

Thoughts and Attitudes of Surgical Nurses on Planned Discharge Education and Influencing Factors

Cerrahi Hemşirelerinin Planlı Taburculuk Eğitimine İlişkin Düşünce ve Tutumları ile Etkileyen Faktörler

Bahar CANDAŞ ALTINBAŞ¹, Ayşe SERPİCİ², Ayla GÜRİSOY³, Didem SARİMEHMET⁴

ABSTRACT

The shortening of the discharge time due to technological developments requires the patients to be discharged with sufficient information about the recovery process they will spend at home. Accordingly, discharge planning and patient education are becoming more and more important in surgical patient care day by day. The aim of the study is to determine the thoughts and attitudes of surgical nurses related to discharge of patients after surgery and influencing factors. This descriptive study included 192 surgical nurses. Data were obtained with a questionnaire designed by researchers. It was found that 83.3% of the nurses provided discharge education to the patients and 71.9% of them implemented this education in a planned manner. In addition, while most of the nurses planned discharge education at the time of discharge, only 38.3% planned it at the time of hospitalization. Planned discharge education is usually given in the patient's room (93.0%), verbally (98.3%), taking into account the patient's age and education level (79.1%). Wound care (80.0%), self-care activities (79.1%) and drug therapy (73.0%) were the top three training topics. The institution where the nurse works, the clinic and the number of patients cared for in each shift are the top three factors affecting the provision of planned discharge education.

Keywords: Discharge Planning, Nursing Care, Patient Discharge, Surgical Nursing

ÖZ

Taburculuk sürelerinin teknolojik gelişmelere bağlı olarak kısalması, hastaların evde geçirecekleri iyileşme süreci hakkında yeterli bilgi ile taburcu olmalarını gerektirmektedir. Buna bağlı olarak cerrahi hasta bakımında taburculuk planlaması ve hasta eğitimi gün geçtikçe daha da önem kazanmaktadır. Bu çalışmanın amacı, cerrahi hemşirelerinin ameliyat sonrası hastaların taburcu edilmesine ilişkin düşünce ve tutumları ile etkileyen faktörleri belirlemektir. Bu tanımlayıcı çalışmaya 192 cerrahi hemşiresi dahil edildi. Veriler, araştırmacılar tarafından hazırlanan soru formu aracılığı ile toplandı. Hemşirelerin %83.3'ünün hastalara taburculuk eğitimi verdiği; %71.9'unun bu eğitimi planlı olarak uyguladığı saptandı. Ayrıca hemşirelerin çoğu taburculuk eğitimini taburculuk sırasında planlarken, sadece %38.3'ü hasta hastaneye yattığı anda planlanlama yapmaktadır. Planlı taburculuk eğitimi genellikle hastanın yaş ve eğitim seviyesi dikkate alınarak (%79.1), hasta odasında (%93.0), sözlü olarak (%98.3) verilmektedir. Yara bakımı (%80.0), öz-bakım aktiviteleri (%79.1) ve ilaç tedavisi (73.0) ilk üç sırada yer alan eğitim konularıdır. Hemşirenin çalıştığı kurum, klinik ve her bir vardiyada bakım verilen hasta sayısı planlı taburculuk eğitimi verme durumunu etkileyen ilk üç faktördür.

Anahtar Kelimeler: Cerrahi Hemşireliği, Hasta Taburculuğu, Hemşirelik Bakımı, Taburculuk Planlaması

Kanuni Eğitim ve Araştırma Hastanesi Klinik Araştırmalar Etik Kurulu'ndan 23618724 sayılı numarası ile etik kurul izni alınmıştır. Bu çalışma 8. EORNA kongresinde özel bildiri olarak sunulmuştur.

¹ Assistant Professor, Bahar CANDAŞ ALTINBAŞ, Surgical Diseases Nursing, Karadeniz Technical University, Faculty of Health Sciences, Department of Nursing, baharcandas@ktu.edu.tr, ORCID: 0000-0001-7069-9011

² Research Assistant, Ayşe SERPİCİ, Surgical Diseases Nursing, Bursa Uludağ University, Faculty of Health Sciences, Department of Nursing, aysegonul1659@hotmail.com, ORCID: 0000-0002-0243-4473

³ Professor Ayla GÜRİSOY, Surgical Diseases Nursing, Antalya Bilim University, Faculty of Health Sciences, Department of Nursing, aylagursoy68@gmail.com, ORCID: 0000-0003-3585-4500

⁴ Lecturer Dr. Didem SARİMEHMET, Internal Medicine Nursing, Karadeniz Technical University, Vocational School of Health Sciences, Department of Medical Services and Techniques, didemsarimehmet@ktu.edu.tr, ORCID: 0000-0002-8490-1943

İletişim / Corresponding Author: Bahar CANDAŞ ALTINBAŞ
e-posta/e-mail: baharcandas@ktu.edu.tr

Geliş Tarihi / Received: 02.04.2023

Kabul Tarihi/Accepted: 26.12.2023

INTRODUCTION

The length of hospitalization during a surgery varies according to the preoperative physiological and psychological conditions, extent of the surgery, and presence of postoperative complications.¹ Nowadays, the hospitalization period of the patients is known to have been shortened significantly with the care provided in line with the enhanced recovery after surgery (ERAS), which was introduced with the developments in the health care system and evidence-based applications.^{2,3} With the shortening of the discharge period, patients should be well informed about the symptoms they can experience at home. It is important for patients to be aware of the normal and complication-related symptoms during the healing process. The need for discharge planning, patient education, and sharing contact information is becoming an increasingly important part of surgical patient care. The need for in-depth education and planning is increasing, as patients who receive care within the scope of the ERAS program and are discharged early assume early and more self-care responsibilities.³ In this regard, planning discharge education in accordance with the individual characteristics of the patient has become one of the important goals of patient care.⁴

Planned discharge education should be continued throughout the patient's hospital stay. In planned education, patients should be evaluated daily, education frequency should be determined according to their health care needs, they should be educated on related subjects, and they should be encouraged to participate in their own care as much as possible.^{5,6} In addition, planned education should be planned in a way that is surgery-specific and should aim to teach the patient, and especially family members who will take care of the patient at home, care practices specific to the surgery.^{1,6,7} Topics included in such a discharge education generally include self-care activities, wound care, exercises, banned practices, diet, drugs, contact persons or institutions, and the follow-up process.^{1,7} In addition to these, patients are known to

require information primarily about treatment, complications, and life activities.⁴

The presentation, timing, and frequency of discharge education have been reported to be important in providing information.⁸ To increase the effectiveness of education, planning discharge education by considering patient characteristics and needs as well as suitable education methods is necessary.⁶ Providing audiovisual education materials to patients and their relatives and complementing educations with guidelines developed for specific surgeries are effective in managing the process.^{1,5,7,9,10}

Discharge education delivered with correct and appropriate methods has many positive results. The average anxiety and depression scores of patients receiving discharge education and counseling services are lower.¹¹ Patients who receive discharge education have a shorter recovery period, less educational needs, higher self-care compliance, larger role in the care process, and better clinical outcomes. In addition, the life quality, care satisfaction and self-confidence of the patients who receiving education are higher.^{6,8,12-14} Furthermore, conducting discharge education in a planned manner and as per the needs of the individuals is effective in preventing or reducing the complications that can be encountered at home.^{5,6} Discharge planning also has positive institutional consequences. It ensures the continuity of quality care for patients institutionally; reduces health care costs arising from long-term hospitalization; and reduces return to the emergency, family physician clinics, and outpatient clinics.^{3,12,14}

Discharge education should be coordinated by a multidisciplinary team and include the patient and the family. Although all members of a health care team are responsible for discharge planning, it falls under the educational role of a nurse.^{13,14} The nurse should start the discharge education during a patient's preoperative admission to the hospital and end it as the patient leaves the hospital after treatment.^{7,15} In particular,

nowadays it is crucial for nurses to improve the self-care skills of patients with up-to-date protocols and provide early discharge. In many countries, nurses evaluate whether a patient is ready for discharge.⁷ It is one of the main duties of surgical nurses to provide discharge education to surgical patients whose recovery process continues at home after discharge.⁴ In this regard, surgical nurses have an important role in ensuring that the patients take responsibility for their own health and return to daily life activities early.^{4,15} Moreover, nurses assume important roles in patient advocacy with respect to discharge decisions.⁹ The scarcity of resources regarding discharge education indicates that the evidence for discharge education in surgical patients is low and more studies are needed in this area.⁸ In particular, there are

limited studies determining the approaches of nurses regarding discharge education delivered in surgical clinics.

The aim of the present study was conducted to determine the views and practices of nurses working in surgical clinics on discharge education and influencing factors.

Answers were sought to the following research questions:

- 1) What are the views of surgical nurses on discharge education?
- 2) What are the practices of surgical nurses regarding the discharge process?
- 3) What are the factors affecting nurses to provide planned discharge education?

MATERIAL AND METHOD

Study Design

This is a descriptive study.

Participants and Setting

Nurses working in the surgical clinics of all hospitals in a province in the Black Sea Region were included in the study. The study comprised 246 surgical clinical nurses working in seven hospitals, including two education and research hospitals, four hospitals affiliated with public hospital associations, and one private hospital. All surgical nurses who agreed to participate in the study, did not have any psychiatric disease, and were aged older than 18 years were included in this study. Sample selection was not performed, and all nurses were targeted. During the data collection process, 22 nurses were excluded from the study because they were on leave, 10 refused to participate, seven filled out the form incompletely, five did not fill in the form, and 10 were included in the pilot study and, therefore, excluded from the study. Accordingly, the study was completed with 192 nurses. Participation rate was 78.0%.

Research Instrument

A questionnaire prepared by the research team was used as the data collection tool. The

questionnaire comprised nine questions examining sociodemographic characteristics, 13 determining the method of discharge education delivered in surgical clinics, and 10 determining the thoughts of nurses on discharge education.

For the content validation of the questionnaire, the form was examined by 10 nurses and five academicians working in the field of surgical nursing. The form was corrected according to expert opinions, and a pilot study was conducted with 10 nurses. It was found that two questions were not understood by the participants, and there was confusion in the ordering of the questions. The necessary corrections were made, and the final form was prepared.

Data Collection

Study data were collected using the face-to-face interview method. The forms were distributed to nurses by a researcher in the clinical wards. The form took approximately 15 min to complete. Nurses' names were not included on the forms. The filled-out forms were collected by the researchers. For the nurses who were not on shift during data collection, surgical clinics were revisited after 3 days and filled-out forms were collected in the same manner.

Statistical Procedures

The statistical analysis and evaluation of significant variables based on their level of importance were conducted using the R programming language. Number, percentage, mean, standard deviation, minimum, maximum, and median were used in descriptive statistical methods. Boruta algorithm was used to determine the variables related to the reasons for not trusting the vaccine according to the degree of importance. The Boruta algorithm uses an iterative approach to identify and eliminate variables that are deemed statistically insignificant. The Boruta algorithm is founded on the concept of mitigating the misleading impact of chance fluctuations and correlations by introducing random variables into the

system and gathering outcomes from a set of random samples.

Ethical Aspect of Research

Ethics committee approval was obtained from the Kanuni Education and Research Hospital Clinical Research Ethics Committee in the province where the study was conducted (Number: 23618724) and written permission was obtained from the relevant institutions. In addition, written consent was obtained from all individuals who agreed to participate in the study.

Acknowledgments

We extend our gratitude and thanks to Nurse Pınar Kutlu ŞAHİNOĞLU and Nurse Bihter ÖZTERZİ for their help during data collection.

FINDINGS AND DISCUSSION

Of the participants, 85.4% were female and mean age was 31.6 ± 7.9 ; 47.4% were university graduates, and 53.6% worked in health institutions affiliated to the public hospitals association. The nurses had an average of 10.4 ± 7.7 years of professional experience, and they had been working in surgical clinics for 6.7 ± 5.2 years (Table 1).

Table 1. Descriptive Characteristics of Nurses (n=192)

Characteristics	n (%)
Sex	
Female	164 (85.4)
Male	28 (14.6)
Marital status	
Married	106 (55.3)
Single	86 (44.7)
Education degree	
High school	57 (29.7)
Associate degree	38 (19.8)
University degree	91 (47.4)
Postgraduate degree	6 (3.1)
Institution	
Public hospital	103 (53.6)
University hospital	78 (40.7)
Private hospital	11 (5.7)
Clinics in which they worked	
General surgery	45 (23.5)
Orthopedics	37 (19.3)
Urology	21 (10.9)
Otorhinolaryngology	19 (9.8)
Cardiovascular surgery	17 (8.8)
Neurosurgery	17 (8.8)
Thoracic surgery	12 (6.3)
Others*	24 (12.6)

Table 1. (Continued)

Number of patients per nurse per shift	
1-5	28 (14.6)
6-10	69 (35.9)
11-15	33 (17.2)
≥ 16	62 (32.3)
Mean±SD (min-max)	
Age	31.6±7.9 (19-55)
Professional experience (year)	10.4±7.7 (1-34)
Duration of work in surgical clinics (year)	6.7±5.2 (1-24)

*Reconstructive and aesthetic surgery, gynecology and eye surgery clinics, %: Percentage.

Although not included in the table, 49.0% (n = 94) of the participants reported that they delivered routine discharge education to all patients in their clinics, 33.9% (n = 65) stated that education varied according to the current conditions of the clinic, and 10.9% (n = 21) stated that the education varied according to the patient. Participants stated that discharge education was mostly delivered by nurses (88.0%). Nurses working in surgical clinics think that discharge education should be given by physicians (80.2%).

Of the participants, 83.3% (n = 160) stated that they delivered discharge education in their institutions. It was determined that the nurses who stated that they delivered discharge education ensured that family

members participated in the education (84.4%), paid attention to having a quiet environment (76.9%), and considered the stress level of the patients (69.4%). Other issues that nurses pay attention to are listed in Table 2.

The nurses who stated that they delivered discharge education thought that the patients were satisfied with the education (77.4%) and that education strengthens the patient–nurse relationship (70.6%) (Table 3).

Table 2. Factors Considered in Patient Education (n = 160)

Factors	n* (%)
I make sure that one of the family members attends the education.	135 (84.4)
I make sure that the environment is quiet.	123 (76.9)
I take into account the stress level of the patient.	111 (69.4)
I ensure an environment where the patient's information will not be heard by others.	104 (65.0)
I ensure an environment where the patient's body cannot be seen by others.	100 (62.5)
I take into account the patient's pain level.	88 (55.0)
I take into account the patient's readiness for education.	80 (50.0)
I determine the best time for the patient to learn.	65 (40.6)

*More than one option could be selected by each participant, %: Percentage

Table 3. Nurses' Opinions on Discharge Education They Delivered (n = 160)

Thoughts	Yes n (%)	Partially n (%)	No n (%)	No idea n (%)
I think the patients are satisfied with the education I provide.	119 (74.4)	25 (15.6)	7 (4.4)	9 (5.6)
I think the discharge education strengthens the patient–nurse relationship.	113 (70.6)	28 (17.5)	12 (7.5)	7 (4.4)
I think there is a difference between the readmission rates of patients who received and did not receive discharge education.	103 (64.4)	24 (15.0)	15 (9.5)	18 (11.3)
I think the patients are ready to be discharged after the education I deliver.	101 (63.1)	39 (24.3)	10 (6.3)	10 (6.3)
I think the discharge education I deliver to the patient is sufficient.	82 (51.3)	49 (30.6)	27 (16.8)	2 (1.3)

%: Percentage

Of the participants who stated that they gave discharge education (n=160), 71.9% stated that they delivered planned discharge education to their patients. The time of planning, issues considered during the planning phase, time of education, place of education, technique and form of education, and practices related to education topics stated by the participants who delivered planned discharge education (n = 115) are shown in Table 4.

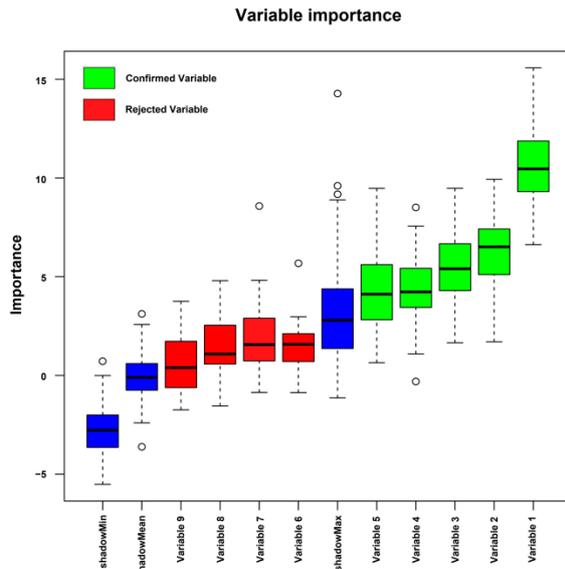
Table 4. Practices of Nurses Regarding Planned Discharge Education (n = 115)

	n* (%)	
Planning phase	After learning that the patient will be discharged	59 (51.3)
	As soon as the patient is admitted to the clinic	44 (38.3)
	Whenever I am available	12 (10.4)
Considerations regarding the patient	Age	91 (79.1)
	Level of education	91 (79.1)
	Knowledge requirement	89 (77.4)
	Problems that the patient may encounter after discharge	83 (72.2)
	Skill education needs (colostomy care, tracheostomy care, use of crutches, etc.)	67 (58.3)
	Having visual/hearing impairment	64 (55.7)
Patient's expectations from the education	53 (46.1)	

Table 4. (Continued)

Time of education	The day the patient will be discharged	58 (50.4)
	Any day from the time the patient is hospitalized to discharge	37 (32.2)
	The day before the patient is discharged	10 (8.7)
	Whenever I get a chance	10 (8.7)
Place of education	In the patient room	107 (93.0)
	At the nurse desk	13 (11.3)
	Anywhere in the ward	4 (3.5)
	In a special room reserved for education	3 (2.6)
Education method	Verbal information	113 (98.3)
	Books, booklets, brochures, and other written materials	45 (39.1)
Form of education	I provide education to all of my patients separately	112 (97.4)
	I give group education to the same type of patients	3 (2.6)
Education topics	Wound care	92 (80.0)
	Timing of self-care activities	91 (79.1)
	Drug therapy (dose of prescribed drugs, route of administration, times, effects and side effects etc.)	84 (73.0)
	Activities to avoid or to do	79 (68.7)
	Regulation of nutrition and dietary practices	78 (67.8)
	Time and intervals of check-up or follow-up	71 (61.7)
	What to do in case of any complication	70 (60.9)
	Complications and symptoms that may develop	64 (55.7)
	Ways to cope with pain	55 (47.8)
	Organizing the home environment according to the disease and needs	51 (44.3)
Sex life	25 (21.7)	

*More than one option could be selected by each participant.



*Variable 1: Institution, Variable 2: Clinics in which nurses worked, Variable 3: Number of patients per nurse per shift, Variable 4: Duration of work in surgical clinics, Variable 5: Education degree, Variable 6: Professional experience year, Variable 7: Sex, Variable 8: Age, Variable 9: Marital status

Figure 1. Feature Selection by Boruta

Figure 1 depicts the outcome of feature screening using the Boruta algorithm. According to the figure, the five confirmed and most closely related variables associated with providing planned discharge education are the institution, clinics where the nurses worked, the number of patients cared for per shift, duration of work in surgical clinics, and education degree.

Among the participants, the discharge education in surgical clinics was perceived as inadequate by 72.9% because of excessive workload, 26.0% because of people being unable to see the education as their own responsibility, 11.5% because of trainers being afraid of providing misinformation, and 6.3% because of trainers not having sufficient information.

Planned discharge education is crucial for surgical patients who continue their care and recovery process at home after discharge. Although all members of a health care team are responsible for educating a patient and the family during the preparation for discharge, planning and education for discharge primarily are the responsibility of a nurse. Although most of the participants in the

present study stated that discharge education was delivered by them, approximately half of them stated that this should be the responsibility of physicians (Table 2). In a study conducted with patients who had undergone cardiovascular surgery, the patients were mostly informed by physicians, followed by nurses and the patients especially wanted to receive information from the physician.¹⁶ We believe that the thought of nurses regarding the discharge education, which is clearly stated as a responsibility of nurses in the Nursing Regulation, being delivered by physicians needs to be further examined.¹⁷ Evaluation of discharge preparation should be taught during the nursing education process and through continuing education programs for graduate nurses. In addition, hospital administrators should support patient education activities by improving the teaching skills of the staff and health care team with sufficient time. In a quasi-experimental study by Abdurrdha et al., nurses were trained on discharge planning after cardiac surgery.¹⁴ The level of knowledge of the trained group on general information, follow-up, wound care, exercise program and daily activity, common health problems, medication, nutrition and risk factors, and their ability of applying this information on discharge plans were found to be higher than the control group.¹⁴

The readiness factor, which is known to affect the education process, is a factor that should be evaluated in the nursing care process.¹⁸ However, in the present study, only half of the participants stated that they paid attention to the patient's readiness, and approximately half of the participants determined the best learning time for the patient. In our study, although the nurses delivering discharge education generally stated that they were satisfied with the education they delivered, only half of them thought that it was sufficient. It is necessary to plan in-house educations and conduct advanced programs to increase the awareness of the nurses expressing that they are satisfied with the discharge education they delivered, although they are aware that it is insufficient,

and enable them to recognize the criteria determining sufficiency or insufficiency of education.

The discharge planning process is affected by the physical/social conditions of the individual and the family.¹⁴ In fact, age, marital status, educational status, employment status, and previous surgery status of the patients affect their educational needs.⁴ In our study, in accordance with the literature, the rate of evaluating the age, educational level, and information needs of the patients before the education was high (Table 4). In addition, to produce effective results, planned discharge education should begin with the decision of surgery and continue at regular intervals by being shaped according to the changes during

the process.¹⁴ In a study, the quality of life of patients who received discharge education with a education booklet and continued to receive counseling for 6 weeks after discharge was found to be significantly higher.¹⁹ In addition, planned education should be implemented individually, supported by educational materials such as booklets or brochures.²⁰ However, contrary to the literature, in our study, nurses generally planned discharge education after learning that patients would be discharged and delivered it verbally in the patient room on the day of discharge. Similar to our study, there are studies in the literature reporting that written educational materials were not provided to patients at discharge (94.9%).²¹⁻²³

CONCLUSION AND RECOMMENDATIONS

Although it is a multidisciplinary approach, nurses play a key role in the planning and implementation of discharge education. However, nurses do not take an active role in the process of discharge education as emphasized in the literature and they believe this role to be the responsibility of physicians. In our study, awareness about planned education was observed, although inadequate. Regulations are needed to ensure that nurses assume a more active role in implementing discharge education, which is a

part of the educational role of nurses and one of their primary responsibilities. In particular, the awareness of nurses working in surgical clinics should be raised about organizing planned discharge education programs in accordance with the personal characteristics and educational needs of patients, so that the patients can perform self-care activities. In addition, organizing educations on subjects that nurses consider insufficient will contribute positively to this process.

REFERENCES

1. Erdil, F. ve Elbaş, N. Ö. (2008). "Cerrahi Hastalıkları Hemşireliği". Ankara: Aydoğdu.
2. Şenyuva, E. and Taşocak, G. (2007). "Patient Education Activities of Nurses and Patient Education Process". *Florence Nightingale Journal of Nursing*, 15(59), 100–106.
3. Jones, D, Musselman, R, Pearsall, E, McKenzie, M, Huang, H. and McLeod, R.S. (2017). "Ready to Go Home? Patients' Experiences of the Discharge Process in an Enhanced Recovery After Surgery (ERAS) Program for Colorectal Surgery". *Journal of Gastrointestinal Surgery*, 21(11), 1865–1878. <https://doi.org/10.1007/s11605-017-3573-0>
4. Aylin, G. and Kurşun, Ş. (2017). "Learning Needs at Discharge of Patients Hospitalized in the General Surgery Clinic". *Journal of Anatolia Nursing and Health Sciences*, 20(2), 107–113. <https://doi.org/10.17049/ahsbd.86054>
5. Dal, Ü, Bulut, H. and Demir, S.G. (2012). "The Problems Experienced by the Patients at Home after Surgery". *Medical Journal of Bakirkoy*, 8(1), 34–40.
6. Dursun, H.B ve Yılmaz, E. (2015). "Batın Cerrahisi Yapılan Hastaların Öğrenim Gereksinimleri". *Celal Bayar University-Health Sciences Institute Journal*, 2(3), 65–70.
7. Fındık, Ü.Y. (2016). "Cerrahi Süreç: Ameliyat Sonrası Bakım ve Komplikasyonların Önlenmesi". İçinde F.E. ASLAN (Ed.), *Cerrahi Bakım Vaka Analizleri ile Birlikte* (425–454). Ankara: Akademisyen.
8. Kang, E, Gillespie, B.M., Tobiano G. and Chaboyer W. (2018). "Discharge Education Delivered to General Surgical Patients in Their Management of Recovery Post Discharge: A Systematic Mixed Studies Review". *International Journal of Nursing Studies*, 87 (February), 1–13.
9. Coffey, A. and McCarthy, G. M. (2013). "Older People's Perception of Their Readiness for Discharge and Postdischarge Use of Community Support and Services". *International Journal of Older People Nursing*, 8(2), 104–115.
10. Çakır, H.K.Z and Yılmaz, Ü.D (2018). "Determination of Information Needs of Pre-Discharge Patients on Laparoscopic Cholecystectomy". *Türkiye Klinikleri Journal of Nursing Sciences*, 10(2), 115–121.
11. Cebeci, F. and Çelik, S.Ş. (2011). "Effects of Discharge Teaching and Counselling on Anxiety and Depression Level of CABG Patients". *Turkish Journal of Thoracic and Cardiovascular Surgery*, 19(2), 170–176.

12. Bobay, K.L, Jerofke, T.A, Weiss, M.E. and Yakusheva, O. (2010). "Age-Related Differences in Perception of Quality of Discharge Teaching and Readiness for Hospital Discharge". *Geriatric Nursing*, 31(3), 178–187.
13. Demirkıran, G. and Uzun, Ö. (2012). "Post-Discharge Learning Needs of Patients Who Had Undergone Coronary Artery Bypass Grafting Surgery". *Journal of Ege University Nursing Faculty*, 28(1), 1–12.
14. Abdulrdha, M.F. and Mansour, K.A. (2019). "Effectiveness of an Instructional Program on Nurse's Knowledge and Practice Concerning Patients Discharge Planning Post Cardiac Surgery at Cardiac Centers and Hospitals in Baghdad City". *Asian Journal of Nursing Education and Research*, 9(1), 35.
15. Coşkun, H. and Akbayrak, N. (2001). "Determining the Nursing Care on Patient Admission to the Clinic and Discharge". *Journal of Cumhuriyet University School of Nursing*, 5(2), 63–68.
16. Aygül, S. and Ulupınar, S. (2012). "Patient's Opinions about Nurse's Role of Patient Education Survey". *Journal of Anatolia Nursing and Health Sciences*, 15(1), 1–9.
17. Nursing Regulation. (2010). *Çalışılan Birim/Servis/Ünite/ Alanlara Göre Hemşirelerin Görev, Yetki ve Sorumlulukları*. 19/4/2011, 27910.
18. Hacıoğlu, N. (2013). "Hemşirelikte Öğretim Öğrenme ve Eğitim". İstanbul: Nobel Tıp Kitabevi.
19. Akbari, M. and Celik, S.S. (2015). "The Effects of Discharge Training and Counseling on Post-Discharge Problems in Patients Undergoing Coronary Artery Bypass Graft Surgery". *Iranian Journal of Nursing and Midwifery Research*, 20(4), 442–449.
20. Brent, L. and Coffey, A. (2013). "Patient's Perception of Their Readiness for Discharge Following Hip Fracture Surgery". *International Journal of Orthopaedic and Trauma Nursing*, 17(4), 190–198.
21. Yu, M, Chair, S, Chan, C. and Choi, K. (2015). "A Health Education Booklet and Telephone Follow-Ups Can Improve Medication Adherence, Health-Related Quality of Life, and Psychological Status of Patients with Heart Failure". *Heart & Lung*, 44(5), 400–407.
22. Bergman, K. and Louis, S. (2016). "Discharge Instructions for Concussion: Are We Meeting the Patient Needs?" *Journal of Trauma Nursing*, 23(6), 327–333.
23. Aktaş, Y, Uğur, H. and Orak, O. (2020). "Discharge Education Intervention to Reduce Anxiety and Depression in Cardiac Surgery Patients: A Randomized Controlled Study". *Journal of PeriAnesthesia Nursing*, 35(2), 185–192.