LOKMAN HEKIM HEALTH SCIENCES

DOI: 10.14744/lhhs.2022.10005
Lokman Hekim Health Sci 2023;3(1):22–31

ORIGINAL ARTICLE

lokmanhekimhs.com

Investigation of the Experiences of Patients Treated in Coronary Intensive Care Unit after Myocardial Infarction Using a Phenomenological Method

Miyokard İnfarktüsü Sonrası Koroner Yoğun Bakımda Tedavi Olan Hastaların Deneyimlerinin Fenomenolojik Yöntemle İncelenmesi

Berrin Pazar[1], **Öznur Kavaklı**[2]

[1]**Surgical Diseases Nursing, Lokman Hekim University, Faculty of Health Sciences, Ankara, Türkiye**
[2]**Department of Fundamentals of Nursing, University Health Sciences Turkey, Gülhane Faculty of Nursing, Ankara, Türkiye**

Abstract

Introduction: This research aimed to reveal the subjective experiences, psychological difficulties, and feelings and opinions of myocardial infarction (MI) patients during their stay in the intensive care unit (ICU).

Methods: This research employed a phenomenological method as a descriptive qualitative method. The research was conducted in June–July 2022. The research comprised 13 MI patients who received treatment at the coronary ICU of a research and training hospital. The collected data were analyzed using Colaizzi's phenomenological method. Necessary permissions were obtained from the ethics committee of the relevant university. The article was written in accordance with the Consolidated Criteria for Reporting Qualitative Research control list.

Results: The mean age of the participants was 59.92±13.62 years and their ages ranged from 37 to 84 years. Of the participants, 69.2% were males, 46.2% were graduates of primary school, and 38.5% were self-employed. Of the total patients, 53.8% quit smoking due to MI, but 7.7% continued drinking. Among the patients, 84.6% had chronic diseases, which were mostly coronary artery diseases (92.3%) and hypertension (69.2%). The main symptoms experienced were chest pain (86.4%), getting tired easily (38.5%), breathlessness (30.8%), and burning in the sternum (23.1%). Three main themes derived from the analysis of the collected data were experiences with MI, experiences in the Coronary ICU, and new life after hospital discharge.

Discussion and Conclusion: The findings of the research showed the need for effective programs to cope with stress and cardiac rehabilitation programs to improve the psychosocial well-being of MI patients and maintain their adaptation to a new life.

Keywords: Coronary intensive care unit; Myocardial infarction; Patient experience; Qualitative research

Cite this article as: *Pazar B, Kavaklı Ö. Investigation of the Experiences of Patients Treated in Coronary Intensive Care Unit after Myocardial Infarction Using a Phenomenological Method. Lokman Hekim Health Sci 2023;3(1):22–31.*

Correspondence: Berrin Pazar, M.D. Lokman Hekim Üniversitesi, Sağlık Bilimleri Fakültesi, Ankara, Türkiye
E-mail: berrin.pazar@lokmanhekim.edu.tr

Submitted: 12.10.2022 **Revised:** 28.10.2022 **Accepted:** 31.10.2022

Cardiovascular diseases (CVDs) account for 40.4% of mortality caused by noncommunicable diseases and one-third of global mortality.[1,2] Mortality caused by CVDs is expected to increase to 22.2 million in 2030. Myocardial infarction (MI), because of CVDs, occurs due to cardiac ischemia induced by poor or lack of blood perfusion.[3] MI patients experience death threats and suffer from various important problems related to personal beliefs, lack of information, uncertainty about the process of recovery, management of symptoms and treatment, and changes in family, social, and professional relations. Serious physical and psychological problems may occur in individuals who suffer from a threat of death and bodily image. Anxiety and fear of death increase after hospitalization.[4] Patients may experience intense stress due to unexpected developments and recurrent cardiac events, which may occur together with various complications.[5] Most MI patients experience difficulties in psychosocial adaptation. Negative feelings, such as anger, sorrow, fear, depression, impaired sleep, and fatigue, make it difficult for MI patients to return to their family, social, and professional life. These patients are affected by factors such as social support needs and the need for information about the management of the disease. Nehir and Çam[4] reported that MI patients experienced anxiety on the first and second days, followed by denial and rejection of treatment on the second day and depression on the third and the following days. Anxiety and intense stress after MI may result in physiological changes such as changes in coagulation, decrease in immune response, delay in wound healing, increase in heart rate, myocardial load, and oxygen consumption. These physiological changes, in turn, may delay treatment and result in various complications. Independent of cardiac diseases, negative feelings, such as anxiety and depression, may increase the rate of mortality.[6]

Psychological factors, such as anxiety and depression, may influence the patient's prognosis if not diagnosed and managed after MI. Effective management has positive impacts on patient's health, so it should be targeted for all critical care patients. This target requires the determination and systematic evaluation of the psychological factors experienced by MI patients. Nonverbal support and distraction may be effective in informing the patients about the disease.[7] Therefore, we may suggest that health professionals working in intensive care units (ICUs) should have information about the physiological and psychological reactions of MI patients. Within this context, this research aimed to describe the subjective experiences, psychological difficulties, feelings, and emotions of MI patients in coronary ICUs using a phenomenological method. This research may have methodological contributions to the literature and address the effective management of psychological factors experienced by MI patients.

Materials and Methods

Design

This study was designed based on phenomenology, a type of qualitative research. Phenomenology, as a qualitative method, analyzes the subjective experiences of the participants and aims to define and explain why the participants behave in a certain way from their perspective.[8] This research dealt with the experiences of MI patients during their stay in the ICU. We encouraged participants to express their feelings and opinions in detail.[8,9] This study was guided by the Consolidated Criteria for Reporting Qualitative Research.[10]

This research used a purposive sampling method and included MI patients who received treatment in the coronary ICU.[9,11] Participants were accessed through personal interviews. The research was conducted at the coronary ICU of a research and training hospital. The data collection ended when data saturation was reached. The research was conducted in June–July 2022 and provided the subjective experiences of 13 MI patients.

Research Team and Reflexivity

Members of the research team are lecturers (assistant professors) of the faculty of health sciences, department of nursing, surgery diseases nursing, and faculty of nursing, basics of nursing. Researchers have been trained in qualitative research methods and have conducted research and publications using these methods.

Participants

The mean age of the participants was 59.92±13.62 years and their ages ranged from 37 to 84 years. Of the participants, 69.2% were males, 46.2% were graduates of primary school, and 38.5% were self-employed. Of the patients, 53.8% quit smoking due to MI, but 7.7% continued drinking. Among the participants, 84.6% had chronic diseases, which were mostly coronary artery diseases (92.3%) and hypertension (69.2%). The main symptoms experienced were chest pain (86.4%), getting tired easily (38.5%), breathlessness (30.8%), and burning in the sternum (23.1%). Descriptive characteristics are shown in Table 1.

Table 1. Descriptive characteristics (n=13)

	n	%
Age (years) Mean±SD	59.92±13.62	
Gender		
Female	4	30.8
Male	9	69.2
Marital status		
Married	9	69.2
Single	4	30.8
Education status		
Illiterate	1	7.7
Primary education	6	46.2
Secondary education	5	38.5
University and above	1	7.7
Profession		
Public servant	2	15.4
Self-employed	5	38.5
Retired	2	15.4
Soldier	1	7.7
Housewife	3	23.1
Smoking		
Yes	3	23.1
No	3	23.1
Quit smoking	7	53.8
Alcohol consumption		
Yes	1	7.7
No	10	76.9
Quit drinking	2	15.4
Lives		
Alone	5	38.5
With family	8	61.5
Chronic diseases		
Yes	11	84.6
No	2	15.4
Names of chronic diseases*		
Reflux stomach pain	3	23.1
Diabetes mellitus	3	23.1
Hypertension	9	69.2
Coronary artery disease	12	92.3
Atrial fibrillation	1	7.7
Symptoms experienced**		
Chest pain	11	86.4
Burning in the sternum	3	23.1
Breathlessness	4	30.8
Getting tired easily	5	38.5
Pain in one or both arms	1	7.7

SD: Standard deviation; *: Answered by the participants with chronic diseases; **: More than one answer was possible.

Data Collection

Before starting the study, patients were informed about the study. The second researcher conducted a face-to-face interview to collect the data. The Descriptive Information Form and a semistructured questionnaire on the experiences of MI patients during their stay in the coronary ICU were used for data collection. The data were collected during the face-to-face interview. In-depth interviews were conducted with the participants who agreed to participate. In line with the suggestion of Charmaz,[12] no restrictions were placed during the interview. The interview started by obtaining data on the descriptive characteristics of the participants. Next, an in-depth interview was conducted using the semistructured questionnaire. Each interview took about 30–45 min. The data collection process was finalized after 13 patients as data saturation was reached.

Descriptive Information Form

This form was prepared by the researchers and included questions on age, gender, marital status, education level, the person they lived with, diagnosis, length and weight, smoking, alcohol consumption, chronic diseases, and physical exercises performed.

Semistructured Questionnaire on the Experiences of the MI Patients During Their Stay at the Coronary ICU

This form was developed by the researchers to reveal the experiences of the participants during their stay at the coronary ICU after MI. It included 17 open-ended questions on the following subjects:

- The process of decision-making on applying to a hospital
- Unforgettable feelings experienced during ICU stay
- Times that made it difficult to cope with stress and created emotional burden during ICU stay
- Expectations from health professionals and the social environment
- Opinions about life after hospital discharge

Data Analysis

Interviews were audio recorded and transcribed one day after each interview. The collected data were analyzed using Colaizzi's phenomenological method. The interview data were analyzed separately by two researchers, meaningful expressions were revealed, and themes were formulated. After the analysis of the data, feedback was received from 12 participants about the findings. All the participants who gave feedback stated that the research findings were appropriate and did not give any additional opinions. The presence of at least 10 participants under the same cate-

Table 2. Main themes, subthemes, and examples of expressions

Themes	Subthemes	Examples
Experiences with MI	Factors leading to MI	*I have two children. Mostly I think of what they will do or be in the future. I am a bit obsessive. I cannot forget at once. It would be better if I was not like this. I think it harms me*
	Symptoms during MI	*I felt like there was an anvil sitting on my chest. There was severe pain on my left shoulder. The pain was severe*
Experiences in the coronary ICU	Fears about MI	*I am scared since it may reoccur due to the disease. I am scared if cannot reach hospital and receive treatment on time. I am scared of death. Everyone gets scared of it*
	Expectations from health personnel	*Social relations are vital for a patient. They are sufficient even the physician does not prescribe a medication*
	Experiences about having no family caregivers	*I wanted my son around. Although I told not to come, I expect someone around*
	Sleeping pattern	*I could not sleep at night. I slept for an hour towards morning. I had a terrible low back pain. The night was a nightmare, I could not sleep. There were severe patients and one of them died. I was affected.*
New life after hospital discharge	Returning to professional life	*I must work. I have a partner and children. I must work for them; I have to recover as soon as possible. The only thing after here is to return to professional life*
	Points to consider	*I will eat saltless things. I will avoid fried food and saturated fat, quit smoking, and do physical exercise*

MI: Myocardial infarction; ICU: Intensive care unit.

gory indicates that data saturation has been reached. All participants were interviewed to increase the diversity of codes under categories. Besides, some of the statements of the participants were quoted. According to Colaizzi's[13] phenomenological analysis, each transcript should be read to get a general idea of the whole content, important statements about the studied phenomenon should be extracted for each transcript, meanings should be formulated from these important statements, and the participants should be asked to confirm the findings by subtracting categories and themes from the formulated meanings. As the research was a qualitative study, statistical analysis was not performed.

Ethical Consideration

Ethical approval was obtained from the Non-Invasive Clinical Research Ethics Committee of a University (date: May 2022, decision no.: 2022/92) before beginning the study. Consent regarding participation in the study was obtained from each participant and confirmed in the voice recordings. The researchers were assured that the data would be anonymous and that confidentiality would be protected. The study was conducted in accordance with the principles of the Declaration of Helsinki.

Results

Three themes were derived from the face-to-face interviews with 13 patients:

1. Experiences with MI
2. Experiences with the Coronary ICU
3. New life after hospital discharge

Table 2 presents the main themes, subthemes, and statements as examples of subthemes.

Experiences with MI

Factors Leading to MI

Physical or emotional stress may cause MI. Participants had MI and were hospitalized after intensive stress. The reasons for stress included traffic accidents, family and social problems, and workload. The participants believed that stress was the primary reason for MI. Besides, one participant expressed that smoking caused MI:

> *"I had chest pain before, but after the accident, the pain spread to my chest. The accident increased stress, which, in turn, resulted with complaints about heart.". (P1)*
>
> *"Stress is experienced everywhere. I don't care about stress at work, but I am concerned about family problems. I have two children. Mostly I think of what they will do or be in the future. I am a bit obsessive. I cannot forget at once. It would be better if I was not like this. I think it harms me." (P5)*
>
> *"My daughter-in-law passed away four years ago. I take care of her two children. She passed away due to hearth attack in this hospital. My responsibilities increased; I feel sorry for the children. My daughter is also ill, she has been experiencing temporary blackouts since she was 20 years old. She has epilepsy. I am exhausted and*

> *I feel so sad. I was working in the daytime and taking care of my daughter at nights. It was exhausting. There is no father. I have been taking care of everything." (P8)*
>
> *"I know my end if I don't quit smoking. I have problems with my family, I can't get along with my partner." (P9)*
>
> *"My partner passed away; its effect was persistent for years. My daughter was one years old; my son was one years old; I was in my twenties." (P13)*

Symptoms During MI

Major symptoms experienced by the participants were chest pain, burning in the sternum, breathlessness, stomachache, and gas pain. Some participants understood that they were having MI, while others thought they had a problem other than MI:

> *"I understood that I was having a heart attack. I had indigestion; everyone thought that I had stomach problem, but I understood that it was a heart attack. I felt chest pain. I had heart attack before. One month ago, but it did not take much time. This time, it took half an hour." (P2)*
>
> *"I woke up to toilet at night. An unendurable pain, I thought I was passing away. But I thought it was heartburn. I also had chest pain, but I always thought it was a stomach problem. It was such an unendurable pain that I thought I was going mad." (P3)*
>
> *"I had severe chest pain. I underwent angiography. The pain was really strong." (P4)*
>
> *"The pain that came from the stomach squeezed at my chest. I felt weakness in my arm. I had eaten hot pancake; I thought it was indigestion. I thought I had stomach problem." (P5)*
>
> *"It started with chest pain; I felt like there was an anvil sitting on my chest. There was severe pain on my left shoulder. The pain was severe." (P6)*
>
> *"During the attack. I felt I was choking. There was pain on my jaw and neck." (P11)*
>
> *"I went to the gastroenterology clinic. I thought I was a stomach problem." (P13)*

Fears About MI

Some participants stated that they did not understand that they had MI. Once diagnosed by health professionals, they were very upset, afraid of death, and anxious because they could undergo surgery with uncertain outcomes:

> *"I was very upset when I learnt that I had a heart attack. I was scared when I learnt that I had to undergo surgery. I had not received angiography up until now. You do not know what kind of thing it is; you just hear about it. You feel scared and anxious when you learn that you must receive angiography. There is uncertainty and you feel hopeless. Will I recover, will I survive? You may have another heart attack before the surgery. You are an invalid person." (P1)*
>
> *"I had chest pain before, but they said that I had no problem. This time, the pain was different. I thought I did not have any problem. I was not aware that I was having a heart attack. I am obsessed with the possibility of another heart attack." (P7)*
>
> *"I thought about my grandchildren. I was scared about their future." (P8)*
>
> *"I got panicked when I heard of the diagnosis. I displayed pessimism. I was anxious. I was not scared of angiography, but I got panicked if I had to undergo bypass surgery. I was relaxed when I learnt that there was no need for a surgery." (P10)*
>
> *"I am scared since it may reoccur due to the disease. I am scared if cannot reach hospital and receive treatment on time. I fear death. Everyone gets scared of it." (P11)*
>
> *"I thought I was too young. I thought I had to have more time to spend with my grandchildren." (P12)*

Experiences with the Coronary ICU

Expectations from Health Personnel

The main expectations of the participants from health professionals in the coronary ICU were good-humored care, being heard by the personnel, and communication based on trust. Besides, the participants demanded information about what to do after discharge:

> *"I was expecting good-humored care from the health personnel. Everyone here did their work; I am delightful". (P1)*
>
> *"Even this conversation is relaxing. It reduced distress. Here, health personnel are friendly, and I am satisfied with their attitudes. This environment gave me confidence. There is uncertainty, I want to ask about these." (P7)*

> *"I want to learn about how to eat." (P8)*
>
> *"Social relations are vital for a patient. They are sufficient even the physician does not prescribe a medication." (P10)*
>
> *"I wonder if I will be able to climb the ladders after discharge." (P13)*

Experiences of Having No Family Caregivers

Although short visits were permitted, family caregivers were not allowed to remain in the coronary ICU, which made the participants feel lonely. However, they were glad because short visits were permitted and felt relaxed because they knew that somebody was waiting outside the ICU:

> *"I wanted my son around. Although I told not to come, I expect someone around." (P1)*
>
> *"Family caregivers are not permitted here but knowing that they are outside makes you relaxed." (P13)*

Sleeping Pattern

Participants had insomnia caused by stress and anxiety during their ICU stay. Lights and sounds caused by alarms, nursing care, or suffering of other patients had effects on their sleeping patterns. Besides, some of the participants experienced pain at the incision site, whereas others were disturbed by the sandbags over the body, which in turn, resulted in insomnia:

> *"I could not sleep since I was at the ICU. I could not fall asleep. I had inguinal pain after angiology. I could not fall asleep due to the pain. I could finally fall asleep, thanks to fatigue and sleeplessness. Sounds of other patients and the treatment also influenced me, there was much sound. I fell asleep, woke up, and then fell asleep again." (P2)*
>
> *"I cannot sleep at nights. I am obsessed with my disease. I experience insomnia." (P4)*
>
> *"I could not sleep at night. I had to lay still due to the sandbag. It was my first angiography. Occasionally, I had pain. I could not sleep at night. I slept for an hour towards the morning. I had a terrible low back pain. The night was a nightmare, I could not sleep. There were severe patients and one of them died. I was affected. I had lower back pain since I had to stay sill; due to this reason, I could not sleep." (P6)*
>
> *"I was affected by staying in the ICU with other severe patients." (P12)*

New Life after Hospital Discharge

Returning to Professional Life

The analysis of the statements of the participants about returning to professional life revealed that some of the participants would not return to professional life, whereas others expressed that they wanted to earn money as soon as possible as they were the only ones who maintained their families:

> *"My professional life will end after the surgery; I could not work much already. I had fatigue and I was getting tired easily. From now on, since I learnt about my disease, I will feel as if I got tired even if I am not really tired." (P1)*
>
> *"I have cherries to be collected. I must go. I will return to my usual life after discharge. I have a garden of nuts. The garden should be cleaned; I think of this duty. I will feel relaxed when I clean there". (P4)*
>
> *"I constantly think when I will be able to return to my job. My mother also had angiography; she did not stay for a long time. Mine is severe and I know that I must stay for a longer time. I am a building worker; I wonder when I can return to my job." (P7)*
>
> *"I hope I will not have persistent problems. There is much time to retire. I cannot do hard work. But I must work. I have a partner and children. I must work for them; I have to recover as soon as possible. I am scared whether I can work again. I do not know when I will be discharged or what kind of life I will experience after discharge. The only thing I think about after here is to return to professional life." (P11)*
>
> *"When will I be discharged? I should immediately return to my work. I am responsible for two different departments. I should return as soon as possible". (P13)*

Points to Consider

Participants expressed that they would pay more attention to their diet, do physical exercise, and quit smoking in their new life:

> *"I will eat saltless things. I will avoid fried food and saturated fat, quit smoking and do physical exercise." (P1)*
>
> *"I will try to be more controlled in my new life." (P7)*

> *"I stay with my family. When I am discharged, I want to rent a new house and cook my own food. I do not know what I eat at the crowds. I have to watch out what I eat." (P8)*
>
> *"Quitting smoking is my first target. I could not breathe one or two months ago. I smoke two packs of cigarettes a day. I feel I will have problems with my heart." (P11)*

Discussion

The participants expressed stress as the primary reason causing MI. Excessive hot or cold weather, excessive eating, impaired sleep, fit of fury, and severe influenza in adults were reported as the reasons for MI.[4] Besides, smoking, nonadherence to medication, and factors causing stress, such as workload, financial loss, leaving a job, financial debts, and loss of beloved ones, were the other reasons for MI.[14] One of the participants lost his/her partner at an early age and took all responsibilities, which was exhausting. Another participant was divorced and had to take care of his/her grandchildren and children with epilepsy, which was also exhausting. MI patients in our research experienced sorrow and stress. Due to this reason, nurses can be supported to identify the levels of anxiety and stress in MI patients, evaluate the coping mechanisms, and use effective methods after evaluations. Besides, education programs on diets, physical exercise, medical adherence, quitting smoking, and coping with stress can be conducted.[4]

The primary symptoms experienced by the participants were chest pain, burning in the sternum, breathlessness, heartburn, and gas pain. Şahin and Köçkar[15] reported that pain was the primary stressor in ICU patients. Falun et al.[14] stated that chest pain was the primary symptom, whereas breathlessness and shoulder or arm pain were the less familiar symptoms. Other studies reported that the patients may experience acute chest pain due to either MI or necrosis, vague pain, and other symptoms, such as sweating, vomiting, and fainting.[5,16] Özdemir[17] reported that nearly half of the MI patients defined chest pain as squeezing pain or pressure and noted that atypical symptoms, including dyspepsia, fatigue, exhaustion, dyspnea, and pain or discomfort in the jaw, neck, arms, or shoulders, may be observed. Some of the participants in our research thought that the symptoms they experienced were related to stomach problems. The research of Hutton and Perkins[18] also noted that symptoms of MI may be confused with indigestion or having slept on one arm. Ferry et al.[19] stated that reassurance, diagnosis, explanation, and advice were the key interventions to reduce the suffering of MI patients. As family caregivers are not allowed to remain in the coronary ICUs, nurses can avoid the loneliness of the patients, provide support, evaluate their needs, and inform them about the treatment process. Participants in our research were concerned about possible death, surgery, and uncertainty. Similarly, Frazier et al.[7] reported that acute MI patients were in despair and experienced fear of death, leading to anxiety. Anxiety may be defined as a feeling of fear or uneasiness caused by a perceived threat to the physical integrity, safety, or life of an individual.[20–22] After a cardiac event, symptoms of anxiety are observed in nearly 50% of the patients, and 25% of these patients suffer from anxiety disorders.[23] Some of the participants in our research experienced fear of death because they were worried about their children or grandchildren needing care. This situation showed that the fear of death was closely associated with a fear of the inability to fulfill parental responsibilities and concerns about the future of their children. Besides, the participants expressed that they feared death as death would prevent them from seeing their children grow, being a part of their life, and loving them. Sjostrom-Strand et al.[24] reported that MI patients wanted to spend more time with their children and grandchildren. Besides, the patients were also worried about having another MI and experienced uncertainty due to the ongoing symptoms they could not interpret. These factors, in turn, increased the anxiety levels of the MI patients.[23,24] Maddox et al.[25] reported that angina pectoris was reported in 19.9% of 1957 patients one year after MI. Consequently, the fear of recurrent MI is highly normal. Therefore, we may suggest that MI patients in ICU should be able to express their feelings, such as fears and concerns, their feelings should be systematically measured with a reliable and valid measurement tool, and anxiety interventions should be evidence-based.[7] The impacts of fear and anxiety on the patients should be clearly identified, and health care needs should be evaluated.[15] The information needs of the patients should be evaluated based on their diagnosis, and required information should be provided. Besides, health professionals who provide care may receive psychosocial care education.[26] Effective management of anxiety and fear may have positive impacts on patient outcomes.[7]

Good humor and giving information about the disease were the primary expectations of the participants. Cossette et al.[6] found that MI patients expected active listening and sympathetic behavior. Other studies also reported that anxiety levels of MI patients decreased when health professionals reassured, listened to, encouraged, and provided advice and emotional support to the patients. Besides, the establishment of reassurance between health care providers and patients and education on the disease may reduce uncertainty. In mild to moderate cases of anxiety, providing information about the symptoms may be helpful in the early stages. Providing information about the diseases and the patients' understanding of health diseases may have a significant impact on recovery, symptom experience, and perception of risk factors.[23] By increasing knowledge, education may help to reconstruct the meaning and context of the situation and, in turn, reduce uncertainty.[6,16] Consequently, patients will feel competent in managing symptoms. Besides, the relationship between health professionals and patients may be empowered when the patients have the freedom to express their concerns and when health professionals show empathy with and respond to individual circumstances.[19]

Although family caregivers were forbidden to remain, the participants were glad to see them for a short time and to feel their support, even behind the doors of the ICU. Dilla et al.[2] stated that family members and friends were the primary sources of social support, providing emotional support and encouragement. Social support is crucial to escape from stress and depression. It elevates the mood and contributes to the process of recovery.[18] Patients who experience traumatic events such as MI will be able to cope with stress if they are supported by their family members and friends.[5] Due to this reason, family caregivers may be provided the right to visit their patients within the boundaries of the rules of the hospitals.

All participants expressed insomnia during the ICU stay. Sleeping disorders are common among ICU patients after MI due to medications, psychological stress caused by physical disease, and environmental factors such as sounds and light during patient care in the ICU.[27] Perkins-Porras et al.[23] reported sleep disorders after cardiac events. Similarly, Tenekeci and Kara[28] observed poor sleep quality in MI patients. Participants in the research of Kala et al.[29] expressed that they woke up earlier and could not fall asleep again during their stay in the ICU after MI. Andersson et al.[30] also noted that MI patients experienced several physical and mental problems, such as impaired sleep, nightmares, and fear of dying in their sleep. These problems and their constant fatigue had a negative impact on the daily life of the MI patients. Based on these and our findings, we may suggest that the sleeping patterns of MI patients may be determined and regularly followed up. Besides, the reasons for sleep disorders may be determined, and health care, education, and counseling may be provided to overcome problems.[28]

Some participants expressed their demands to return to professional life after recovery, whereas others were reluctant to do so. Sjostrom-Strand et al.[24] reported that female MI participants preferred early retirement instead of working. Cossette et al.[6] identified uncertainties about recovery and house and work responsibilities among MI patients after recovery. Hutton and Perkins[18] stated that MI patients experienced uncertainty about the extent of their physical limitations and felt frustrated because they were being treated as invalids. The patients may experience difficulties in returning to their life or face social traumas, such as losing or changing their jobs, 4–8 weeks after MI. An MI patient in the research of Nehir and Çam[4] expressed that the employer demanded the MI patient to return to profession without waiting for full recovery or maintaining support. Reassignment or job loss may contribute to the feeling of uncertainty and pressure.[30] On the other hand, Yardımcı[16] reported that MI patients demanded to return to the profession as soon as possible if they had a family to look after. The aim of nursing care should be to help the patients to have an active life and return to their profession as soon as possible.

Participants of this research expressed their intention to be more careful about their life, do physical exercises properly, have a healthy diet, and quit smoking. Existing studies reported that MI patients should be referred to cardiac rehabilitation programs before discharge.[2] Evidence supports the benefits of attending cardiac rehabilitation on reduction of morbidity and mortality rate.[23] Cardiac rehabilitation programs offer graded exercise, relaxation training, information, and the opportunity to meet with other patients.[18] Adopting a healthy life that includes regular physical activity, healthy diet, and quitting smoking may reduce the prognosis of MI and is a low-cost health strategy that decreases the risk of cardiac events in the future.[31]

Limitations

This research was limited to the experiences of 13 patients with MI who were hospitalized at the coronary ICU of a research and training hospital.

Conclusions

This research found that MI patients had a stressful life or experienced stressful events before MI. They mostly applied to the hospital due to complications of chest pain. Following MI, the participants feared death, felt despair, and had concerns about the possibility of undergoing surgery and uncertainty of the future. They expected good humor, effective interaction, information about the disease, and the support of family caregivers. Besides, they experienced insomnia during the ICU stay. Participants who had to maintain their families expressed their demands to recover as soon as possible so that they could return to professional life. On the other hand, participants without responsibilities did not have any intention to return to professional life.

Based on these findings, we may suggest that health professionals might meet the demands of MI patients for information during their ICU stay. Besides, they may develop communication based on reassurance and aid and allow the family caregivers to visit MI patients within the limits of hospital rules. Besides, MI patients may participate in programs to cope with stress and cardiac rehabilitation programs to maintain their adaptation to their new life and improve their psychosocial well-being.

It is recommended to conduct a study on the experiences of patients after cardiac rehabilitation.

Peer-review: Externally peer-reviewed.

Ethics Committee Approval: The Gülhane Scientific Research Ethics Committee granted approval for this study (date: 26.05.2022, number: 2022/92).

Authorship Contributions: Concept: BP; Design: BP, ÖK; Supervision: BP; Fundings: BP, ÖK; Materials: BP, ÖK; Data Collection or Processing: ÖK; Analysis or Interpretation: BP, ÖK; Literature Search: BP; Writing: BP, ÖK; Critical Review: BP.

Conflict of Interest: None declared.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. T.C. Sağlık Bakanlığı, Halk Sağlığı Kurumu. Türkiye Kalp ve Damar Hastalıkları Önleme ve Kontrol Programı, 2015-2020. Available at: https://tkd.org.tr/TKDData/Uploads/files/Turkiye-kalp-ve-damar-hastaliklari-onleme-ve-kontrol-programi.pdf. Accessed Mar 15, 2022.
2. Dilla D, Ian J, Martin J, Michelle H, Felicity A. "I don't do it for myself, I do it for them": A grounded theory study of South Asians' experiences of making lifestyle change after myocardial infarction. J Clin Nurs 2020;29(19-20):3687–700. [CrossRef]
3. Sepehrian E, Pooralmasi M, Abdi A, Rajati M, Mohebi S, Tavakol K, et al. Life after myocardial infarction: a qualitative study on experiences of Kurdish patients affected by Iran-Iraq war. Patient Relat Outcome Meas 2020;11:209–19. [CrossRef]
4. Nehir S, Çam O. Psyhosocial health and illness adjustment in patients undergone myocardial infarction. Ege Üniversitesi Hemşirelik Yüksek Okulu Dergisi 2010;26(3):73–84.
5. Akın G. Miyokard İnfarktüsü Geçirmiş Bireylerin Travma Sonrası Büyüme, Bağlanma Stilleri ve Başa Çıkma Tutumları Açısından İncelenmesi. (Master Thesis). İstanbul: Maltepe University, Institute of Social Sciences; 2019.
6. Cossette S, Frasure-Smith N, Lespérance F. Nursing approaches to reducing psychological distress in men and women recovering from myocardial infarction. Int J Nurs Stud 2002;39(5):479–94. [CrossRef]
7. Frazier SK, Moser DK, O'Brien JL, Garvin BJ, An K, Macko M. Management of anxiety after acute myocardial infarction. Heart Lung 2002;31(6):411–20. [CrossRef]
8. Tenny S, Brannan JM, Brannan GD. Qualitative Study. 2022 Sep 18. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022.
9. Kamal SSLB. A Research paradigm and the philosophical foundations of a qualitative research. PEOPLE: International Journal of Social Sciences 2019;4(3):1386–94. [CrossRef]
10. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care 2007;19(6):349–57.
11. Sönmez V, Alacapınar FG. Örneklendirilmiş Bilimsel Araştırma Yöntemleri. Ankara: Anı Yayıncılık; 2017.
12. Charmaz K. Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. London, UK: Sage Publications; 2000.
13. Colaizzi PF. Psychological Research As the Phenomenologist Views it. New York: Oxford University Press; 1978.
14. Fålun N, Fridlund B, Schaufel MA, Schei E, Norekvål TM. Patients' goals, resources, and barriers to future change: A qualitative study of patient reflections at hospital discharge after myocardial infarction. Eur J Cardiovasc Nurs 2016;15(7):495–503. [CrossRef]
15. Şahin M, Köçkar Ç. Intensive care unit as a stressor. Life Skills Journal of Psychology 2018;2(4):207–14. [CrossRef]
16. Yardımcı T. İlk Kez Akut Miyokard İnfarktüsü Geçiren Bireylerin Tıbbi Yardım İsteme Konusunda Nasıl Karar Verdiklerinin İncelenmesi. (Master Thesis). İzmir: Dokuz Eylül Üniversitesi, Sağlık Bilimleri Enstitüsü; 2010.
17. Özdemir L. Pain characteristics at the patients experienced myocardial infarction and factors influencing pain. Sağlık Bilimleri Fakültesi Hemşirelik Dergisi 2012;34–45.
18. Hutton JM, Perkins SJ. A qualitative study of men's experience of myocardial infarction. Psychol Health Med 2008;13(1):87–97. [CrossRef]
19. Ferry AV, Strachan FE, Stewart SD, Marshall L, Lee KK, Anand A, et al. Exploring patient experience of chest pain before and after implementation of an early rule-out pathway for myocardial infarction: a qualitative study. Ann Emerg Med 2020;75(4):502–13. [CrossRef]
20. Van Beek MH, Zuidersma M, Lappenschaar M, Pop G, Roest AM, Van Balkom AJ, et al. Prognostic association of cardiac anxiety with new cardiac events and mortality following myocardial infarction. Br J Psychiatry 2016;209(5):400–6. [CrossRef]
21. Guler E, Schmid JP, Wiedemar L, Saner H, Schnyder U, von Känel R. Clinical diagnosis of posttraumatic stress disorder after myocardial infarction. Clin Cardiol. 2009 Mar;32(3):125-9.
22. Matthias AT, Samarasekera DN. Preoperative anxiety in surgical patients - experience of a single unit. Acta Anaesthesiologica Taiwanica 2012;50(1):3–6. [CrossRef]

23. Perkins-Porras L, Joekes K, Bhalla N, Sutherland C, Pollard M. Reporting of posttraumatic stress disorder and cardiac misconceptions following cardiac rehabilitation. J Cardiopulm Rehabil Prev 2015;35(4):238–45. [CrossRef]
24. Sjöström-Strand A, Ivarsson B, Sjöberg T. Women's experience of a myocardial infarction: 5 years later. Scand J Caring Sci 2011;25(3):459–66. [CrossRef]
25. Maddox TM, Reid KJ, Spertus JA, Mittleman M, Krumholz HM, Parashar S, et al. Angina at 1 year after myocardial infarction: prevalence and associated findings. Arch Intern Med 2008;168(12):1310–6. [CrossRef]
26. Bulduk B, Aktaş MC, Bulduk M. Mental disorders developed following acute myocardial infarction. JAREN 2017;3(1):24–7.
27. Kavaklı Ö. Koroner Yoğun Bakım Ünitesinde Göz Bandı Uygulaması ile Birlikte Verilen Danışmanlığın Uyku Kalitesi, Anksiyete ve Konfor Düzeyine Etkisinin İncelenmesi. (Doctoral Thesis). Ankara: Health Sciences University, Gulhane Health Sciences Institute; 2017.
28. Tenekeci EG, Kara B. The relationship between sleep quality and fatigue in patients with myocardial infarction. Gülhane Tıp Derg 2016;58:366–72. [CrossRef]
29. Kala P, Hudakova N, Jurajda M, Kasparek T, Ustohal L, Parenica J, et al. Depression and anxiety after acute myocardial infarction treated by primary PCI. PLoS One 2016;11(4):e0152367. [CrossRef]
30. Andersson EK, Borglin G, Willman A. The experience of younger adults following myocardial infarction. Qual Health Res 2013;23(6):762–72. [CrossRef]
31. Mayou RA, Gill D, Thompson DR, Day A, Hicks N, Volmink J, et al. Depression and anxiety as predictors of outcome after myocardial infarction. Psychosom Med 2000;62(2):212–9. [CrossRef]