherapy, satisfaction with medical staff, the equipment of the healthcare institution, and quality of life after acute myocardial infarction in relation to gender, age, marital status, level of education, employment status, monthly income, and place of residence. To examine differences according to gender, an independent samples t-test was applied, while ANOVA analysis was used to examine differences according to age, marital status, level of education, employment status, monthly income, and place of residence. Based on the results of the t-test presented in Table 7, it can be concluded that there is no statistically significant difference in patients' experiences during rehabilitation, satisfaction with medical treatment and physiotherapy, satisfaction with medical staff, the equipment of the healthcare institution, or quality of life after acute myocardial infarction in relation to the gender of the respondents.

Table 7. Differences in relation to the gender of the respondents.

	Male (N=44)	**Female (N=62)**	**t**	**p**
	Mean value			
IPatient experience during rehabilitation	3.36 ± 0.24	3.31 ± 0.21	1.074	0.285
Satisfaction with medical treatment and physiotherapy	3.27 ± 0.37	3.22 ± 0.37	0.696	0.488
Satisfaction with medical staff	3.23 ± 0.38	3.25 ± 0.25	-0.316	0.752
Equipment of the healthcare institution	3.03 ± 0.37	2.93 ± 0.25	0.716	0.483
Quality of life of patients after myocardial infarction	4.25 ± 0.20	4.20 ± 0.16	0.481	0.636

*Statistical significance at the 0.05 level.

Based on the results of the ANOVA test presented in Table 8, it can be concluded that there is a statistically significant difference in the perception of the equipment of healthcare institutions in relation to the age of the respondents. The post hoc test showed that a significant difference exists between respondents aged 45 to 60 years and those over 60 years of age (p = 0.022), where older respondents reported lower satisfaction with the equipment of healthcare institutions.

Table 8. Differences in relation to the age of the respondents.

	>30 (N=5)	**30-45 (N=6)**	**46-60 (N=55)**	**<60 (N=40)**	**F**	**p**
	Mean value					
Patient experience during rehabilitation	3.44 ± 0.15	3.48 ± 0.13	3.31 ± 0.26	3.32 ± 0.18	1.362	0.259
Satisfaction with medical treatment and physiotherapy	3.28 ± 0.46	3.20 ± 0.33	3.26 ± 0.36	3.22 ± 0.38	0.174	0.914
Satisfaction with medical staff	3.20 ± 0.24	3.13 ± 0.51	3.25 ± 0.31	3.25 ± 0.29	0.297	0.828
Equipment of the healthcare institution	3.42 ± 0.31	2.85 ± 0.25	3.22 ± 0.36	2.83 ± 0.20	4.022	0.025*
Quality of life of patients after myocardial infarction	4.12 ± 0.14	4.11 ± 0.13	4.30 ± 0.17	4.21 ± 0.19	0.615	0.615

*Statistical significance at the 0.05 level.

Based on the results of the ANOVA test presented in Table 9, it can be concluded that there is a statistically significant difference in patients' quality of life after myocardial infarction in relation to marital status. The post hoc test showed that a significant difference exists between married respondents and divorced respondents (p = 0.028), with married respondents reporting a better quality of life.

Table 9. Differences in relation to marital status.

	Married N=51	**Single N=18**	**Divorced N=29**	**Widowed N=8**	**F**	**p**
	Mean value					
Patient experience during rehabilitation	3.35 ± 0.23	3.36 ± 0.21	3.29 ± 0.23	3.30 ± 0.16	0.626	0.600
Satisfaction with medical treatment and physiotherapy	3.32 ± 0.38	3.27 ± 0.30	3.13 ± 0.37	3.07 ± 0.31	2.458	0.067
Satisfaction with medical staff	3.25 ± 0.35	3.25 ± 0.24	3.25 ± 0.26	3.12 ± 0.41	0.400	0.754
Equipment and facilities of the healthcare institution	3.02 ± 0.31	3.38 ± 0.08	2.91 ± 0.31	2.82 ± 0.30	2.369	0.107
Quality of life of patients after infarction	4.38 ± 0.15	4.25 ± 0.16	4.11 ± 0.20	4.20 ± 0.04	3.378	0.043*

*Statistical significance at the 0.05 level.

Based on the results of the ANOVA test presented in Table 10, it can be concluded that there is no statistically significant difference in patients' experiences during rehabilitation, satisfaction with medical treatment and physiotherapy, satisfaction with medical staff, the equipment of the healthcare institution, or quality of life after acute myocardial infarction in relation to the respondents' level of education.

Table 10. Differences in relation to the level of education.

	Secondary School (N=43)	**Higher Vocational School (N=46)**	**Faculty / University (N=17)**	**F**	**p**
	Mean value				
Patient experience during rehabilitation	3.36 ± 0.24	3.29 ± 0.21	3.35 ± 0.23	1.032	0.360
Satisfaction with medical treatment and physiotherapy	3.27 ± 0.41	3.26 ± 0.35	3.12 ± 0.30	1.011	0.368
Satisfaction with medical staff	3.23 ± 0.31	3.28 ± 0.27	3.14 ± 0.41	1.344	0.265
Equipment of the healthcare institution	2.92 ± 0.26	2.95 ± 0.36	3.14 ± 0.33	0.678	0.520
Quality of life of patients after myocardial infarction	4.18 ± 0.16	4.26 ± 0.22	4.22 ± 0.13	0.348	0.711

*Statistical significance at the 0.05 level.

Based on the results of the ANOVA test presented in Table 11, it can be concluded that there is no statistically significant difference in patients' experiences during rehabilitation, satisfaction with medical treatment and physiotherapy, satisfaction with medical staff, the equipment of the healthcare institution, or quality of life after acute myocardial infarction in relation to the respondents' employment status.

Table 11. Differences in relation to employment status.

	Employed (N=70)	**Unemployed (N=16)**	**Student (N=3)**	**Retired (N=17)**	**F**	**p**
	Mean value					
Patient experience during rehabilitation	3.34 ± 0.24	3.28 ± 0.24	3.40 ± 0.12	3.31 ± 0.17	0.493	0.688
Satisfaction with medical treatment and physiotherapy	3.27 ± 0.39	3.17 ± 0.34	3.06 ± 0.30	3.24 ± 0.32	0.523	0.668
Satisfaction with medical staff	3.24 ± 0.31	3.17 ± 0.33	3.33 ± 0.11	3.27 ± 0.34	0.372	0.773
Equipment of the healthcare institution	3.14 ± 0.32	2.95 ± 0.43	3.42 ± 0.35	2.78 ± 0.15	2.994	0.060
Quality of life of patients after myocardial infarction	4.25 ± 0.14	4.29 ± 0.23	4.11 ± 0.17	4.19 ± 0.22	0.396	0.758

*Statistical significance at the 0.05 level.

Based on the results of the ANOVA test presented in Table 12, it can be concluded that there is no statistically significant difference in patients' experiences during rehabilitation, satisfaction with medical treatment and physiotherapy, satisfaction with medical staff, the equipment of the healthcare institution, or quality of life after acute myocardial infarction in relation to the respondents' financial status.

Table 12. Differences in relation to financial status.

	Up to 65,000 RSD (N=53)	**From 65,001 to 120,000 RSD (N=26)**	**Over 120,001 RSD (N=27)**	**F**	**p**
	Mean value				
Patient experience during rehabilitation	3.31 ± 0.24	3.38 ± 0.22	3.33 ± 0.19	0.774	0.464
Satisfaction with medical treatment and physiotherapy	3.29 ± 0.38	3.20 ± 0.32	3.20 ± 0.39	0.841	0.434
Satisfaction with medical staff	3.23 ± 0.34	3.27 ± 0.26	3.22 ± 0.30	0.193	0.825
Equipment of the healthcare institution	2.98 ± 0.32	3.08 ± 0.35	2.92 ± 0.34	0.297	0.747
Quality of life of patients after myocardial infarction	4.24 ± 0.17	4.11 ± 0.24	4.31 ± 0.10	1.817	0.191

*Statistical significance at the 0.05 level.

Based on the results of the ANOVA test presented in Table 13, it can be concluded that there is no statistically significant difference in patients' experiences during rehabilitation, satisfaction with medical treatment and physiotherapy, satisfaction with medical staff, the equipment of the healthcare institution, or quality of life after acute myocardial infarction in relation to the respondents' place of residence.

Table 13. Differences in relation to place of residence.

	Belgrade (N=28)	**Vojvodina (N=29)**	**Region of Šumadija and Western Serbia (N=38)**	**Region of Southern and Eastern Serbia (N=11)**	**F**	**p**
	Mean value					
Patient experience during rehabilitation	3.32 ± 0.22	3.34 ± 0.15	3.33 ± 0.29	3.34 ± 0.18	0.039	0.990
Satisfaction with medical treatment and physiotherapy	3.23 ± 0.33	3.19 ± 0.39	3.31 ± 0.39	3.18 ± 0.36	0.744	0.528
Satisfaction with medical staff	3.22 ± 0.35	3.23 ± 0.29	3.23 ± 0.31	3.32 ± 0.30	0.286	0.835
Equipment of the healthcare institution	3.01 ± 0.41	3.19 ± 0.29	2.85 ± 0.33	2.89 ± 0.19	0.594	0.627
Quality of life of patients after myocardial infarction	4.26 ± 0.22	4.29 ± 0.16	4.11 ± 0.18	4.17 ± 0.14	0.561	0.648

*Statistical significance at the 0.05 level.

4. Discussion

The results of the conducted research indicate that rehabilitation after acute myocardial infarction represents an important component of patient recovery, both physically and psychologically. The analysis of the sociodemographic characteristics of the respondents showed that the majority of patients are of middle and older age, which is consistent with epidemiological data indicating that myocardial infarction most frequently occurs in individuals older than 45 years [12].

Additionally, the higher proportion of female respondents may indicate greater awareness of the need for rehabilitation or a greater willingness among women to participate in research related to healthcare services. Regarding patients' experiences during rehabilitation, the results show a high level of satisfaction with support and motivation during the rehabilitation process (M = 4.80), as well as with the organization of therapy adapted to patients' health conditions (M = 4.40). These findings confirm the importance of continuous support from medical staff during rehabilitation, which is consistent with the findings of other studies emphasizing the importance of a multidisciplinary approach in cardiac rehabilitation [18]. However, the relatively low level of satisfaction with information provided about patients' own health condition (M = 1.96) indicates the need to improve communication between healthcare professionals and patients. Patient education regarding the course of rehabilitation, therapeutic procedures, and expected outcomes represents an important factor in successful secondary prevention of cardiovascular diseases [20]. The analysis of satisfaction with medical treatment and physiotherapy showed that patients recognize significant progress due to regular therapies (M = 3.78), confirming the effectiveness of rehabilitation programs based on physical activity and controlled physical exertion. Similar results have been reported in numerous studies confirming that physical activity programs within cardiac rehabilitation contribute to improved functional capacity and reduced risk of recurrent myocardial infarction [16]. However, the low level of satisfaction regarding monitoring progress and adjusting therapy (M = 1.52) indicates the need for a more intensive individualized approach to patients during rehabilitation. The results related to satisfaction with medical staff show that patients feel safe during rehabilitation (M = 4.18) and have confidence in the expertise of healthcare professionals (M = 3.72). These findings confirm the important role of nurses, physicians, and physiotherapists in the rehabilitation process, particularly in providing emotional support and motivation for patients. However, the relatively low level of satisfaction regarding receiving answers to patients' questions (M = 1.97) may indicate a lack of time for individual communication or insufficiently developed educational programs within rehabilitation institutions. Regarding the equipment and facilities of healthcare institutions, the results indicate that patients are most satisfied with the space and conditions for physical activity (M = 4.47), while they are least satisfied with the level of privacy and hygienic conditions in certain areas. These findings suggest the need for further improvement of infrastructural and organizational conditions in rehabilitation centers, which is important for increasing the quality of healthcare services and patient satisfaction. The analysis of patients' quality of life after rehabilitation showed that respondents report a high level of support from family and friends (M = 4.85), as well as a positive attitude toward recovery (M = 4.66). Social support represents one of the key factors for successful rehabilitation and significantly influences patients' motivation to adhere to medical recommendations and healthy lifestyle habits [17]. At the same time, the relatively lower level of satisfaction with the overall quality of life after rehabilitation (M = 3.19) indicates that the recovery process often takes longer and requires continuous medical and psychological support. The results of the statistical analysis showed that there is no significant difference in satisfaction with rehabilitation in relation to the gender of respondents, thereby rejecting the initial hypothesis about gender differences in the perception of the quality of the rehabilitation process. On the other hand, a statistically significant difference was found in the perception of the equipment of healthcare institutions in relation to the age of respondents, with older patients reporting lower levels of satisfaction. This result may be explained by the fact that older patients often have higher expectations regarding the availability of medical equipment and the quality of healthcare services.

A statistically significant difference was also found in the quality of life after myocardial infarction in relation to the marital status of respondents. Patients who are married showed a higher level of satisfaction with their quality of life compared to divorced respondents. This finding confirms the importance of emotional and social support in the recovery process after cardiovascular diseases, which is also supported by numerous previous studies in the field of cardiac rehabilitation [23]. On the other hand, the results of the study indicate that the level of education, employment status, financial status, and place of residence do not significantly influence satisfaction with rehabilitation or quality of life after myocardial infarction. This finding may indicate a relatively uniform quality of rehabilitation programs in the healthcare institutions included in the study. Despite the significant findings, the study has certain limitations. First, the relatively small sample size may affect the possibility of generalizing the results to the broader population of patients. In addition, the subjective perception of satisfaction with healthcare services may be influenced by individual expectations, the psychological condition of patients, and their previous experiences with the healthcare system. Future research should include a larger number of respondents and different rehabilitation centers in order to obtain a more comprehensive picture of the quality of rehabilitation services and the factors influencing the success of recovery in patients after acute myocardial infarction.

5. Conclusions

Based on the conducted research, it can be concluded that rehabilitation after acute myocardial infarction represents a key component in the patient recovery process and significantly contributes to improving their physical, psychological, and social functioning. The research results indicate that most patients demonstrate a relatively high level of satisfaction with rehabilitation treatment, particularly regarding support and motivation during the rehabilitation process, the organization of therapy, and the sense of safety during treatment. These findings confirm the importance of a multidisciplinary approach involving physicians, nurses, and physiotherapists, whose collaboration plays a significant role in the success of the rehabilitation process. At the same time, the research results also indicate certain shortcomings in the rehabilitation process, particularly in the area of communication between healthcare staff and patients. Patients expressed a relatively low level of satisfaction with the information provided about their own health condition, progress during rehabilitation, and opportunities to ask questions to medical staff. These findings highlight the need to improve educational activities and strengthen communication between healthcare professionals and patients in order to increase trust and encourage patients' active participation in the recovery process. The analysis of the proposed research hypotheses showed different results. Hypothesis H0, which assumed that there is a statistically significant difference in satisfaction with rehabilitation in relation to the gender of patients, was not confirmed, as the statistical analysis did not show significant differences between men and women. Hypothesis H1, according to which patient age influences the perception of satisfaction with rehabilitation, particularly regarding the equipment of healthcare institutions, was partially confirmed, since a statistically significant difference was found in the perception of healthcare institution equipment between different age groups. Hypothesis H2, which assumed that the marital status of patients significantly affects quality of life after rehabilitation, was confirmed, as the results showed that married patients reported a higher level of satisfaction with their quality of life compared to divorced respondents. This result highlights the importance of social and family support in the recovery process after myocardial infarction.

Hypothesis H3, which assumed that the level of education, employment and financial status, as well as the place of residence of patients, do not significantly influence satisfaction with rehabilitation, was also confirmed, as the statistical analysis did not show significant differences in relation to these variables. Based on the obtained results, it can be concluded that continuous improvement of rehabilitation programs, patient education, and the development of modern methods of cardiac rehabilitation are of great importance for reducing the risk of recurrent myocardial infarction and improving patients' quality of life. Particular attention should be given to improving communication between patients and healthcare professionals, as well as to the further development of infrastructure and equipment in rehabilitation institutions. Future research should include a larger number of respondents and different rehabilitation centers in order to obtain a more comprehensive understanding of the factors influencing the success of rehabilitation and patient satisfaction with healthcare services. Such an approach may contribute to the development of more effective rehabilitation programs and the improvement of healthcare for patients after acute myocardial infarction.

Conflicts of Interest: The authors declare no conflict of interest.

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