

Experiences of Patients Underwent Bariatric Surgery: A Qualitative Research

Bariyatrik Cerrahi Geçiren Hastaların Deneyimleri: Nitel Bir Araştırma

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ABSTRACT Objective: Bariatric surgery team members need to gain insight into bariatric patients' individual experiences to ensure that they have realistic expectations about the surgery and better understanding of the changes following surgery. The study aimed to investigate the experiences of patients who have undergone bariatric surgery before the operation, their status of deciding on surgical treatment, and their experiences after the surgical process. **Material and Methods:** The study was conducted as a qualitative descriptive phenomenological study using a semi-structured in-depth individual interview method. Ethical permission was obtained. The study was conducted between June and August 2020, in a tertiary hospital in Türkiye, with patients who underwent bariatric surgery and were followed up (n=18). The study data were collected by using the personal form and semi-structured interview form. The data analysis method was used with the MAXQDA 2020-Qualitative Analyses program, and Colaizzi's 7-step analysis process was used to ensure reliability. **Results:** When the interviews with the patients who underwent bariatric surgery were analyzed seven themes were determined. The seven themes were as follows: (1) physical effects of obesity, (2) psychological effects of obesity, (3) social effects of obesity, (4) decision to undergo surgery, (5) physical effects of bariatric surgery, (6) psychological effects of bariatric surgery, (7) social effects of bariatric surgery. **Conclusion:** It was found that obesity negatively affects the health of patients, and that patients' eating habits, activity and mobility levels, ability to perform daily living activities, body image and self-confidence improved after the operation.

Keywords: Bariatric surgery; patient care; perioperative care; decision making; life style

ÖZET Amaç: Bariyatrik cerrahisi ekip üyelerinin, bariyatrik cerrahisi geçirecek hastaların beklentileri hakkında bilgi sahibi olmaları ve ameliyat sonrası değişiklikleri daha iyi anlamalarını sağlamak için hastaların bireysel deneyimleri hakkında fikir sahibi olmaları gerekir. Bu çalışmada, bariyatrik cerrahi geçiren hastaların operasyon öncesindeki deneyimlerinin, cerrahi tedaviye karar verme durumlarının ve cerrahi süreç sonrası deneyimlerinin araştırılması amaçlandı. **Gereç ve Yöntemler:** Araştırma, yarı yapılandırılmış derinlemesine bireysel görüşme yöntemi kullanılarak nitel betimleyici fenomenolojik bir çalışma olarak gerçekleştirildi. Etik izin alındı. Haziran-Ağustos 2020 tarihleri arasında Türkiye'de üçüncü basamak bir hastanede bariyatrik cerrahisi geçiren ve takip edilen hastalarla (n=18) gerçekleştirildi. Araştırma verileri kişisel form ve yarı yapılandırılmış görüşme formu kullanılarak toplandı. MAXQDA 2020-Nitel Analizler programı ile veri analizi yöntemi kullanıldı, güvenilirliğin sağlanması için Colaizzi'nin 7 adımlı analiz süreci kullanıldı. **Bulgular:** Bariyatrik cerrahisi geçiren hastalarla yapılan görüşmeler analiz edildiğinde 7 tema belirlendi. Yedi tema şu şekildeydi: (1) obezitenin fiziksel etkileri, (2) obezitenin psikolojik etkileri, (3) obezitenin sosyal etkileri, (4) ameliyat olma kararı, (5) bariyatrik cerrahisinin fiziksel etkileri, (6) bariyatrik cerrahinin psikolojik etkileri, (7) bariyatrik cerrahinin sosyal etkileri. **Sonuç:** Obezitenin hastaların sağlığını olumsuz etkilediğini, hastaların operasyondan sonra beslenme alışkanlıkları, aktivite ve mobilite düzeylerinde ve günlük yaşam aktivitelerini gerçekleştirme becerilerinde, beden imajını ve öz güvenlerinde iyileşme olduğu bulundu.

Anahtar Kelimeler: Bariyatrik cerrahisi; hasta bakımı; perioperatif bakım; karar verme; yaşam tarzı

Obesity poses health risks, numerous additional conditions may arise; the quality of life decreases, and mortality and morbidity rates increase, as do psy-

chological and social problems.^{1,2} Bariatric surgery provides continuous weight loss and is also effective for the treatment of obesity-related diseases. Im-

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improvements in the quality of life, self-esteem, physical activity level, and weight loss rates of patients following bariatric surgery are known.³ Moreover, a significant and continuous decrease in comorbidity and mortality is an expected outcome of the procedure. The adaptation of the patient and the family to treatment affects patient outcomes.⁴⁻⁶ A certain time is necessary to achieve this goal. Therefore, in the management of this process, it is necessary to ensure the adoption of the teamwork approach and the patient's adaptation to the new lifestyle.² Besides, According to the report of the Ministry of Health, General Directorate of Health Research in our country, the evaluation of the patient's medical, psychological, environmental and nutritional status before the operation, providing the patient with information about proper nutrition, realistic expectations about the operation and the advantages and disadvantages of the operation, appropriate medical, psychiatric or environmental treatments. It is the responsibility of the bariatric surgery team.²² Numerous studies exist on the beneficial medical effects of bariatric surgery, primarily quantitative design studies focusing on the quality of life after the operation.^{7,8} However, there is a significant lack of qualitative studies in Türkiye. The bariatric surgery team needs to gain insight into bariatric patients' individual experiences to ensure that they have realistic expectations about the surgery and a better understanding of the changes following surgery.⁹ In addition, every experience may affect individuals emotionally, physically, and socially.¹⁰ According to research results; long-term follow-up of diet and monitoring of emotional components in patients undergoing bariatric surgery has been shown to improve patient outcomes, achieve the desired changes in physical appearance at the end of the surgery, positively affect their body image and communication with their families and social circles, increase their quality of life, increase their satisfaction in their relationships, and become more satisfied with their appearance. It has been reported that they feel more happy and their self-confidence increases.^{2,4,7,10,11,15,19} Studies on the subject have only addressed post-operative experiences. However, because we know that the pre-operative period will also affect the postoperative period, we completed our re-

search by covering all processes. We believe that the opinions, experiences, and feedback of the patients will be instructive in the planning of this care. Based on this gap, this study aimed to understand the pre-operative and postoperative experiences of bariatric surgery patients.

MATERIAL AND METHODS

STUDY DESIGN AND SETTINGS

This qualitative study adopted a descriptive phenomenology. Researchers employ descriptive phenomenology to address lived experiences. The study was conducted using a semi-structured in-depth individual interview method. Data were collected from bariatric surgery patients (n=18) in Türkiye a tertiary hospital and met the inclusion criteria between June-August 2020. The sample was finalized once the data began to be repeated and data saturation was reached.

The inclusion criteria were having undergone bariatric surgery and at least 3 months after the operation, volunteering, having spoken Turkish, and being over 18 years old. The exclusion criteria had psychiatric or neurological disease diagnosed by a physician.

DATA COLLECTION

The study data were collected using a personal data form and 7 closed-ended items (Table 1). Appointments were made to patients who agreed to participate in the study. An appointment schedule was created with patients when they came for outpatient appointments. The interviews occurred in the hospi-

TABLE 1: Summary of interview guide questions.

Questions
1. How did obesity affect your life? How were you affected in physical, psychological, and social terms?
2. How did you decide to undergo the operation? Can you talk about this?
3. Are you content with what you experienced during bariatric surgery treatment? Which experiences are you content with?
4. What do you think of the preparations you made for the operation?
5. Can you talk about your operation? How did it go?
6. How was your follow-up stage after the operation?
7. What do you think was affected in your life after the operation?

tal, in a quiet environment with the windows and doors closed. Due to the pandemic, these rules were considered during the meeting: standing at a distance of 1.5 m from the patient, wearing a mask, and wearing a mask of the patient. There were only the researcher and patient in the room. The participant and the researcher conducting the interview had not met before. The interviews were conducted by the researcher, who was experienced in bariatric surgery patient care and follow-up and completed his doctorate in nursing. An appointment schedule was created with patients when they came for outpatient appointments. The participants were informed that the data would be recorded using a voice recorder. The interviews lasted between 39 and 56 minutes. During the interview, no notes were taken by the researcher in order not to distract the patient and to maintain eye contact. The interviews were terminated once the data began to be repeated, and no new information was collected. The recorded interviews were transcribed and verified by having the participants read it again.

The Consolidated Criteria for reporting qualitative studies 32-item checklist for qualitative studies was used for this study to ensure clear and complete reporting of study conduct.

ENHANCING CREDIBILITY

The authors rigorously followed the quality criteria of credibility, transferability, dependability, confirmability, and reflexivity.¹¹ All researchers worked together to ensure the reliability of the study. The transcription of audio recordings was controlled by the researchers. After discussion and frequent rereading of the data, the team reached consensus on the steps implemented in the methodology. Peer briefing was used because it was based on team discussion and consensus that occurred regularly throughout the research process.

DATA ASSESSMENT

After the interviews were completed, the recordings were examined and transcribed by the researchers. MAXQDA 2020 Qualitative Data Analysis software and thematic data analysis method were used for data analysis. Colaizzi's 7-step analysis process was used

to ensure the reliability of the analysis, and all authors participated in all stages of the analysis.¹²

I. step: The entire recorded interview was read by two researchers at different times (2 author).

II. step: Repeat the same or nearly identical phrases and unnecessary were removed (2 author).

III. step: While reading the text, meaningful sentences or expressions were underlined to understand what they mean conceptually (2 author) .

IV. step: From each statement the meanings have been formulated (2 author).

V. step: It was done by the first researcher, who had experience in qualitative study and data analysis during the formulation of meanings, and the second researcher who had worked with bariatric surgery patients for 4 years (2 author).

VI. step: The themes of the study were formed by bringing the similar expressions together.

VII. step: Finally, after the themes were determined and edited, the theme and content created by reading by all researchers were strengthened and validated (3 author).

ETHICAL CONSIDERATIONS

Before recruitment, ethical approval for the study was obtained from the Non-Interventional Health Research Ethics Committee of Düzce University (date: February 3, 2020; no: 2020/14), and written consent was obtained from the participants. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The aim of the study was explained to the patients and their written approvals were obtained.

RESULTS

PARTICIPANT CHARACTERISTICS

The mean age of the patients who participated in the qualitative study was 34.2±9.2; 55.56% were male, 72.2% were married, and 61.11% were employed.

The entire sample underwent laparoscopic sleeve gastrectomy by the same surgeon (Table 2).

THEMATIC RESULTS

Seven main themes were identified in this study. The main theme, sub-themes and patient sentences are shown in Table 3.

Theme 1 Physical effects of obesity: Physical limitations and poor health are sub-themes. Obesity affects all organs of patients. Patients stated that they had difficulty doing physical exercises such as walking and running.

Theme 2 Psychological effects of obesity: Sense of self-body image, loss of self-esteem, feeling stigmatized and motivation are sub-themes. Patients' negative perceptions of the changes in their bodies also negatively affect their self-confidence. Patients reported statements that made them feel stigmatized. They stated that the patients motivated themselves to lose weight.

Theme 3 Social change effects of obesity: Sub-themes include communication within the family, low social support systems, and decreased social interaction. Patients often explained how being obese affected their social environment and family relationships. They stated that their communication with their friends was especially negatively affected. Pa-

tients stated that they wanted support from their families in losing weight.

Theme 4 Deciding on surgery: Subthemes include peer support (experiences of patients undergoing bariatric surgery), physical health impairment, social support systems, and interactions. Patients stated that their discussions with patients who had previously undergone surgery, their deteriorating physical health, and their family members were effective in deciding on surgery.

Theme 5 Physical effects of bariatric surgery: Post-operative complications, changes in physical appearance, improvement of physical health, and nutritional habits are sub-themes. After obesity surgery, patients stated that they experienced problems, especially nausea and vomiting. Participants described themselves as "normal" with their changed physical appearance after bariatric surgery. All participants reported postoperative improvement in their activity and mobility levels and ability to perform activities of daily living.

Theme 6 Psychological effects of bariatric surgery: Sense of own body image, self-esteem, and motivation are sub-themes. They reported that the changes in the physical appearance of patients after obesity surgery positively affected their body image and self-confidence.

Theme 7 Social impacts of bariatric surgery: Change in the perception of others, changes in the relationship and adaptation to the new life are the sub-themes. Patients reported that they cared about noticing changes in themselves and having them expressed by others. In addition, they reported that physical changes positively affected their communication. Patients stated that the information given by the nurse contributed positively to their adaptation to their new lives after the operation. However, they said that staying at home due to the coronavirus disease-2019 (COVID-19) epidemic negatively affected the process.

DISCUSSION

This qualitative study determined what the patients who underwent bariatric surgery experienced in the period before the surgery, how they responded to sur-

TABLE 2: Distribution of the patients according to the demographic characteristics (n=18).

Participant characteristics	n	%
Gender		
Female	8	10
Male	44.4	55.56
Education status		
Primary education	2	11.10
Secondary	3	16.70
High school	9	50.00
License and above	4	22.20
Marital status		
Married	13	72.22
Single	5	27.78
Work status		
Working	11	61.11
Not working	7	38.89
Age ($\bar{X} \pm SD$)	34.2 \pm 9.2	

SD: Standard deviation.

TABLE 3: Themes, subthemes and patients sentences (n=18).

Themes	Subthemes	Patients sentences
Physical effects of obesity	Physical limitations	They say it is physically a hard life. Indeed, you live your life hard. You want to walk, but you can't. (Interviewee 10)
	Deterioration of health	I was experiencing pain in my legs and high blood pressure. (Interviewee 10)
Psychological effects of obesity	Sense of self-body image	My mother used to address me as "my chubby boy." I didn't like this. (Interviewee 7) As I gained weight, my breasts became larger and there was some sagging. When I looked closely at my photographs, they had a feminine appearance. Of course, as a man, this upset me. Thus, I preferred not to take off my t-shirt when I went to the beach. (Interviewee 7)
	Losing self-esteem	My daughter always said to me, "Do you have a baby in your belly, mom? Why do you always eat these (foods)? Mom, doesn't eat anymore, you are overweight." I didn't want my daughter to look at me when I was eating. I used to monitor whether she was looking at me or not. (Interviewee 10)
	Feeling stigmatized	There used to be conversations about weight around me in the past. For example, we used to go to this place when I was a kid. They told me, "Let's give you a bigger piece of cake, because you are overweight." The other kids would take normal-sized pastry. I was given a bigger piece of pastry than the other kids would get. (Interviewee 13)
	Motivation	I promised myself that I would not gain weight again if my weight loss increased. (Interviewee 11)
Social effects of obesity	Inter-family communication	My psychology deteriorated very much. My spouse didn't like my weight. I am easily affected; I am a very emotional person. My psychological state was terrible, and my life turned upside down. (Interviewee 12)
	Low social support systems	Most of my friends told me not to undergo an operation. My immediate circle also did not want this. Only a few of my friends said, "Have the operation." Yet, I was determined and said to myself, "I will do it." (Interviewee 8)
	Decreasing social interaction	I had great difficulty participating in activities with my friends. Let's say my friends went hiking in the mountains. I would say I couldn't go and walk there and thus would not be able to join them. I would go out walking myself instead. (Interviewee 18)
The decision of surgery	Peer support	Several of my friends also underwent laparoscopic sleeve gastrectomy. I talked to them. They affected my decision making. (Interviewee 16)
	Deterioration of physical health	The reason for my operation was that I have cardiomyopathy in my heart. I underwent surgery for this reason. My body mass index was 35. (Interviewee 10)
	Social support systems and interactions	My daughter was influential in my decision. She is a university student. We came to the hospital. We conducted some research and learned about the process. My daughter did most of the research. In fact, she was more determined. (Interviewee 12)
Physical effects of bariatric surgery	Complications after the operation	I continuously vomited for two months. Whatever I ate, came back out. I drank water and retched; I ate soup and vomited that too. (Interviewee 5)
	Changes in physical appearance	As I lose weight, I cannot forget the first day when I crossed my legs. My God, this was very important to me. (Interviewee 12)
	Improvement in physical health	I quit my diabetes and blood pressure medications after the operation. (Interviewee 8)
	Eating habits	My nurse and doctor told me something: You will eat everything after surgery, but only in small amounts. (Interviewee 1)
Psychological effects of bariatric surgery	Sense of self-body image	Previously, I felt like I was the largest Now it seems like I am the most graceful I look at my old photographs again and again; I have changed so much. I feel so happy when I compare myself with those photographs. (Interviewee 6)
	Self-esteem	Now I make plans to meet my friends. I speak to everyone individually. I have better times. (Interviewee 8)
	Motivation	My health getting better motivates me more. I spend my efforts on myself for my own health. I am trying to hold my head high. (Interviewee 5)
Social effects of bariatric surgery	Change in perception of others	You become happy when people see you and notice that you have lost weight, saying "Hey, how different you have become! You are so attractive". (Interviewee 1)
	Changes in relationships	Before the operation, I had difficulty meeting someone or talking to a girlfriend. Now, I am quite at ease. (Interviewee 15)
	Adaptation to the new life	Thanks to what I learned at the hospital, I did not have any problems after the operation. In it, you told me everything, saying. "You will do this and that for one week; now you will eat these; in the second week you will eat these." I abided by all of them and did not have any problems. (Interviewee 7)

gical treatment, and what they experienced during and after the surgical process.

BIOPSYCHOSOCIAL EFFECTS OF OBESITY

This qualitative study found that obesity negatively impacts physical, psychological, and social health. It found that deterioration in physical health, talking to

patients undergoing surgery, and social support contributed to the decision to undergo surgery, bariatric surgery positively affected participants' physical, psychological, and social functioning.

The study found that obesity negatively affects the physical health of patients in the pre-operation period, makes them feel stigmatized, and decreases their

self-esteem. Studies have reported that obesity is a risk factor for Type 2 diabetes, cardiovascular diseases, gall bladder diseases, infertility, osteoarthritis, and certain types of cancer. Obesity brings some difficulties in patients' daily living activities. Obesity negatively affects body image, and there are strong associations with depression and anxiety.^{4,13-15} The psychological effects of obesity are inevitable. Deterioration in body image, decrease in self-esteem and feeling of stigma are three basic concepts that affect each other in obese patients. It was determined that the patients used expressions indicating their negative perceptions regarding their body image. The effects of obesity lead to self-esteem issues, avoidance of social interactions, and a decreased quality of life.^{6,15,16} While an individual's communication with his social environment increases the risk of obesity, being obese also affects his interaction with his social environment.

THE DECISION OF SURGERY

The decision to undergo obesity surgery is a process that affects the patient's life. We found that deterioration of physical health, and conversations with those who had previously undergone bariatric surgery, influenced the patients' decision to undergo the operation. There are studies reporting that sharing the individual experiences of patients who underwent bariatric surgery enables patients who are planning surgery to set realistic expectations and better understand changes following the surgery.^{9,15}

BIOPSYCHOSOCIAL CHANGES AFTER SURGERY

The study results showed that the patients experienced lifestyle changes after the operation, mainly in their eating habits. According to the results of studies conducted with patients who underwent bariatric surgery, performing long-term dietary follow-up and monitoring their emotional components are important to achieve better surgical results.¹⁵ Achieving the changes they desired related to their physical appearance at the end of bariatric surgery positively affected their body image as well as communication with their families and social circle. It is necessary to regulate the care provided by the members of the healthcare team and ensure that patients are given appropriate and effective care in the perioperative period, espe-

cially in the period following the operation.^{2,17} Nurses play a significant role in the care of bariatric patients throughout the entire period, including the positive and potentially negative outcomes of the operation, and in supporting the patients.¹⁸ Bariatric surgery is a process that changes life based on the concept of rapid change. After the operation, previous studies observed an improvement in patients' quality of life, increasing satisfaction in their relationships, greater happiness due to their appearance, and feelings of excitement and joy following the operation, thus increasing their self-esteem.^{4,11,19} It is important for the patient to be compatible with all aspects of life in the post-bariatric surgery period. During this process, they expressed the situations that affected patients' adaptation. We also found that staying home for prolonged periods due to the COVID-19 pandemic negatively affected their regular physical activities. It has been reported that bariatric surgery patients gained weight during the COVID 19 period.²⁰ Another qualitative study identified a significant impact of the COVID-19 pandemic on the daily living structure and well-being of patients with a bariatric history, resulting in weight gain and psychological distress.²¹

LIMITATIONS OF THE RESEARCH

The sample of the study consisted of patients who had undergone bariatric surgery and 3 months had passed. The limitation of the study is that the data are collected in this interval, as the most weight loss occurs after the surgery and the experiences in the preoperative period and the decision to have the surgery are forgotten.

CONCLUSION

Although studies on the subject only addressed post-operative experiences, this study was completed to cover the entire perioperative process, as it is known that the preoperative period will also affect the post-operative period. According to the results of this study, it was concluded that obesity negatively affects the physical, psychological and social health of patients, that there is an improvement in the patients' eating habits, activity and mobility levels and their ability to perform daily life activities after the operation, and that the changes in the physical appearance

of the patients positively affect their body image and self-confidence. This study can inform both patients and healthcare professionals of recommendations and strategies for managing potential difficulties in the high-risk group of bariatric surgery patients. For effective health programs, bariatric surgical nursing should be considered a special branch of nursing. We think that exploring the experiences of bariatric surgery patients will help determine effective factors for achieving success, both in the processes that patients go through and in the adaptation to their new lives. This study will shed light on determining the boundaries of counseling services by detailing the roles and responsibilities of bariatric surgery nursing in our country from a political point of view.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct con-

nection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

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

Idea/Concept: Esra Usta, Havva Bozdemir, Sevim Akbal; **Design:** Esra Usta, Havva Bozdemir, Sevim Akbal; **Control/Supervision:** Esra Usta; **Data Collection and/or Processing:** Esra Usta, Havva Bozdemir; **Analysis and/or Interpretation:** Havva Bozdemir, Sevim Akbal; **Literature Review:** Havva Bozdemir; **Writing the Article:** Esra Usta, Havva Bozdemir; **Critical Review:** Sevim Akbal; **References and Fundings:** Esra Usta, Havva Bozdemir; **Materials:** Esra Usta.

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