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Psychosocial Problems and Life Experiences of Patients Undergoing Cardiac Surgery: Qualitative Study

Kardiyak Cerrahi Geçiren Hastaların Yaşadığı Psikososyal Sorunlar ve Yaşam Deneyimleri: Nitel Çalışma

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ABSTRACT Objective: This study aims to evaluate the psychosocial problems and life experiences of patients who have undergone cardiac surgery using a phenomenological approach. **Material and Methods:** A qualitative research method was used in this study. The research was conducted through face-to-face interviews with 15 patients who had undergone cardiac surgery in a province located in northern Türkiye. Data were collected through semi-structured in-depth interviews. Purposeful sampling method was preferred for participant selection. Interviews continued until data saturation was achieved. The collected data were analyzed using thematic analysis. The research process and reporting were carried out in accordance with the Consolidated Criteria for Reporting Qualitative Research checklist. **Results:** Two main themes were identified through data analysis: "effects of open-heart surgery" and "adaptation to work life and daily living activities after open-heart surgery". In addition, 8 sub-themes were determined: emotional, physical, social, nutrition, family life, social life, work life, and disease/health. The results were interpreted based on the participants' statements. **Conclusion:** The study revealed that lifestyle changes following cardiac surgery led to anxiety, difficulty coping with stress, fatigue, sleep problems, nutritional issues, dependence in daily life, role changes within the family, and challenges in social and professional life. These issues were found to delay patients' return to daily life and hinder their adaptation process. Therefore, it is of great importance to support patients not only physically but also psychosocially after cardiac surgery.

Keywords: Cardiac surgery; psychosocial; life experience; nursing; qualitative research

ÖZET Amaç: Bu araştırmanın amacı, kardiyak cerrahi geçiren hastaların yaşadıkları psikososyal sorunlar ve yaşam deneyimlerini fenomenolojik bir yaklaşımla değerlendirmektir. **Gereç ve Yöntemler:** Bu çalışmada, nitel araştırma yöntemi kullanılmıştır. Araştırma, Türkiye'nin kuzeyinde yer alan bir ildeki kardiyak cerrahi geçirmiş 15 hastayla yüz yüze yürütülmüştür. Veriler, yarı yapılandırılmış derinlemesine görüşmelerle elde edilmiştir. Örneklem seçiminde, amaçlı örnekleme yöntemi tercih edilmiştir. Görüşmeler, veri doygunluğu sağlanana kadar sürdürülmüştür. Elde edilen veriler, tematik analiz yöntemiyle analiz edilmiştir. Araştırma süreci ve raporlaması, Nitel Araştırma Raporlama için Konsolide Kriterler kontrol listesi doğrultusunda gerçekleştirilmiştir. **Bulgular:** Verilerin analizinde, "açık kalp cerrahisi operasyonunun etkileri" ve "açık kalp cerrahisi sonrası iş yaşamı ile günlük yaşam aktivitelerine adaptasyon" olmak üzere 2 ana tema bulunmuştur. Ayrıca 8 alt tema (duygusal, fiziksel, sosyal, beslenme, aile hayatı, sosyal yaşam, iş yaşamı ve hastalık/sağlık) saptanmıştır. Katılımcılardan alınan ifadelere göre belirlenen bu temalar doğrultusunda bulgular yorumlanmıştır. **Sonuç:** Bu çalışmada, kardiyak cerrahi sonrası hastaların yaşam tarzlarında meydana gelen değişimlerin anksiyete, stresle baş etmede zorluk, yorgunluk, uyku sorunları, beslenme problemleri, günlük yaşamda başkalarına bağımlı olma, aile içindeki rollerin değişmesi ile sosyal ve iş yaşamında çeşitli zorluklara yol açtığı görülmüştür. Bu durumların, hastaların günlük yaşamlarına geri dönmelerini geciktirdiği ve uyum süreçlerini zorlaştırdığı belirlenmiştir. Bu nedenle kardiyak cerrahi geçiren hastaların yalnızca fiziksel değil, psikososyal yönden de desteklenmeleri büyük önem taşımaktadır.

Anahtar Kelimeler: Kardiyak cerrahi; psikososyal sorunlar; hemşirelik; fenomenolojik çalışma

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Cardiovascular diseases (CVDs) remain one of the leading global health challenges due to their high prevalence and mortality rates. Non-communicable diseases (NCDs) account for the majority of deaths worldwide, and among them, CVDs are the most common.[1,2] According to the World Health Organization, ischemic heart disease is the single largest cause of death within the NCD group, responsible for an estimated 17.9 million deaths globally each year.[3] This accounts for approximately 32% of all global deaths, highlighting the urgent need for preventive strategies and effective treatment approaches. Similarly, in Türkiye, CVDs pose a significant public health burden. Data from the Turkish Statistical Institute indicate that diseases of the circulatory system were the leading cause of death in the country in 2022, accounting for 34.4% of all reported deaths.[4] These statistics underscore the critical importance of addressing cardiovascular health through early diagnosis, medical intervention, and comprehensive patient care, including the management of physical and psychosocial recovery following cardiac surgeries.[3]

Treatment methods for ischemic heart disease, which is a cause of high mortality, include lifestyle changes, pharmacological treatment, percutaneous coronary intervention or coronary artery bypass grafting.[5] Coronary artery bypass grafting can be performed with the traditional method (cardiac surgery) or the alternative method (in the working heart).[6,7] In addition to coronary artery bypass grafting, valve surgeries, congenital heart surgeries and heart transplantation are performed with the cardiac surgery method.[5,8]

Cardiac surgery affects patients physically, socially, and psychologically.[9] It can impact various organs, especially the brain, leading to neurological issues in 3-7% and psychological problems in 33-83% of patients. Postoperative issues include pneumonia, acute renal failure, stroke, decreased cognitive function, work-life changes, and mental health challenges such as anxiety, depression, and fear of not recovering.[10,11] Patients also face psychosocial problems like stress, role confusion, changes in relationships and activities, sexual issues, and mood disorders.[11]

Although cardiac surgery is a major intervention aiming to prolong the life of individuals, it creates significant effects in psychological and social areas beyond physical recovery. In the postoperative period, patients face various psychosocial difficulties including anxiety, depression, body image change, social isolation and fear of dependency.[12,13] In this process, the time spent in intensive care, physical limitations and difficulties in activities of daily living negatively affect the quality of life of individuals and increase the need for psychosocial support.[14] In this context, understanding the psychological processes following cardiac surgery is critical for patients' adaptation to the rehabilitation process.[13,14]

On the other hand, complications that develop after cardiac surgery also deeply affect the life experiences of individuals. Complications such as infection, arrhythmia, stroke, cognitive impairment and chronic pain may negatively affect not only physical recovery but also psychological well-being.[15,16] Role losses, withdrawal from the social environment and loss of independence that occur in the postoperative period cause significant decreases in the quality of life of individuals.[16] Therefore, qualitative examination of the physical and psychosocial experiences of individuals undergoing cardiac surgery is important in terms of both clinical practice and the development of holistic care models. When the studies were examined; it was reported that psychosocial problems seen in patients after coronary arterial bypass graft delayed recovery and caused re-hospitalization and repeated hospitalizations.[17-19] According to Parvan et al., being sick again after coronary artery bypass graft surgery, reoperation, fear of death, loss of role at home and at work were found to be the causes of stress.[20]

Individuals who undergo cardiac surgery face not only physiological but also profound psychosocial effects after the operation. Problems such as anxiety, depression, social isolation, fear of dependency and loss of role can negatively affect the quality of life of patients; this situation reveals that the surgical process should be handled with a holistic approach, not only medical. However, in the existing literature, studies that qualitatively examine the personal experiences of these individuals in a cultural context are limited.[13-17] This study aims to understand in depth the psychosocial problems and life experiences of individuals undergoing cardiac surgery in their own

words; thus, while contributing to the understanding of patient-centered care, it also prepares the ground for the integration of values and coping strategies specific to Turkish society into health services. In this respect, the study has a high contribution potential in terms of both original and clinical applications.

The examination of psychosocial problems experienced by individuals undergoing cardiac surgery is of great importance in terms of nursing discipline. In this context, psychiatric nursing plays a role in understanding and supporting psychological reactions such as anxiety, depression, stress, loneliness and difficulties in coping with life, while surgical nursing assumes a critical function in the management of physical problems experienced by patients before and after surgery. Psychosocial traumas experienced by individuals after surgical intervention affect not only physical recovery but also mental health and social adaptation; this situation requires psychiatric nursing and surgical nursing to cooperate with a holistic approach. This study aims to contribute to the development of patient-centered, sensitive and multidimensional nursing care practices in both psychiatric and surgical nursing fields by trying to understand the psychosocial experiences of individuals undergoing cardiac surgery.

MATERIAL AND METHODS

This study was conducted using a phenomenological approach, a form of qualitative research, and was reported in alignment with the Consolidated Criteria for Reporting Qualitative Research guidelines (Appendix 1).[21]

STUDY DESIGN

This study was carried out from August 2024 to September 2024, employing an inductive qualitative design. Semi-structured in-depth interviews were held with 15 patients admitted to the cardiovascular surgery ward of a training and research hospital in a province in northern Türkiye.

Research Team and Reflexivity

The research team consisted of 3 researchers, all of whom are full-time faculty members in nursing faculties within the university. Two of the researchers hold a PhD in psychiatric nursing and have extensive experience in mental health, therapeutic communication and psychosocial care. The 3rd researcher holds a PhD in surgical nursing and has in-depth clinical expertise in perioperative care, particularly in cardiac surgery units. All 3 researchers have previous hands-on clinical experience, which contributes to their contextual understanding of patient care and hospital dynamics. In addition, each member of the research team received formal training in qualitative research methodologies, including phenomenological analysis, interview techniques and reflexive practices. Throughout the research process, the team held regular discussions to reflect on potential biases and clinical assumptions and kept reflexive diaries to ensure that data interpretation was based on participants' authentic narratives rather than the researchers' professional perspectives.

Sample Group

The study group was identified through criterion sampling, a purposive sampling technique commonly used in qualitative research to ensure that participants possess specific characteristics directly related to the phenomenon under investigation. Participants were required to be receiving care in the cardiovascular surgery ward of a state hospital located in northern Türkiye. The aim was to include individuals who could provide rich, detailed accounts of their psychosocial experiences in the postoperative period. A total of 15 patients meeting these criteria were recruited for the study. Semi-structured, in-depth interviews were conducted face-to-face in a private setting to ensure comfort and confidentiality. Data collection continued until data saturation was achieved defined as the point at which no new themes or insights emerged from subsequent interviews. This sampling approach ensured both depth and relevance of the data, enhancing the credibility and transferability of the findings.

Inclusion Criteria

- Having undergone cardiac surgery
- Being hospitalized in the vascular surgery service
- Being open to communication

APPENDIX 1: Consolidated Criteria for Reporting Qualitative Research (COREQ)

Number	Item	Guiding questions	Explanations
Area 1: Research team and reflexivity			
Personal characteristics			
1	Interviewer/facilitator	Which author/authors conducted the interview or focus group?	The second author conducted the interview.
2	Identity information	What were the credentials of the researcher?	First author: PhD Second author: PhD Third author: PhD
3	Profession	What was their occupation at the time of the study?	First author: Dr. Psychiatric Nursing Second author: Dr. Surgical Nursing Third author: Dr. Psychiatric Nursing
4	Gender	Was the researcher a man or a woman?	Three researchers are women
5	Experience and training	What experience or training did the researcher have?	The first author has completed courses in qualitative research. The second author has taken qualitative research courses, gained experience in qualitative studies, and published research in international journals. The third author has also completed qualitative research courses, has practical experience in qualitative research, and has published studies in international journals.
Relationship with participants			
6	Relationship status	Was a relationship established before the training started?	No relationship was established before the start of the study.
7	Interviewer's participant knowledge	What did participants know about the researcher?	Individuals knew that the researcher had a doctorate in surgical diseases nursing.
8	Interviewer characteristics	What traits were described about the interviewer/facilitator?	At the start of each interview, participants were provided with information about the study's purpose and goals.
Area 2: Study design			
Theoretical framework			
9	Methodological orientation and theory	Which methodological orientation was specified to support the study, e.g. discourse analysis, ethnography, phenomenology, content analysis?	This is a qualitative study.
Participant selection			
10	Sampling	How were the participants selected?	Criterion sampling method, one of the purposive sampling methods, was used.
11	Approach method	In what way were the participants approached?	The interview schedule was set based on the availability of individuals who voluntarily agreed to participate in the study.
12	Sample size	How many participants were there in the study?	A total of 15 individuals were included in the study.
13	Disagree	How many people refused to participate or dropped out? Reasons?	There were no individuals who refused to participate in the study.
Setting			
14	The setting of data collection	Where was the data collected?	Detailed information is provided in the data collection section of the study.
15	Presence of non-participants	Was there anyone else present apart from the participants and the researchers?	There were no observers.
16	Description of the sample	What are the important characteristics of the sample?	Individuals who agreed to participate in the study were included in the study.
Data collection			
17	Interview guide	Did the authors provide the questions, prompts, and guidelines? Were these tested in a pilot study?	Detailed information is given in the Methods section.
18	Repeat interviews	Have there been re-interviews? If yes, how many?	No.
19	Audio/visual recording	Was audio or visual recording employed to gather data in the study?	The interviews were recorded with a voice recorder.
20	Field notes	Were field notes taken during and/or after the interview or focus group?	The responses of all individuals and the researcher's observations were recorded.
21	Duration	How long were the interviews or focus groups?	Each interview lasted between 30 and 40 minutes.
22	Data saturation	Has data saturation been discussed?	Data saturation is discussed.
23	Transcripts returned	Were the transcripts shared with participants for feedback and/or corrections?	No.
Area 3: Analysis and findings			
24	Number of data coders	How many data coders coded the data?	Three researchers coded the data.
25	Identification of data	Did the authors define coding?	The headings and subheadings in the results section represent the final coding.
26	Derivation of themes	Were the themes predetermined or derived from the data?	Themes were derived from the data.
27	Software	What software, if any, was used to manage the data?	Data were analyzed manually.
28	Participant control	Did participants provide feedback on the findings?	No.
Reporting			
29	Quotes provided	Are participant quotes presented to illustrate themes/findings? Is each quote identified, e.g. participant number?	Conclusion. Participant quotes are provided to illustrate themes/findings. For example, participant number.
30	Data and findings consistent	Was there consistency between the data presented and the findings?	Yes
31	Clarity of main themes	Are the main themes clearly presented in the findings?	Yes
32	Clarity of small themes	Is there an explanation of the different cases or a discussion of minor issues?	Yes

■ Voluntary participation in the research

Exclusion Criteria

■ Having a language, speech or hearing impairment that prevents communication

DATA COLLECTION TOOLS

The study used an "introductory information form" for demographics and a "semi-structured interview form" to explore patient experiences. Interviews were held privately with written and verbal consent, using active listening, note-taking, and recording with the participant's approval.

Introductory Information Form

The introductory information form was prepared by the researcher in line with the literature and consists of 5 questions.[6,7]

Semi-structured Interview Form

The semi-structured interview form was developed in accordance with the aim of the study and was informed by a comprehensive review of the relevant national and international literature on psychosocial issues following cardiac surgery.[6,7] The form was designed to explore the lived experiences and psychosocial challenges of individuals who underwent cardiac surgery within a phenomenological framework. To ensure both flexibility and depth, the form included main guiding questions as well as supportive probing sub-questions, which were used adaptively depending on the participant's responses, particularly in cases where the participant became silent, digressed from the topic, or required prompting for elaboration.

The interview form aimed to allow participants to reflect openly on their experiences, emotions, thoughts, and coping processes related to the surgical and post-surgical period. During the interviews, the researchers occasionally asked follow-up or clarifying questions to deepen understanding and gather rich, meaningful data. These supplementary questions were not fixed but were contextually shaped during the interview process to maintain the conversational flow and support phenomenological depth.

The core questions included in the form were as follows:

1. What does it mean for you to have cardiac surgery? How did it make you feel? What kind of thoughts did it provoke?

2. How have your relationships with your family members or relatives changed after the surgery? Could you describe your experiences in this regard?

3. How do you feel psychologically after the surgery? How did it affect you psychosocially? What kind of experiences did you go through in this context?

4. Were you able to return to and adapt to your work and/or daily life? Are you able to fulfill your responsibilities as before?

5. Do you experience anxiety or worry about the future? Could you share your thoughts and experiences on this matter?

The responses obtained from participants were analyzed in line with Colaizzi's (1978) 7-step method, and emerging themes and sub-themes were constructed not only from the answers to the main questions, but also from the elaborations and narratives shared in response to these probing follow-up questions. This approach ensured a comprehensive and authentic representation of participants' psychosocial experiences, consistent with the phenomenological orientation of the study.

Validity and Reliability of the Study

The study rigorously adhered to Lincoln and Guba's criteria to ensure the credibility, transferability, dependability, and confirmability of the findings.[24] For credibility, the research team engaged in prolonged engagement and persistent observation, and interview results were subsequently returned to two well-informed participants for verification and validation; both participants approved the interpretations without suggesting any modifications. Detailed descriptions of both participants and the research setting were provided to facilitate transferability of the findings to similar contexts. To ensure dependability, the entire research process was meticulously documented—from data collection to analysis—allowing for an audit trail that external reviewers could exam-

ine. Confirmability was strengthened by incorporating direct quotations from participants, thereby ensuring that the themes emerged directly from the data rather than the researchers' predispositions. Additionally, three independent researchers performed coding of the interview data to enhance internal reliability, and the interview questions and resultant themes were reviewed by experts. Notably, these expert reviews confirmed the appropriateness of the methodological approach and the interpretation of the results, and no changes were recommended, further underscoring the study's internal validity.

DATA ANALYSIS

The qualitative data obtained from the semi-structured interviews were analyzed using Colaizzi's 7-step phenomenological method (1978), which is a systematic and rigorous approach for exploring the meanings of lived experiences.[21] Initially, all interviews were transcribed verbatim and read multiple times by the researchers to gain a general sense of the participants' narratives. In the 2nd step, significant statements directly related to the psychosocial experiences of post-cardiac surgery patients were identified across transcripts. These statements were then extracted and clustered to generate formulated meanings, with particular attention paid to the context and emotional content of the expressions.

Each researcher independently conducted initial coding and then met collectively to discuss and reconcile interpretations, ensuring inter-rater reliability and minimizing potential bias. In the following steps, themes and sub-themes were developed through an inductive process that reflected the underlying structure of the participants' experiences. These thematic categories were refined through iterative comparison and reflective dialogue among the research team. To enhance credibility and trustworthiness, direct quotations from participants were integrated into the findings to support the identified themes and to allow readers to trace the analytical process. Finally, a comprehensive description of the phenomenon was formulated, and findings were validated through member checking with selected participants, who confirmed that the themes accurately represented their experiences.[22]

ETHICAL CONSIDERATION

This research was approved by Gümüşhane University's Ethics Committee (date: June 27, 2024; no: 2024/6, E-95674917-108.99-259779). Informed consent was obtained from participants, and recordings and transcripts were stored securely. The study followed the Declaration of Helsinki and National Research Committee ethical standards.

RESULTS

Five of the individuals included in the study were women and the average age of the participants was 59.73±7.75. In addition, 12 of the participants were married and 10 of them had a chronic disease. Demographic characteristics of the individuals participating in the study are presented in Table 1.

As a result of the analysis of the data obtained from the semi-structured interviews, themes, subthemes and codes were identified (Table 2).

THEME 1. THE EFFECTS OF CARDIAC SURGERY

Subtheme 1. Emotional

According to the data obtained from the interviews, the participants stated that they were mentally af-

TABLE 1: Characteristics of participants

Participant number	Age (years)	Gender	Marital status	Chronic disease
P1	69	Male	Married	Hypertension
P2	55	Male	Married	Chronic renal failure
P3	70	Female	Married	Hypertension
P4	49	Male	Single	No
P5	69	Female	Married	No
P6	60	Male	Married	Hypertension, Type 2 diabetes mellitus
P7	59	Male	Married	Hypertension
P8	62	Female	Single	Hypertension
P9	42	Female	Married	Hypertension
P10	54	Male	Married	No
P11	59	Male	Single	Hypertension
P12	62	Male	Married	No
P13	65	Male	Married	Hypertension, Type 2 diabetes mellitus
P14	56	Male	Married	Hypertension
P15	65	Female	Married	No

TABLE 2: Psychosocial issues and life experiences of patients who undergoing cardiac surgery themes and sub-themes

Themes	Subthemes	Codes
1. Effects of cardiac surgery	A. Emotional	A. 1. Fear of death A. 2. Anxiety A. 3. Sadness A. 4. Uncertainty A. 5. Anxiety A. 6. Hopelessness A. 7. Regret A. 8. Restlessness A. 9. Depressive mood
	B. Physical	B.1. Pain B.2. Fatigue B.3. Sleep problems B.4. Fatigue B.5. Appetite problems
	C. Social	C.1. Increased family support C.2. Involvement of children in postoperative care
2. Adaptation to work life and activities of daily living after cardiac surgery	A. Nutrition	A. 1. Avoid salty and fatty foods A. 2. Paying attention to diet to ensure weight control A. 3. Trying to balance fluid consumption A. 4. Reduction or cessation of cigarette consumption
	B. Family life	B.1. Increased spousal support B.2. Children being more present with the individual B.3. Having arguments with family members about smoking B.4. Thinking that you are a burden to your loved ones B.5. Fear of being disliked by the spouse
	C. Social life	C.1. Decrease in social activities C.2. Fatigue C.3. Sadness C.4. Crying C.5. Difficulty in fulfilling responsibilities C.6. Decreased quality of life C.7. Difficulty in stress management
	D. Work life	D.1. Fear of losing your job D.2. Fear of deterioration in work performance D.3. Don't think about thinking a little late to work
	E. Disease/health	E.1. Fear of having heart disease again E.2. Fear of death E.3. Fear of not being able to return to the pre- operative state E.4. Fear of being dependent on others due to illness E.5. Having problems in adaptation to life after illness

fected by the cardiac surgery operation and that they experienced many different emotions such as anxiety, fear and uneasiness.

There was fear of death, fear of not being able to do my own work. I had a lot of stress when they told me that I would have surgery, but my doctor was very good, thanks to him (P1). There is almost no one on my father's side of the family who has not had this surgery. My father had it. Uncle, aunt. So I had previous experience. I knew more or less. But it still scares you... If you ask whether knowing is good or bad, when it happens to you, you don't know anything (P9).

Subtheme 2. Physical

According to the data obtained from the interviews with the participants, individuals experience physical problems such as pain, sleep and appetite after cardiac surgery.

My husband passed away. My children live abroad. I didn't have much support with me. My daughter came for the surgery but she could not stay long. I have sleep problems... I couldn't think about the surgery. I always thought about whether I would have someone to help me (P8).

Heart surgery is a big operation. You have a lot of pain... I think it is the biggest surgery. That's why I was afraid to lie on that table (P3).

Subtheme 3. Social

Participants stated that family support increased socially after cardiac surgery and children participated in the postoperative care process.

I had surgery suddenly. I thought I was weak and anemic, I was tired all the time, I was sleeping. I went to prescribe blood medication. They said you needed urgent surgery. I didn't have time to be scared. But now I am afraid if I have to have surgery again. Thank God my family is with me, but there is fear again... (P15).

THEME 2. ADAPTATION TO WORK LIFE AND ACTIVITIES OF DAILY LIVING AFTER CARDIAC SURGERY

Subtheme 1. Nutrition

Participants stated that they paid more attention to their nutrition after cardiac surgery and that they paid more attention to fluid consumption and smoking.

It was regret. I never used to pay attention to what I eat and drink. I hope I will get better from now on. I pay attention to salt consumption after the surgery... (P14).

One's life is changing. I pay more attention to what I eat and drink. Smoking is also very important, thank God I quit. I can't relieve my tension when I don't smoke alone (P4).

Subtheme 2. Family life

Participants stated that their family life was also affected after cardiac surgery. These effects are seen as restlessness in family relationships, guilt towards the family as a result of not being able to do housework or daily chores, and deterioration in family relationships due to fear and anxiety.

I can't fulfill my responsibilities, my household chores (P5).

I had a bit of a fight with my wife. He said you didn't watch your blood pressure. He was very upset about me. He actually gets angry because he thinks about me (P14).

Subtheme 3. Social life

In the interviews with the participants it was determined that the social lives of the participants changed after cardiac surgery. This change is seen in ways such as not going out, being isolated, spending less time outside due to physical mobility limitations, and spending less time with friends.

I don't work, I don't go out much, I walk around the house, I walk outside (P14).

My fears seem to be over. I'm feeling better. I haven't fully returned to my old life. Social life is changing as it is, so let's see how it goes (P10).

Subtheme 4. Work life

Interviews with participants revealed that individuals experienced problems related to their professional life cardiac heart surgery.

I live a lot. I am afraid whether I will be unemployed, whether I can continue to make a living, whether I will be dependent on people (H4).

Don't I worry about the future. How I will spend my life, how things will be, when and how death will come. These questions always cause trouble for me (P9).

Subtheme 5. Health/illness

Interviews with participants revealed that individuals had concerns about their health after cardiac surgery.

Yes, yes. Sickness is no joke. One should not think that it will not happen to oneself. I had heart surgery when I thought I had nothing. Now I am more afraid of everything (P12).

I am afraid of what if I suddenly get sick again in the future. Maybe it won't be the heart this time, maybe it will be something else, but I can't trust my health, so let's see what happens... (P15).

DISCUSSION

The aim of this study is to evaluate the psychosocial problems and life experiences of patients undergoing cardiac surgery with a phenomenological approach. As a result of the analysis, the psychosocial problems experienced by individuals after cardiac surgery were addressed in 2 main themes.

THE EFFECTS OF CARDIAC SURGERY

The study found that individuals were psychosocially affected after cardiac surgery. While cardiac surgery improves life quality and prevents complications, it also impacts various systems. Participants reported a range of emotional responses such as fear of death, anxiety, uncertainty, restlessness, regret, and depres-

sive mood. These emotions are often associated with uncertainty and drastic lifestyle changes following surgery. Post-surgery, patients often need to adjust medication, diet, exercise, stress management, smoking, and daily activities, which can negatively affect their quality of life, especially in the first 6 weeks.[23-27] A recent review by McCann et al. emphasized that psychological distress after cardiac surgery is closely related to increased pain and functional decline, and that interventions such as preoperative education, cardiac rehabilitation, and social support play significant roles in mitigating these effects.[28] Similarly, Ebrahimi et al., in a qualitative study conducted in Iran, reported that patients undergoing coronary artery bypass grafting experienced significant psychological and social stressors, including the need for emotional support, spiritual reassurance, and managing limited resources.[29] These findings show that the emotional, physical and social problems experienced by patients after cardiac surgery are similar to each other, as in our study.

The study also highlighted the importance of family support, as it helps reduce anxiety and supports patients in managing activity restrictions. Studies show that coronary artery bypass grafting patients with family support show greater improvements in physical, social, and psychological health, particularly in older individuals.[29-31] These results suggest that patients need psychosocial support after surgery.

ADAPTATION TO WORK LIFE AND ACTIVITIES OF DAILY LIVING AFTER CARDIAC SURGERY

The study found that individuals had difficulty adapting to work and daily life activities after cardiac surgery. While cardiac surgery has positive effects, it can also lead to physical and psychosocial problems that impact quality of life. Quality of life includes objective indicators like physical well-being and functional ability, and subjective indicators like emotional well-being and life satisfaction.[32-34] A study by Yüksel et al. showed that patients undergoing bypass surgery experienced increased death anxiety and depression.[35] The current study also found patients had a fear of death, indicating the need for psychological evaluation. Cardiac surgery improves symptoms like angina and exercise capacity, but postoperative issues such as pain, fatigue, insomnia, and fear of death may occur.[35,36] Additionally, 9.4% of coronary artery bypass grafting patients are re-hospitalized within 30 days.[37,38] Recovery involves addressing physical, psychological, and social well-being, and regaining independence in daily activities.[39] The study's findings suggest that cardiac surgery negatively affects individuals psychosocially.

Participants reported difficulties in adapting to daily and work life post-surgery. Changes in dietary habits, evolving family dynamics, social withdrawal, and reduced work performance were among the prominent issues, consistent with previous qualitative research. In a study by Pourhabib et al., factors influencing return to work after cardiac surgery included perceived psychosocial support, individual characteristics, and occupational factors.[40] Additionally, surgical effects and limited institutional support were identified as barriers to reintegration. Blokzijl et al. highlighted personal, healthcare-related, work-related, and legal challenges as barriers to returning to work after heart surgery. Participants in their study reported anxiety, fatigue, and decreased self-confidence as key obstacles.[41] These align with our findings, such as fear of job loss, concerns about reduced performance, and challenges in fulfilling responsibilities.

LIMITATIONS

This study was conducted with a limited sample group of 15 patients who underwent cardiac surgery in a state hospital in northern Türkiye, which limits the generalizability of the findings. Although the cultural and individual differences of the participants were taken into account, the fact that the interviews were conducted in a single center and with individuals with certain sociodemographic characteristics limited the comparability of the results with other patient groups. In addition, data were collected only through semi-structured in-depth individual interviews and analyzed based on participant statements, which may have limited data diversity due to limitations in researcher interpretation and participant's own narrative. In addition, only the patient perspective was considered in the study, and the experiences and observations of family members or health professionals were excluded. For these reasons, the results should

be interpreted with caution as they reflect a specific context and further studies supported by larger samples are needed.

CONCLUSION

This study revealed that individuals undergoing cardiac surgery face not only physical but also significant psychosocial challenges. Participants reported experiencing anxiety, depressive feelings, fear of death, hopelessness, and psychological distress during the postoperative period. In addition to these emotional difficulties, symptoms such as fatigue, insomnia, appetite problems, and physical pain hindered their ability to carry out daily activities, significantly reducing their quality of life. Many participants expressed that they needed time to reorganize their lives and resume their previous social roles. Moreover, changes in family dynamics had mixed effects: while some individuals felt more supported, others experienced feelings of burdening their loved ones, social withdrawal, and decreased self-worth.

In light of these findings, it is evident that patients recovering from cardiac surgery should be evaluated not only in terms of their biological health but also with regard to their psychosocial and environmental needs. The psychological adaptation process in the postoperative period has a direct impact on patients' ability to return to their social roles, professional life, and daily responsibilities. Therefore, it is recommended that a comprehensive and individualized educational and support program be initiated before discharge and continued into the post-discharge period. This program should include guidance on managing physical and emotional changes, making lifestyle modifications (e.g., nutrition, exercise, smoking cessation), stress management, and strengthening family communication and social support systems. In this context, surgical nurses play a key role in managing the physical recovery process and postoperative education, while psychiatric nurses are essential for assessing and supporting the patient's mental health and emotional adjustment. Additionally, multidisciplinary collaboration among healthcare professionals and regular follow-up through effective communication can enhance the recovery process and facilitate patients' reintegration into daily life, ultimately improving their overall quality of life.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

All authors contributed equally while this study preparing.

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