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Learning Needs of Bariatric Surgery Patients: A Qualitative Study

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ABSTRACT

Aim: This study was planned to determine the training needs that patients who experienced bariatric surgery patients should receive from health professionals.

Material and Methods: The research was planned using a qualitative research methods. The study was conducted with 13 patients in a university hospital between April 2020 and July 2020. Research data was collected using a Semi-Structured Interview form and patient socio-demographic form. The data analysis method was used with MAXQDA 2020-Qualitative data Analyses program, Colaizzi's 7-step analysis process.

Results: We five main themes related to the learning needs of patients who have undergone bariatric surgery were determined as; "Physiological Requirements, Psychological Requirements, Social requirements, Consulting requirements and Learning methods".

Conclusion: It was determined that the patients had the highest learning needs on postoperative nutrition, complications, surgical procedure, symptoms, daily life activities, mobilization, adapting to the social life, learning materials, to come together with the people experiencing the process of bariatric surgery, etc. in the codes and sub-codes created from the patient expressions.

Patients undergoing bariatric surgery need continuous, easily accessible, applicable, and emotional support to prevent complications before and after the surgery, to make behavioral changes and prevent weight gain.

Keywords: *Bariatric surgery, Experience, Nursing care, Patient care, Patient education*

Bariatrik Cerrahi Hastalarının Öğrenme Gereksinimleri: Kalitatif Araştırma

ÖZ

Amaç: Bu çalışma, obezite cerrahisi geçiren hastaların sağlık profesyonellerinden alması gereken eğitim ihtiyaçlarını belirlemek amacıyla planlandı.

Gereç ve Yöntemler: Araştırma nitel araştırma yöntemleri kullanılarak planlanmıştır. Araştırma, Nisan 2020 ile Temmuz 2020 tarihleri arasında, yatan, 13 hastadan veri toplanarak gerçekleştirilmiştir. Araştırma verileri, yarı yapılandırılmış görüşme formu ve hasta sosyo-demografik formu kullanılarak toplanmıştır. Veri analiz yönteminde, Colaizzi'nin yedi aşamalı analiz süreci ve Maxqda 2020-Kalitatif Veri Analiz programı kullanılmıştır.

Bulgular: Nitel verilerin analizi sonucunda; obezite cerrahisi geçirmiş hastaların öğrenme ihtiyaçları beş ana tema olarak belirlendi. Bunlar; "Fizyolojik Gereksinimler, Psikolojik Gereksinimler, Sosyal Gereksinimler, Danışmanlık Gereksinimleri ve Öğrenme Yöntemleri"dir.

Sonuç: Hastaların en yüksek öğrenme gereksinimlerinin postoperatif beslenme, komplikasyonlar, cerrahi işlem, semptomlar, günlük yaşam aktiviteleri, mobilizasyon, sosyal yaşama uyum, öğrenme materyalleri, obezite sürecini yaşayan kişilerle bir araya gelme konularında olduğu belirlendi. hasta ifadelerinden oluşturulan kodlar ve alt kodlarda cerrahi vb.

Obezite cerrahisi geçiren hastaların ameliyat öncesi ve sonrası komplikasyonları önlemek, davranış değişiklikleri yapmak ve kilo alımını önlemek için sürekli, kolay erişilebilir, uygulanabilir ve duygusal desteğe ihtiyaçları vardır.

Anahtar Sözcükler: *Bariatrik cerrahi, Hasta deneyimi, Hemşirelik bakımı, Hasta bakımı, Hasta eğitimi*

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INTRODUCTION

The success of obesity surgeries requires a multidisciplinary team approach involving surgeons, psychiatrists, nutritionists, nurses, physiotherapists, and other health professionals from the moment the patient is admitted to the hospital to discharge. Obesity is a chronic disease characterized by excessive fat accumulation in the body, which is listed as the 5th leading cause of death in the world by the World Health Organization (WHO), and as a result of the accumulation of body fat in a way that disrupts health, many additional diseases occur, psychological and social problems, as well as a disease with a high mortality and morbidity rate, which reduces the quality of life (1,2). According to WHO data for 2016, around 650 million people are obese in the world.2 with the exponential growth of obesity, the number of patients admitted to bariatric surgery has been increasing every day in recent years (1). Although different techniques are used in obesity surgery, it is based on two basic principles such as restrictive, malabsorptive, in which stomach volume is reduced (3).

Obesity surgery, morbid obesity-related diseases, and a therapeutic tool for improving sustained weight loss, but the patient and family compliance with treatment, are important in influencing patient safety and patient outcomes. Improvements in the patient's quality of life, self-esteem, physical activity level, and weight-loss rates after bariatric surgery a significant and sustained reduction in comorbidity and mortality is an expected outcomes (4-6). All surgical processes require interaction between the medical team, patient, and family, and this interaction is usually done through education (1). Some studies report the results of different training programs applied to bariatric surgery patients that affect the knowledge levels, physical activity levels, and nutritional balance of the patients (6-10).

Bariatric surgery is responsible for a series of physical and psychic changes experienced by patients who undergo this procedure (11). Although, obese people who are constantly gaining weight see surgery as a last resort. However, some bariatric surgery patients may not be able to sustain weight loss (6).

In national literature, research examining perspectives on educational needs in patients experiencing bariatric surgery has not been found. In addition, this study was planned to determine the training needs that patients should receive from all medical team members to make this process more experienced, comfortable and uncomplicated before and after bariatric surgery.

MATERIALS and METHODS

Type of research, population, and sample

The research was planned qualitative research methods. Patients undergoing bariatric surgery by both methods are asked to contact doctors, nurses and other medical personnel (dietician, psychologist..etc.) who will allow in-depth questioning of the responses to their educational needs they need. The research was conducted between April 2020 and July 2020 in the Department of General Surgery, Medical Faculty Hospital of Kocaeli University.

Ethical approval was obtained for this study from the Non-Interventional Clinical Ethics Committee of Kocaeli University (Date:12/04/2020, decision no: KÜ GOKAEK 2020/4.18) and written consent was taken from the participants.

The universe of the research is made up of 42 sleeve gastrectomy and four Roux-en-Y gastric bypass surgeries with bariatric surgery treatment between 2015 and 2020 in Kocaeli University's Medical Faculty Hospital, Department of General Surgery. The size of the sample for the qualitative method was determined according to the situation in which the sample was terminated (n=13) when the data began to be repeated and satiation was reached (12-15). Criteria for inclusion in researchers determined as having undergone bariatric surgery and at least six months after surgery, volunteering to participate in research, being able to speak Turkish, to be over 18 years old.

Data collection tools

Research data was collected using a personal information form consisting of open and closed questions covering socio-demographic and disease information, a Semi-Structured Interview form.

Personal Information Form: It was created by the researcher based on literature. Individual characteristics of patients include questions about age, educational status, marital status, year of marriage, work status, social security status, and previous attempts to lose weight.

Semi-Structured Interview Form: The semi-structured interview form was prepared. The consists of a general opening question, a transition question and four key questions (Table 1). Questions are arranged in a logical string. This form consists of three main parts. In the first part; warm-up explanations, in the second part; interview questions and the third part, it consists of closing explanations. The warm-up descriptions include two stages. The first part; it consists of the content of the interview, in the second part; consists of the steps of the process. The second part consists

Table 1: Summary of Interview Guide Questions

1. Can you tell me about your surgery? How did it go?
2. Can you tell me about the training you received before and after surgery?
3. What would you like to know from a doctor, nurse, dietitian, or psychologist? What would you like to know about?
4. If you could change your experience of training for future patients, what would you change?
5. If you were to inform future patients, what would you tell them?
6. What did you need other than the training you received?

of a total of 6 questions to evaluate the care processes in the hospital and determine the educational needs of bariatric surgical treatment in patients undergoing bariatric surgery. The third section covers closure. The research questions were created by two bariatric surgeons, one nurse and nurse academician experienced in the field of bariatric surgery and qualitative research.

After obtaining the necessary ethics committee and institution permission, patients who met the criteria for inclusion in the study were informed about the research. To collect qualitative data, appointments were made for patients who agreed to participate in the study. According to the appointment plan established with the patients, the interviews were conducted in a quiet, comfortable, comfortable room with only the researchers and the patient. Before the interview began, patients were given informed written consent, explaining the purpose of the study and how to do it. It was guaranteed that everything that was said during the interview would remain confidential, that no one other than the researcher would see this information, and that his name would not be written in the report when writing the research results. A personal information form was filled out to patients before the interviews began. Patients have explained the purpose of the interview and the steps of the procedure. Data were recorded using a voice recorder with patient approval. The negotiations were terminated when the data replays began and no new information was available. In other words, it was terminated with 13 patients when the data reached saturation (16,17).

Research Limitations

The data were collected during the pandemic period, when the outpatient service was provided. In addition, the interviews with the patient were made masked and in accordance with the 2 meter distance rule.

Analyses of Qualitative Data

Data collection is terminated when groups are completed. After the interviews, the audio recordings were examined and written by investigators. The thematic data analysis method was used the with Maxqda 2020-Qualitative data Analyses program in the analysis of research data. A strategy for detailed identification of methods and analyses was used for the reliability of the research. For internal validity (credibility), the method of evaluation of data separately was used by the researchers. A detailed description of the sample and data (dense description of the sample, rich descriptions of the data) was predicted for external data validity (18). The first author was responsible for the management of the entire analytical process. 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 (Figure 1) (19).

Increasing Reliability

All the researchers came together for the reliability of the research. The transcription of the audio recordings was checked by the researchers. After discussion and frequent rereading of the data, the team reached a consensus on all steps implemented in the methodology. The translation of the article was done by an expert who was trained in the field of English language and whose mother tongue is Turkish. The English and Turkish translations of the patient statements were examined by the researchers and a consensus was reached.

RESULTS

The average age of the patients participating in the qualitative study was 34.6 years , seven of them were male, six were married, six were working, and 13 were surgical-type sleeve gastrectomy.

As a result of the analysis of the interviewers records, five main themes were created: themes I-Physiological Needs, II-Psychological Needs, III-Social Needs, IV-Counseling Needs, V-Learning Methods.

Sub-themes and codes of physiological needs theme are formed; Preoperative Learning Needs (Nutrition, Physiological Preparation, Information about Surgical Procedure), Postoperative Learning Needs (Nutrition, Exercise, Mobilization, Daily life activities, Healing process), Symptoms (Pain, Vomiting, Gas, Hiccups), Complications (Anastomosis leak). The theme of psychological needs sub-themes and

codes were created by; pre-operative psychological support (Anxiety) after surgery, psychological support (psychological preparation), the theme of social needs sub-themes and codes were created by; informing the patient, social support, adapting to social life, Surgical decision-making process (Process to come together with people experiencing), Sub-themes of the Consulting Requirement theme was created; Emergency support mechanisms, conditions requiring hospitalization, drug use, treatment management and control process, sub-themes of Learning Methods theme was created by; written materials and social media (Table 3).

Table 2: Participant characteristics (n=13)

Characterstics	Findings (n=13)
Gender *	
Female	6 (46.15)
Male	7 (53.85)
Education status*	
Primary education	2 (15.38)
Secondary	3 (23.07)
High school	5 (38.46)
License and above	3 (23.07)
Marital status*	
Married	6 (46.15)
Single	7 (53.85)
Work status*	
Working	8 (61.54)
Not working	5 (38.46)
Age (median/min.-max.)	(33/26.5-42.7)

*Data were expressed as n(%)

Hierarchical Code-sub-code of the model according to the analysis results, the generated code and sub-code when it is sorted from most to least frequency of food 32 times, 26 times to come together with the people experiencing the process of treatment in the management of 16 times, 11 times to adapt to the social life, written materials 10 times, complications (leakage, anastomosis) nine times, pre-operative psychological support, and information about the surgical procedure pre-operative psychological support (anxiety) eight times, pain, activities of daily living, which is repeated six times to benefit from social media was detected (Figure 1).

DISCUSSION

With this study, the educational needs of patients who underwent bariatric surgery were reached under five main headings. The five themes identified in this study are as follows: I-Physiological Needs, II-Psychological Needs, III-Social Needs, IV-Counseling Needs, V-Learning Methods.

According to the results of qualitative data analysis, to learn how to do the diet of patients after surgery, surgery (surgical type) to get more detailed information about, how the

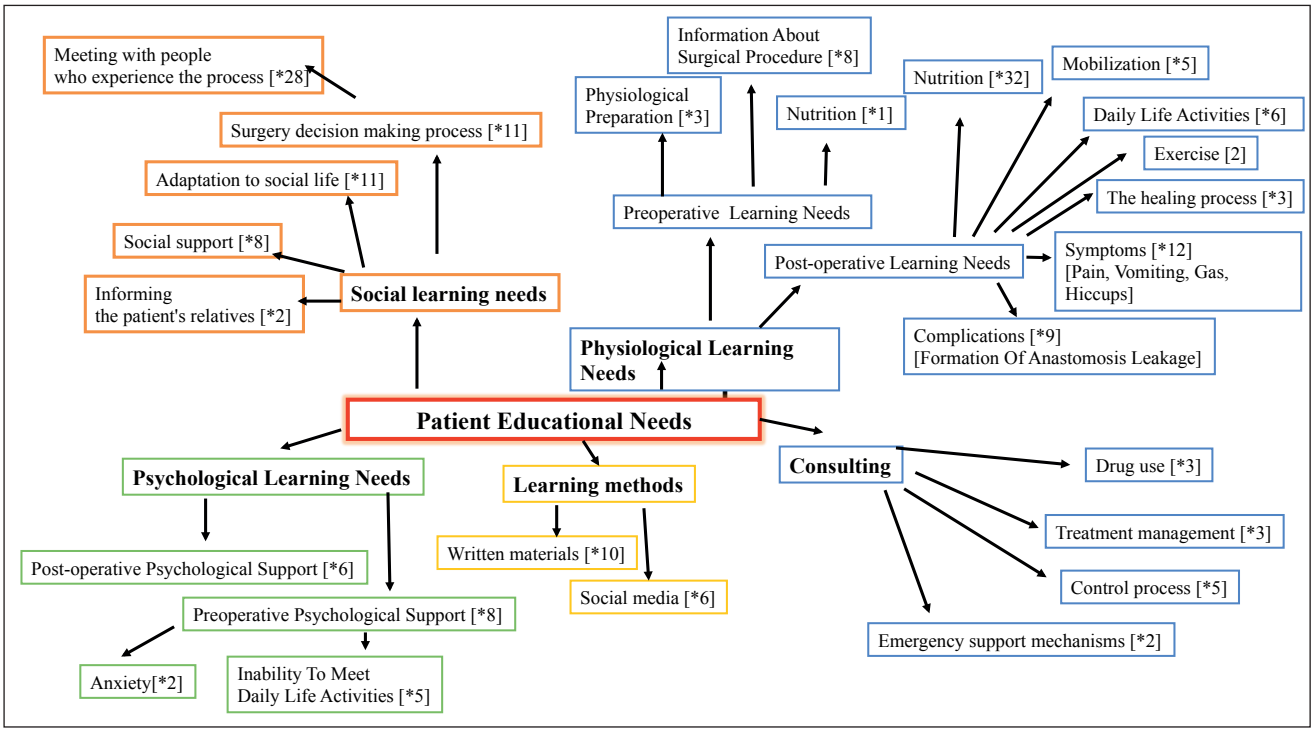

Figure 1: Hierarchical Code-Sub-Code of the Model. **Code Repeat Frequency*

Table 3: Theme, Sub-theme, Codes, and Patient Sentence Examples (n=13)

Theme	Subtheme	Codes	Exemplar Quote
Theme 1: Physiological Requirements	Surgical Learning Requirements	Nutrition	"My doctor said you need to lose a few pounds before surgery, and I need to see your effort. We went on a diet before surgery. During the operation, both the doctor and his assistants came and followed him every day" (Interviewer 3: 8).
		Physiological preparation	"In terms of pre-evaluation decision making, finaling - A little bit of procedure seems to me a little bit long i.e. commute, appointment, even though I'm a little accelerated, because I also remember the late tests" (Interviewer 2: 12). "The process of going to other outpatient clinics was long. It could have been shorter, and there was the excitement of having an operation as soon as possible" (interviewer 2: 16).
		Information about surgical procedure	"After the operation, I don't know, there could have been something clarifying. So it could be explained a little more thans the operation will take place like this or that" (interviewer 2: 25).
	Post-Operative Learning Requirements	Nutrition	"Our dietitian came in after the operation and told me everything one by one, as you need to diet, you need to eat them. I'm still very happy thanks to him" (Interview 1: 2). "I'll give you how to live for the first 6 months, how to live for 3 months, how to eat liquid, how to eat at home, how to eat, how to do what I do" (interview 1: 3). "You'll just learn to live like this with limited plans and projects. You learn that it's not all about eating in life. You learn that life goes on without eating. Then we eat all the food you ate in one meal when you were 140 pounds, and now we eat it in 3-4 days. But now we're full. I say that there is no need to burden yourself so much that I eat one bread and one soup" (1: 6).I don't know that I should be dieting so much after surgery" (interview 4: 10). "I'd tell him to feed his eye first. I would say their habits would change from 'a' to 'z' " (interview 6: 15).
		Exercise	"I mean, I think I did what I had to do. Frankly, I'm on a fitness bike for an hour. I think I did what I could" (interview 4: 16).
		Mobilization	"Although I had difficulty walking at first, that problem disappeared afterward" (Interview 9: 3). "I forgot when I woke up, I forgot a little bit that I had surgery, and I tried to get up. At the moment of awakening, when the nurses suddenly intervened there, I was afraid there, as if you were operated, you could not get up, there was something like a shock" (interview 10: 2).
		Daily life activities healing process	"After the operation, I wondered how life would change, I wanted to know how I would live after that, I asked my doctor" (Interview 1: 3). "Because it's the surgical process that's most obsessed with it. How will I live after surgery" (Interview 5: 5) "The only thing that upset me after the operation is that my movements are a little limited, I can't get out, because of the germ infection. There is no human-induced, hospital-induced, doctor-induced or my doctor-induced problem or surgery-induced problem, but I didn't know what to do because I didn't go out to not get germs" (interviewer 6: 5).
		Symptoms (Pain, Vomiting, Gas, Hiccups)	"After I came out of surgery, I didn't feel any pain, I only had pain for the first 5 minutes, so I didn't have any pain after that. Everyone would say this information, that everyone has nothing to be afraid of. Only the first 5 minutes have a pain, and Life After Life is a pain at the time of your life" (Interview 1: 6). "I just woke up in pain, very severe, I think the painkiller hadn't been shot, so for me, as a hospital, that's the only missing thing I've experienced here" (Interview 5: 14). "Am I going to throw up a lot, What am I going to eat, how will my life change" (interview 1: 3). "It's a lot of nausea. It was commented that there was vomitinga lott. I have not experienced any of them thankfully" (interview 2: 8). "There's only one hiccup, I eat a little fast, the alarm goes off, I hiccup three times four times, I hiccup, and then it passes" (interview 3: 24).
		Complications (Formation of anastomosis leakage)	"For example, after this operation again, the stomach will grow, I did something later, for example" (Interview 2: 22). "It could have been a danger, just no leakage, at least something could have happened with information like what happens if there is a leakage. -I understand that when something happens to me, you mean how can I understand it" (Interview 2: 26). "How to test when there are complications. I'd like to know how my moments are. It scared me the most". (Interview 2: 37). "I have a lot of questions about what happens if It leaks in my stomach. There are a lot of question marks" (Interview 5: 5).

Table 3 continue

Theme 2: Psychological Requirements	Preoperative Psychological Support	Anxiety	"I'd like a psychologist to comfort me about how to get into surgery comfortably before surgery" (interview 1: 4). "I had a fear on the first day" (interview 2: 4).
		Inability to meet daily life activities	"Let's play, Dad, let's play, Son. Before the operation, I didn't want to break the children's hearts, but it was far-fetched like I was carrying a stone on my back. Because I have weight, fatigue, constant weakness, stress, what a nuisance I have inside me. But after the surgery, it all went away" (Interview 8: 8).
	Post-operative Psychological Support	Psychological preparation	"I'm afraid not to gain weight. Now I'm not as much as before. I used to eat a bite or two. Now, of course, I can eat lighter than before. "I am afraid of food, that is, I am afraid of overeating, eating and gaining weight again" (Interview 7: 8). People are psychologically eating and feeling insatiable when you actually hear it(when you are 140 pounds in a meal). all the food you eat now 3-4 days, but now we are full of one bread, and I am full of one soup, and I would say that you don't need to be so burdened" (interview 1: 6). "At first, when I have this operation, you eat less, but those around you don't eat less, their lives go normally. Then you feel a little psychologically bad. And you want to eat what they eat right now, and I can't eat it like they eat right now. They sit longer at the table, for example, when I am full of bites, I have to leave them, I can't accompany them, something a little difficult" (interview 10: 6). "After the operation, I was never the same. I never had that happiness. I've had a breakdown, I don't laugh as much as I used to, I'm not as cheerful as I used to be" (Interview 12: 11). "Even though our stomachs are small now, we must be hungry. I know at first, even 2 meatballs are enough, but there were times when I put 5 meatballs on my plate. You want to see your plate full, I don't know, maybe the counseling can affect this" (interview 3: 26).
Theme 3: Social Requirements	Informing The Patient's Relatives		"A lot of work goes into the patient here, but I think for the first 15 days, I think there should be someone. It definitely has to be. Because they're more careful when they make those soups or something" (interview 3: 12). "I think that private interviews should be conducted with the spouses of married patients and with the parents of single patients" (Interview 9: 7).
	Social Support		"The surgery actually triggered my son a little bit and I wanted to be behind him because he was young, in terms of himself he had decided. After that, mother said, let's do it together" (interview 4: 3). "I convinced my mother not to bother me, he's fearless, so I said We don't ... we don't ... I'm gonna die, you're gonna stay behind? I said Let's go if we're going to die, let's die together, and we went into surgery one after the other on the same day" (Interview 11: 10). "I think that private interviews should be conducted with the spouses of married patients and with the parents of single patients. 50% of success goes through them" (Interview 9: 7).
	Adaptation To Social Life		"For example, I get up because I'm full before them, I usually don't sit down, I do a different job with them, or I put tea or something like that. For example, when you sit, I can't, even if I want to, instead of sitting after I'm full, I want to do this. But they eat more, and because they eat more, they sit longer at the table" (interview 10: 7). "If we're going to have surgery, we should now agree to spend our lives eating healthy with little food" (Interview 5: 26). "I believe that everything in your life has changed everything in my life at least. From A to z, this caused things to change that I was angry and happy about" (Interview 6: 17). "Here comes your assurance. It's a reassurance to me. I couldn't get into an environment before the operation, in terms of weight. For example, when I compare myself to someone, you Iinto an environment and your outfit doesn't suit you. I wouldn't go in, so what would I do, I'd be upset all day at home, I'd cry" (interview 7: 3).
	Surgery Decision Making Process	Meeting with people who experience the process (interaction of patients)	"I think transferring my experience to people who will have surgery will make them more comfortable, it motivates them ecologically, it says psychologically, which means that a person has experienced it" (Interview 1: 6). "There were a lot of people around me who actually were. In fact, there were those who came back from very, very bad situations. A famous artist everyone knows, for example, came back from the dead, became a fugitive or something like that. I'm a TV guy, I know him. For example, even he was in a coma or something, even though he came back from the dead. He said he'd be on the phone today. When I say what you say I want to have this surgery. I came back from the dead, but with the right surgery and the right team, he said that I would still have the operation, and then I decided to have the operation" (interview 3: 10). "Before the surgery, we became members of the tube stomach group on social media. A lot of data came from there. We even asked what I was going to eat first. Because we acted in that direction, we had no difficulty" (interview 13: 10).

Table 3 continue

Theme 4: Consulting Requirements	Emergency Support Mechanisms	"I wonder if you ever wanted anyone from the team or someone who could be reached from the team, you pulled it back because it was intense, or Okay, I'll handle it" (Interview 2: 32).
	Conditions Requiring Repeated Hospitalization	"For example, I said that after this operation, your stomach will grow again, and then I did, for example, you found out on your terms, like this. - What happens to me after surgery, I found out later, or rather, I met someone who has had surgery. He had an operation on the second subject he did not pay attention to the subject" (Interview 2: 30). "If we blow up the stomach with a momentary mistake, he wants it, so especially I see that this is the biggest dangerous period of the first 6 months. If there's a leak in the stomach, we're at risk of dying, we may not understand it, or we may be late for the hospital we understand, or we'll be taken to surgery, assuming it's a leak. If you are going to undergo open surgery in this way as an emergency, the stomach will be sewn by hand, so the very serious distressing process scares me, the part that I am most careful about is this first 6 months" (Interview 5: 22).
	Drug Use	"It's important to ask if something has happened to my eye if I will use this drop if anything will happen if I will use this medicine. Because it's about the stomach, does it dissolve in the stomach or cause trouble?" (Interview 3: 18).
	Treatment Management	"Here's your diet, here's your exercise, whether you did them or not, I would like to be followed" (interview 2: 34). I think, of course, it would be great if it was a nurse or consultant just related to obesity, the first semester yourself will be in surgery or something like that, if you want to reach him in case we can't reach him, I'm throwing away the change in yourself, something happened that I ate, should I eat, should I not eat? Or, most importantly, you have the flu" (interview 3: 18)
	Control Process	"It was a problem for me to call the doctors or the nurse because I thought they were working so hard, you don't ask about things, and I was living on my own. I'm worried about disturbing you. Never disrupt their control" (interview 6: 17).
Theme 5: Learning Methods	Written Materials	"It was a process. I'll have a booklet in my hand or I'll be able to look at it quickly on my phone. I'm even more relieved that it happened to the others, of course. I think I'd at least find answers to the questions in my head quickly. It was a hassle for me to call the nurse at the bear because I thought they were working so hard, and ask them some things, and I was living with myself. I'm worried about disturbing you, and I think that tracking and calling your controls may have increased it, and maybe made it easier in my Process" (Interview 1: 6). "3 years I checked. There was no surgery video or life story I hadn't watched" (interview 3: 2). "I think an app would be very perfect. Because it's in the book, it can also be entered into the internet every time the phone also has an app. A lot of everything has an app, now you will also sell a car, you enter the app and sell it. Social media is also on the app. I think the app makes it easier for young people and now everyone is using it. For example, if there is something that will give you 10 days when you enter the App Store, then maybe you can even do it alone, even if you are a single man at home" (Interview 13: 22).
	Social Media	"Before the surgery, we became members of the tube stomach group on social media. a lot of data came from there" (Interview 10: 10). "We had a Wahatsapp group, and every time we wrote, We immediately got the answer from both the private and the group, we had very regular follow-ups, you will come on this day, your next check said on this date, your next check said on this date" (Interview 3: 14).

process would work and follow-up after surgery, possible complications that they can understand and follow how the occurrence of social harmony in their life after surgery that they provide the learning that would make their lives easier, and it was determined that would facilitate their adaptation to new life. In the literature, it is emphasized that it is necessary to ensure that patients have the best knowledge of individual treatment choices and clinical practice so that they can cope with the complex and pervasive nature of changes resulting from bariatric surgery (20). The general desire and expectation of bariatric surgery patients is 'normalization' (6). It requires the regulation of care provided by medical team members to provide patients with appropriate and effective care during the perioperative period, resulting in an increase in the success of the surgical procedure (1,11,21,22). It has been stated that health professionals should acquire special knowledge and skills regarding the management of patients after bariatric surgery to provide appropriate and effective care to the post-bariatric patient (21). We think that our research results will contribute to health professionals regarding the needs of bariatric surgery patients.

In our results, it was found that they wanted psychological support before and after the operation. Effective use of social support systems (spouse, mother, experienced patient) and educational materials (brochure,video,application.) were determined that having a post-operative

follow-up system and a medical staff to consult constantly would have a positive impact on the process. The study that report that peer support is effective in motivating patients and enabling change (20). According to the results of research conducted in the literature with patients undergoing bariatric surgery; long-term nutritional monitoring of bariatric patients and monitoring of emotional components are important for better surgical results (23,24). The study that report that peer support is effective in motivating patients and enabling change. It emphasizes the importance of providing simultaneous psychological support as well as pre-treatment education focusing on psychosocial well-being (20). After bariatric surgery before and after surgery in patients, individually or as a group, educational brochures, web-based training programs and training methods and there are studies of patient education programs of different educational contents (22). However, in order to provide patients with realistic expectations for surgery and a better understanding of post-surgical changes, it is important to transfer an insight into the individual experience of the bariatric patient to other patients (23,25). The results parallels our research results. In contrast to the literature, our study noted that the frequency of expressing what patients should do about exercise in order to lose weight was very small. However, regular physical activity after bariatric treatment should be encouraged moderate aerobic physical activity after surgical recovery at least 150 min per week. and 300 min. including the goal, bodybuilding 2 to 3 times a week is considered evidence Level 1 recommendation in weight loss (7,21). It suggested that this may be related to the fact that they are restricted in their activities outside the home due to Covid-19. In addition, the results of the study stating that postoperative bariatric patients did not decrease in BMI due to consuming foods such as sweets in their diets during the incarceration period due to the pandemic and emotional stress were reached (26).

The success of obesity surgeries requires a multidisciplinary team approach involving surgeons, nurses, psychologists, dietitians, physiotherapists and other health professionals from the moment the patient is admitted to the hospital until his or her discharge. It is very important to know and meet the special needs of patients undergoing obesity surgery due to the presence of accompanying diseases. The results of this study will contribute to the patients' determination of goals to meet their information needs during the surgery process. Management of the bariatric surgery patient requires privileged and qualified knowledge. The results of the research contribute to the consultancy service that should be given to increase the quality of care of the patients during the treatment selection, surgery process and after.

In conclusion, during the perioperative period in patients undergoing obesity surgery reduce the risks that may arise in the care of, and to prevent the development of complications, pre-operative, intraoperative and post-heal and to cope with the challenges they may face in the process as soon as possible, be on behavior change and self-management strategies by providing access to personalized, individualized, holistic approach and providing counseling services that aim to support the development of quality of life and satisfaction of patients surgery it is recommended to establish training programmes.

Due to the lack of equal distribution of the group of patients who formed the sample of the research according to the type of surgery and because it is qualitative research, it cannot be generalized to all patients undergoing bariatric surgery.

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Conflicts of Interest

No conflict of interest was declared by the authors.

Financial Disclosure

None

Ethical Approval

This study follows the principles of the Declaration of Helsinki; and it was approved by the Ethics Committee of the Non-Invasive Ethics Committee of A University (Date:12/04/2020, decision no: KÜ GOKAEK 2020/4.18)

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