



# **PERSPECTIVES IN PALLIATIVE & HOME CARE**

**Cilt 4  
Sayı 2  
Ağustos 2025**

**Volume 4  
Issue 2  
August 2025**

**ISSN: 2979 - 9961**

**www.pphcjournall.com**



# **PERSPECTIVES IN PALLIATIVE & HOME CARE**

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## ***EDITORIAL / EDİTÖRDEN***

Dear Readers,

We are together with the August issue of Perspectives in Palliative & Home Care in 2025. Perspectives in Palliative & Home Care (PPHC), is an open access, free, and interdisciplinary journal on palliative & home care, published in accordance with the principles of independent, unbiased, and double-blind peer-review. The PPHC reflects the interdisciplinary approach that is the hallmark of effective palliative and home care and addresses the many specialties related to palliative and home care. The Journal welcomes submission editorial comments, opinions, original research articles, current ongoing series and review articles.

This issue of the journal features three original research articles, a case report, and a review article. The first research article presents a qualitative study examining the awareness and practices of genital hygiene among caregivers of female palliative care patients. The second article examines compassion competence and fatigue in nurses using a sample of children and adults, while the third article addresses the effect of nursing care provided to patients with coronary artery bypass grafts on discharge learning needs, meeting of these needs, perception of recovery, coping-adaptation level, and quality of life. The case presentation presents the use of a pacifier in an 80-year-old patient with post-stroke orofacial paralysis, while the review study draws attention to the perception of death in palliative care clinics.

We would like to thank the authors who shared their scientific studies with the Journal of Perspectives in Palliative & Home Care and contributed to the broad perspective of the palliative and home care literature, to the members of the reviewer board who carefully and diligently evaluate the articles submitted to the journal, and to the members of the editorial board of the journal, who worked hard and diligently during this difficult process. We offer our best regards and see you in our next issue.

With our respect

Editors

Professor Rukuye AYLAZ, PhD

Associate Prof. Zeliha CENGİZ, PhD



## PERSPECTIVES IN PALLIATIVE & HOME CARE

Değerli Okurlarımız;

Perspectives in Palliative & Home Care Dergisi'nin 2025 yılı Ağustos sayısı ile birlikteyiz. Perspectives in Palliative & Home Care (PPHC); palyatif ve evde bakım üzerine bağımsız, önyargısız ve çift-kör hakemlik ilkeleri çerçevesinde yayın yapan açık erişimli, ücretsiz ve disiplinler arası bir dergidir. PHHC etkili palyatif ve evde bakımın ayırt edici özelliği olan disiplinler arası yaklaşımı yansıtır ve palyatif ve evde bakım ile ilgili bir çok uzmanlık alanına hitap eder.

Derginin bu sayısında üç orijinal araştırma makalesi, bir olgu sunumu ve bir derleme çalışması okurlar ile buluşmaktadır. Araştırma makalelerinden ilki kadın palyatif bakım hastalarına bakım verenlerin genital hijyen farkındalığı ve uygulamalarını inceleyen nitel bir çalışma örneği sunmaktadır. İkinci makale hemşirelerde merhamet yeterliliği ve yorgunluğunu çocuk ve yetişkin örneklemleri üzerinde incelemekte, üçüncü makale ise koroner arter baypas greftli hastalara verilen hemşirelik bakımının taburculuk öğrenim gereksinimleri ile bu gereksinimlerin karşılanması, iyileşme algısı, başetme-uyum düzeyi ve yaşam kalitesi üzerine etkisini ele almaktadır. Olgu sunumu İnme Sonrası Orofasial Paralizisi Olan 80 Yaşında Bir Hastada Emzik Kullanımını örneğini sunarken derleme çalışması palyatif bakım kliniklerinde ölüm algısına dikkat çekmektedir.

Bilimsel çalışmalarını Perspectives in Palliative & Home Care Dergisiyle paylaşan, palyatif ve evde bakım literatürünün, geniş perspektifine katkı sağlayan yazarlara, dergiye gönderilen makaleleri dikkatle ve özenle değerlendiren hakem kurulu üyelerine ve bu zorlu süreçte yoğun çaba ve titizlikle çalışan dergi yayın kurulu üyelerine teşekkürlerimizi sunuyoruz. Bir sonraki sayımızda görüşmek üzere saygılarımızı sunarız.

Saygılarımızla

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# PERSPECTIVES IN PALLIATIVE & HOME CARE

*Year (Yıl): 2025*

*Volume (Cilt): 4*

*Issue (Sayı): 2*

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# Perspectives in Palliative & Home Care

Research Article/Araştırma Makalesi

## Genital Hygiene Awareness and Practices of Caregivers of Female Palliative Care Patients: A Qualitative Study

Kadın Palyatif Bakım Hastalarına Bakım Verenlerin Genital Hijyen Farkındalığı ve Uygulamaları: Nitel Bir Araştırma

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### ABSTRACT

**Background/ Objective:** Keeping good genital hygiene in female palliative patients is important for preventing infections and supporting overall care. The aim of this study is to determine the genital hygiene awareness and practices of caregivers in female palyative care patients.

**Material and Methods:** The study was conducted with a qualitative research design. The sample of the study consisted of 14 caregivers who provided care to female patients hospitalized in palliative wards of a state hospital from May to June 2019. Data were collected in using the Information Form and Interview Form, which were comprised of semi-structured questions. The content analysis method was used to interpret the data.

**Results:** It was determined that none of the caregivers had received any formal training, more than half of them cleaned the perineal and anal areas separately using wet wipes during diaper changes, and the majority properly cleaned and dried the perineal area from front to back after cleaning the genital area. In the data analysis, three main themes were identified: timing and frequency of diaper change time and frequency, genital hygiene practices, and changes in skin integrity.

**Conclusion:** The results of this study indicate that none of the caregivers had received training, and that there were deficiencies and certain errors in the care provided. Healthcare professionals are recommended to inform caregivers about genital hygiene within the framework of their educational and counseling roles.

**Keywords:** Caregivers; genital; hygiene; palliative care.

### ÖZ

**Giriş/Amaç:** Kadın palyatif bakım hastalarında genital hijyenin sağlanması, enfeksiyonların önlenmesi ve bütüncül bakımın sürdürülebilirliği açısından kritik bir bakım alanıdır. Bu çalışmanın amacı kadın palyatif bakım hastalarında bakım verenlerin genital hijyen farkındalığını ve uygulamalarını belirlemektir.

**Gereç ve Yöntemler:** Çalışma nitel bir araştırma tasarımıyla yürütülmüştür. Çalışmanın örneklemini Mayıs-Haziran 2019 tarihleri arasında bir devlet hastanesinin Palyatif servislerinde yatan 14 kadın hastaya bakım veren 14 bakım verici oluşturmuştur. Veriler, yarı yapılandırılmış sorulardan oluşan Bilgi Formu ve Görüşme Formu kullanılarak toplanmıştır. Verileri yorumlamak için içerik analizi yöntemi kullanılmıştır.

**Bulgular:** Bakım verenlerin tamamının herhangi bir eğitim almadığı, yarısından fazlasının hastalarının bezlerini değiştirirken perine ve anüsü ayrı ayrı ve ıslak mendille temizledikleri, çoğunluğunun genital bölgeyi temizledikten sonra perineyi düzgün bir şekilde önden arkaya doğru temizleyip kuruladıkları belirlenmiştir. Verilerin analizinde bez değişim zamanı ve sıklığı, genital bölge temizliği ve cilt bütünlüğünde değişiklikler olmak üzere üç ana tema belirlenmiştir.

**Sonuç:** Bu çalışmanın sonuçları bakım verenlerin hiçbirinin eğitim almadığını, verilen bakımda eksikler ve bazı hataların olduğunu göstermiştir. Sağlık profesyonelleri eğitici ve danışmanlık rolleri çerçevesinde bakım verenleri genital hijyen konusunda bilgilendirilmesi önerilmektedir.

**Anahtar Kelimeler:** Bakıcı; genital; hijyen; palyatif bakım.

\*Presented as an oral presentation at the 1st International Palliative Care Congress held on 4-6 October 2019.

Received: 17 July 2025

Accepted: 26 August 2025

Publication Date: 30 August 2025

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## 1. Introduction

Palliative care, which is closely associated with the concept of supportive care, is a healthcare service that focuses on improving the quality of life and comfort of patients facing life-limiting illnesses and their caregivers (Janah et al., 2019; Rakic et al., 2018). The primary goal of palliative care is not to diagnose or treat the disease, but to prevent, relieve, or minimize the symptoms and stress associated with it (Janah et al., 2019). This approach adopts a holistic perspective that aims to reduce symptom burden and enhance the overall well-being of both patients and their families (Radbruch et al., 2020; Turgut & Soylu, 2020). Throughout the course of the disease, terminal patients and their families are confronted with numerous biological, psychological, social, and spiritual challenges (Palacio & Limonero, 2020), all of which significantly impair quality of life. Ensuring that terminally ill individuals maintain the highest possible quality of life is considered both a global priority and a fundamental human right (Filiz & Dikmen, 2017). Therefore, the need for effective palliative care services is becoming increasingly essential worldwide (Eğici et al., 2019; Bilgehan & Inkaya, 2021). Each individual aims to lead a high-quality life in accordance with the culture of the society they live in and the opportunities afforded by their environment. Health problems are among the most significant factors that compromise this quality of life (Kitirci, 2018).

Infection in one third of terminal patients is one of the most common complications in the final stages of the disease (Dagli et al., 2020; Macedo et al., 2018). In these patients, factors such as the existence of chronic diseases, complications induced by the disease, being in the terminal phase, conditions that weaken the immune system such as cancer, physical inactivity, long hospitalisation, and urinary catheter usage all lead to the development of infection (Kapucu, 2018; Macedo et al., 2018). Especially urinary tract and genital infections are common (Dagli et al., 2020).

The risk of genital infection increases in female patients receiving palliative care, especially considering their health status and length of stay in hospital. Individual perineal hygiene practices in these patients are of critical importance in the prevention of genital infections in palliative patients (Akça & Türk, 2021; Durmuş & Zengin, 2020). The literature states that incorrect and inadequate. Genital hygiene behaviors increase the risk of a genital infection (Daşikan et al., 2015), and genital hygiene training positively affects hygiene behaviors and reduces the risk of infection (Öner & Turfan, 2020; Sinan et al., 2020).

Palliative patients are dependent on others to meet their personal needs since they are in the final stages of their disease. Therefore, a caregiver is needed to help patients with their care activities. These caregivers are generally family members (children, spouse, or siblings) and are responsible for the patients' care and meet their daily needs World Health Organization (WHO) (WHO, 2021; Perpiñá-Galvañ et al., 2019). The study by Silva et al., (2019) reported that 87% of the elderly required assistance with basic daily activities and 92 % had a caregiver (Silva & Faustino, 2019). The genital hygiene behaviors and knowledge levels of caregivers must first be determined to protect the genital health of palliative patients. Based on the results, it is important to determine the incorrect practices of the caregivers, to teach them proper genital hygiene practices and to raise their awareness thereof. This study was conducted to determine the genital hygiene awareness and practices of caregivers in female palliative care patients.

## 2. Methods

### Study design and participants

This study was designed as a qualitative study using the phenomenological method to explore the experiences of caregivers providing genital hygiene care to female palliative patients. The study was conducted between May and June 2019 in the Palliative Care Units 1 and 2 of a Training and Research Hospital. A homogeneous purposive sampling method was employed, which involves selecting a subgroup of participants who share similar characteristics relevant to the research problem (Baltacı, 2018). In this context, 14 caregivers who were providing care to female palliative patients and met the inclusion criteria were included in the study. The sample size was determined based on the principle of data saturation.

### Data collection tools and data collection

Data were collected through face-to-face, one-on-one in-depth interviews conducted by a researcher experienced in qualitative research. Two tools were used for data collection: a Demographic Information Form and a Semi-Structured Interview Form. The Demographic Information Form included seven items addressing caregivers' age, education level, income status, social security coverage, the diagnosis of the patient under their care, their relationship with the patient, and the duration of caregiving. The Interview Form consisted of four semi-structured open-ended questions (Table 1).

Each interview lasted approximately 40 minutes. Interviews were conducted in a private room to ensure participants felt comfortable, could speak freely, and that confidentiality was fully protected. Both audio recordings and written notes were obtained during the interviews to enhance the depth and accuracy of the data.

### Table 1. Interview questions

Could you tell how frequently you replace the diaper of the patient for whom you provide care?
Could you tell how and with what do you clean the genital area of the patient for whom you provide care?
Is there any alteration in the genital area of the patient for whom you provide care?
Could you tell me what you did when an alteration took place?

### Inclusion criteria

- Having the cognitive and communication skills to participate in in-depth interviews,
- Long-term caregiving (at least 1 month),
- Agreeing to participate in the study voluntarily.

### Data analysis

The data analysis process was conducted in accordance with qualitative research principles, utilizing the content analysis method. The researchers transcribed the interview data in detail by repeatedly listening to the audio recordings and comparing them with written notes. Subsequently, two researchers independently coded the meaningful expressions identified in the participants' statements. These codes were then compared, and through consensus, similar codes were grouped together to form themes and sub-themes. The coding process was carried out using an inductive approach, in line with the research objectives and questions. The resulting themes and sub-themes are presented in Table 2. This process contributed to enhancing the credibility and trustworthiness of the analysis.

### Rigour and trustworthiness

To ensure the trustworthiness and consistency of the data analysis, the strategies outlined by Jiggins Colorafi and Evans were followed (Colorafi & Evans, 2016). These included independent coding by multiple researchers, constant comparison of codes, consensus-based theme development, and maintaining a detailed audit trail throughout the analysis process. These steps enhanced the credibility, dependability, and confirmability of the findings.

### Ethical aspects of the research

Before the study, institutional permission was acquired from the Chief Physician of Training and Research Hospital. Ethics approval was received from Inonu University Health Sciences Non-Interventional Clinical Research Ethics (dated 07/05/2019, no. 2019/9-11). Then, the caregivers of the female patients were informed about the objective of the study and the volunteering principle, and their informed consent was obtained.

### 3. Result

The average age of the caregivers was 50.14, their education levels were mostly high school (n: 5) and primary school (n: 5), and half of them were the daughters of the patients.

It was found that the caregivers of 12 patients were first-degree relatives of the patients. In the data analysis, three main themes and seven sub-themes that included the time for diaper change time and frequency, genital area cleanliness, and changes in skin integrity were created (Table 2).

**Table 2.** Research themes

Main Themes	Sub-Themes
Diaper change time and frequency	Variable
Cleaning way	Front to back, back to front, wet wipes, water/soap
Change in skin integrity	Nappy rash

### 1. Diaper change time and frequency

#### Variable

About two-thirds (10 people) of the caregivers reported changing diapers according to the patient's needs, usually once or twice a day, but more frequently in unusual (e.g. diarrhoea) circumstances. Changing diapers 1-2 times a day by caregivers causes the patient's genital area to remain covered for an extended period of time, increasing the area's humidity rate and creating an ideal setting for infection.

*"I change it whenever she defecates. Sometimes, when I'm not at home, I check on her and if she is wet up to her back, then I change it. I check on her in the evenings and if she gets wet, I change it completely. It's uncertain, when she gets wet, I change it. I also change it once or twice a day." (Caregiver 2, 74 years old, wife.)*

*"It's uncertain at all. I sometimes change it every 3-4 days, sometimes 5-6 times a day. I change diapers*

*based on the medication administered. I changed the diaper four times that day (meaning the day before). I haven't changed it for the past five days. Because she suffers from constipation"* (Caregiver 8, 55 years old, daughter.)

*"She has a catheter, and I change her diapers when she defecates and twice or three times a day so that there is no sweat."* (Caregiver 5, 51 years old, daughter).

## 2. Cleaning Way

Despite the fact that more than half of the caregivers (n=8) had no training, it was determined that they did the perineal cleaning of their patients properly front to back. The caregivers stated that they cleaned the area using wet wipes (7 participants), soap (4 participants), and only water (3 participants).

### Front to back

How women clean their genital area is important for preventing possible infection. Proper way to clean genital area (from front to back) is a behaviour that protects against genital infection agents, which play a significant role in women's health.

*"I clean her by turning her onto her side. I turn her onto her side and begin by removing the general faecal matter off the back using a napkin. Then, I wipe her front to back after wiping her back with a wet wipe. Because if we wipe the front first, the matter would spread to the back. That is why we begin by wiping the back and then the front"* (Caregiver 1, 62 years old, caregiver).

### Back to front

Genital hygiene behaviors differ between individuals. The critical issue in this difference is proper hygiene practices that protect and promote health. If hygiene practices are not followed properly, the development of infection is inevitable. Cleaning the genital area back to the front is one of the incorrect practices that increase the risk of infection, and six of the participants were found to do the cleaning back to the front.

*"When she defecates, I cut her diaper along the side and wipe it with a wet tissue. I wipe the back first, then the front. Finally, I wipe her back to front and put the diaper on. Sometimes he says it hurts, and I am unable to adequately wipe her."* (Caregiver 2, 74 years old, wife).

Cleaning the genital area with an irritant to the perineum's skin, such as wet wipes or soap, disrupts the skin/mucosa of the area, causing infection. It was determined that 11 of the caregivers used wet wipes and soap to clean the genital areas.

## Wet wipes

*"I dampen the gauze and wipe her from front to back. If the faecal in the back moves forward, she gets infected. Then, I wipe her with a wet wipe. When I was at home, I used a soapy towel to wipe her."* (Caregiver 9, 57 years old, wife).

## Water/Soap

*"I bring the dry towel with me and unfasten the diaper. I use the dry towel to wipe away her pee (faecal). After that, I thoroughly clean her with a soapy towel. After cleaning the back, I clean the front, starting at the top to bottom."* (Caregiver 14, 59 years old, daughter).

## 3. Change in skin integrity

### Nappy rash

The genital area has a unique mucous membrane and folded skin structure. Infection risk is increased when this mucosa is irritated and the area is kept moist for an extended period of time due to the skin structure. After cleaning the genital area, it was determined that eight of the caregivers dried the area. Skin integrity got impaired in six of the patients. All the caregivers indicated that they protect and treat their patients' genital areas with a variety of materials, such as diaper rash creams, solutions, powder, and olive oil.

*"I dry it with something soft, with cotton. Then, I apply a cream. It acts as a barrier to the development of wounds. We apply batticon once a day just before bed to prevent germs from growing in the front area. The nurse had told me. Washing is ideal, but we do not have such a possibility."* (Caregiver 7, 28 years old, son).

*"I put the diaper on after cleaning; I do not dry her. The red flesh of that region appeared. Occasionally, girls (nurses) come to clean and apply cream, and they tell me to do so. I don't know, I forget which cream it is; she has oil, and I apply it. I don't apply it all the time, only when it comes to my mind; I apply it when it hurts while cleaning."* (Caregiver 2, 74 years old, wife).

## 4. Discussion

The results of this study indicate that all of the caregivers received no training, they provided care based on their own, the care provided was incomplete, and some of them were incorrect. The frequency of diaper changes was insufficient, the majority of the caregivers demonstrated proper cleaning behaviour but utilized the incorrect cleaning materials, and the patients for whom they provided care had a deteriorated skin integrity in the genital area.

The literature reports that correct genital hygiene practices by caregivers have a significant effect on preventing genital infections (Durmuş & Zengin, 2020; Silva & Faustino, 2019; Yazici & Çuvadar, 2019). In this sense, the current study assessed the genital hygiene awareness and practices of caregivers of female palliative care patients.

No study on the genital hygiene practices of caregivers for female palliative care patients has been encountered in the literature review. This strengthens the study's originality, and the study's findings are discussed by referencing the outcomes of the study that was conducted with different sample groups in the literature.

Using pads with insufficient fluid absorption for an extended period of time, keeping the area moist, and maintaining a wet environment with stool raise the risk of infection by creating an ideal setting for microorganism reproduction (Sumarah & Widyasih, 2017). To prevent this, it is recommended to replace diapers or pads every 3-4 hours (Cangöl & Tokuç, 2013; Yazici & Çuvadar, 2019). Caregivers stated in the current study that patients changed their diapers when they became dirty, which is usually once or twice a day. In a study conducted on elderly patients who were hospitalized, bedridden, and dependent on others for individual care, it was shown that, more than half of the patients had their diapers changed within four hours or less, which is different from the results of the study and their perineal care was provided once daily, which is compatible from the results of the study (Silva & Faustino, 2019). The fact that the frequency of pad change during menstruation was found insufficient in the literature for female patients applying to a gynaecological outpatient clinic supports the present study's findings (Cangöl & Tokuç, 2013; Daşikan et al., 2015; Durmuş & Zengin, 2020; Kula Ulu et al., 2019; Yurttaş et al., 2018). It is stated that replacing pads infrequently increases the incidence of genital infections (Yağmur & Orhan, 2017). In the current study, it was observed that caregivers needed training on the frequency of changing diapers.

Another critical factor to consider while preventing genital infections is the direction and way in which the perineum is cleaned, particularly in women. Cleaning the perineum improperly (wiping from the anus to the vulva, washing, or not washing at all) leads microorganisms to be transmitted from the anus to the vaginal area, resulting in genital infections (Sinan et al., 2020). In order to prevent genitourinary infections, it is important to clean the perineum from the vulva to the anus (front to back). In the study it was determined that more than half of the participants cleaned their perineum correctly. The cleaning of the genital area

generally from front to back in the literature supports the findings of the study (Bilgiç et al., 2019; Kartal et al., 2020; Küçükkeleşçe et al., 2019; Sinan et al., 2020). Similarly, the study by Akça and Türk (2020) reported that 55.7% of the women who applied to a gynecological outpatient clinic cleaned their genital areas from front to back; whereas, in the study by Türkmen et al. (2021), 80.8% of the students staying in the dormitories cleaned their genital areas from front to back (Akça & Türk, 2021; Türkmen & Karagüzel, 2021). While the study by Daşikan et al., (2015) revealed that 62.4% of women cleaned their genital areas from back to front; whereas, and in the study by Cangöl et al., (2013), 51.7% of the women cleaned their genital areas from back to front (Cangöl & Tokuç, 2013; Daşikan et al., 2015). Mostly proper cleaning of genital area in the current study can be explained by the fact that caregivers the majority of whom were female, and they were experienced in genital hygiene due to having children and caring for them.

A practice that disrupts the pH by reducing the lactobacilli of the genital area may pave the way for infection to develop (Pete et al., 2019). The use of irritants such as wet wipes, soap, and powder, while cleaning the area, induce an infection to develop in the genital area (Kaya & Beji, 2013). Therefore, appropriate materials should be utilized to clean and dry the genital area following toilet use. Seven caregivers used wet wipes and four caregivers used soap to clean the genital areas of palliative care patients in this study. Likewise, Ruiz et al., (2019) determined that the majority of female gynecologists cleaned the perineum with soap and water after toilet use, while Ferreira et al., (2020) identified that 69% of hospitalized elderly patients cleaned the perineum with soap (Ferreira et al., 2020; Ruiz et al., 2019). Most studies reported that cleansing the genital area with water is sufficient (Akça & Türk, 2021; Cangöl & Tokuç, 2013; Kartal et al., 2020; Kula Ulu et al., 2019; Pete et al., 2019; Silva & Faustino, 2019; Yurttaş et al., 2018). In the current study, the use of wet wipes by caregivers to clean the genital area may be due to the fact that they believe that the wipe is more comfortable to use and cleans better.

Leaving the perineal area moist promotes microorganism reproduction and paves the way for infection. Therefore, it is important to keep the perineal area dry and to use disposable toilet rolls while drying (Kula Ulu et al., 2019). This study reported that eight of the caregivers dried the genital area with a napkin or a cloth after cleaning. According to the literature, the genital area is usually dried with a toilet roll following urination, which is compatible with findings of the study (Akça & Türk, 2021; Cangöl & Tokuç, 2013; Kula Ulu et al., 2019; Ruiz et al., 2019; Sinan et al., 2019).



A study conducted by on imprisoned and unimprisoned women revealed that over half of imprisoned ones and all of unimprisoned ones dried themselves after urination (Palas & Karaçam, 2013).

Preserving skin integrity in bedridden patients is crucial and requires special attention. Any contact of urine and/or stool with the genital area, which has a particularly vulnerable structure, persistent use of patient diapers, and cleaning the area with the incorrect materials may damage the skin by altering its microbiota (Kaya & Beji, 2013; Lopes et al., 2021). In literature, skin integrity deteriorates more in those who are immobile and use underpads (Ferreira et al., 2020; Lopes et al., 2021). The skin integrity of the genital area of six female palliative care patients who were bedridden was determined to be impaired in this study. Likewise, Campbell et al., (2014) reported that 25 of 50 female patients who had incontinence had deterioration in skin integrity, as did Silva et al., (2019) with 42% of hospitalized elderly patients, and Ferreira et al., (2020) with 36.2% of the patients (Campbell et al., 2014; Ferreira et al., 2020; Silva & Faustino, 2019). All of these findings indicate a lack of knowledge about genital hygiene among caregivers of palliative care patients.

This study has several limitations. First, a purposive sampling method was employed in selecting the study participants, which restricts the generalizability of the findings. In addition, the data analysis relied on the researcher's interpretation, which introduces the risk of subjectivity and potential bias. Furthermore, although the data were discussed with different sample groups, which broadened the scope of the study, the comparisons remain limited in terms of in-depth generalization. Future research with larger and more diverse samples, incorporating both qualitative and quantitative methods, is recommended to enhance the reliability and validity of the findings.

## 5. Conclusions

The results indicated that all of the caregivers received no training, they provided care based on their own experiences and the hospital staff's directives, the care provided was incomplete, and some of them were incorrect. Therefore, patients, their families, and caregivers must be included in the process of care. In this sense, healthcare professionals play a critical role in facilitating the informal care interaction between the patients and caregivers during the palliative care process with the support of professional teams, minimizing unfavourable aspects in the process of care, and improving the patient's and family's quality of life. Within the framework of their educational and counselling roles, healthcare professionals can inform caregivers on genital hygiene and guide them toward proper behaviors.

## Conflict of Interest

The authors have no conflict of interest.

## Author Contributions

HO: Idea/concept, Design, Data processing, Analysis and interpretation, Literature review, Writing the article, Literature review. Y.Y: Idea/concept, Design, Analysis, Critical review, Manuscript writing,

## Acknowledgments

The authors would like to thank the patients and relatives who participated in the study.

## Financial Support

No financial support was received to complete this study.

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## Compassion Competence and Fatigue in Nurses: Child and Adult Sample

### Hemşirelerde Merhamet Yeterliliği ve Yorgunluğu: Çocuk ve Yetişkin Örneklemi

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#### ABSTRACT

**Background/ Objective:** The concepts of compassion competence and compassion fatigue are two important variables that affect the working life and performance of nurses. This study was conducted to investigate the variables affecting compassion competence and fatigue in nurses caring for adult and paediatric patients.

**Material and Methods:** The descriptive cross-sectional study was applied to a total of 108 nurses, 54 working in adult wards and 54 in paediatric wards. Data were collected with Socio-Demographic Data Form, Compassion Competence Scale and Compassion Fatigue Scale.

**Results:** The study revealed that a multitude of variables influenced the levels of compassion, competence and fatigue in nurses caring for adult and paediatric patients. These variables were determined as marital status, gender, having children, inadequate wage thought, satisfaction with the unit and working conditions, negative experiences in their work life, duration of professional experience, frequent unit change, liking the profession and the intensity of the working unit ( $p<0.05$ ).

**Conclusion:** Many factors have been identified that have a significant effect on the levels of compassion competence and fatigue experienced by nurses caring for adult and paediatric patients. These factors include individual characteristics such as socio-demographic variables as well as factors related to work life such as working environment and conditions.

**Keywords:** nursing; care; compassion competence; adult; pediatric.

#### ÖZ

**Giriş/Amaç:** Merhamet yeterliliği ve merhamet yorgunluğu kavramları hemşirelerin çalışma hayatını ve performansını etkileyen iki önemli değişkendir. Bu çalışma, yetişkin ve çocuk hastalara bakım veren hemşirelerde merhamet yeterliliği ve yorgunluğunu etkileyen değişkenleri incelemek amacıyla yapılmıştır.

**Gereç ve Yöntemler:** Tanımlayıcı kesitsel tipteki araştırma, 54'ü yetişkin, 54'ü çocuk servisinde çalışan toplam 108 hemşireye uygulanmıştır. Veriler Sosyo-Demografik Veri Formu, Merhamet Yeterliliği Ölçeği ve Merhamet Yorgunluğu Ölçeği ile toplanmıştır.

**Bulgular:** Çalışma, yetişkin ve pediatrik hastalara bakım veren hemşirelerin merhamet yeterliliği ve merhamet yorgunluğu düzeylerini etkileyen çok sayıda değişken olduğunu ortaya koymuştur. Bu değişkenler; medeni durum, cinsiyet, çocuk sahibi olma, yetersiz ücret düşüncesi, çalışılan birim ve çalışma koşullarından memnuniyet, iş yaşamındaki olumsuz deneyimler, mesleki deneyim süresi, sık birim değiştirme, mesleği sevmeye ve çalışılan birimin yoğunluğu olarak belirlenmiştir ( $p<0.05$ ).

**Sonuç:** Yetişkin ve pediatrik hastalara bakım veren hemşirelerin merhamet yeterliliği ve yorgunluk düzeyleri üzerinde önemli etkisi olan birçok faktör belirlenmiştir. Bu faktörler arasında sosyo-demografik değişkenler gibi bireysel özelliklerin yanı sıra çalışma ortamı ve koşulları gibi iş yaşamına ilişkin faktörler de yer almaktadır.

**Anahtar Kelimeler:** hemşire; bakım; merhamet yeterliliği; yetişkin; çocuk.

Received: 17 April 2025

Accepted: 22 August 2025

Publication Date: 30 August 2025

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## 1. Introduction

Compassion is an essential concept in the dynamics of the nursing profession (Yi et al., 2024). Compassion, defined as the process of understanding the patient as an individual and finding solutions to their problems, is an integral part of patient care (Patole et al., 2024). Compassion is a fundamental element in the motivation to care for patients and to provide care in accordance with ethical principles. Due to this feature, compassion is among the basic qualities that nurses should have (Üçüncüoğlu et al., 2024). The notion of compassion, a fundamental component of the nursing profession, elucidates fundamental concepts such as compassion fatigue and competence. Compassion competence includes the practices and qualities necessary for the purpose of fulfilling the basic goals of nursing care such as alleviating pain and suffering (Sadeghi et al., 2025). Nevertheless, the concept of compassion competence is not exclusively associated with patient care. Thanks to compassion competence, nurses increase their professional satisfaction through activities such as self-control and self-awareness (Ünlüsoy Dinçer et al., 2024). A multitude of factors are associated with the level of compassion demonstrated by nurses. For example, the development of fear of compassion in nurses negatively affects compassion competence (Sadeghi et al., 2025).

Another concept related to compassion that has an impact on nurses is compassion fatigue. The reasons for the emergence of compassion fatigue in nurses are numerous and varied. These include both personal and professional factors, with the potential to exert significant influence on the personal and professional lives of nurses (Dos Santos et al., 2024).

The difficulties nurses experience in regulating their emotions may be related to compassion fatigue. For example, nurses experiencing high levels of compassion fatigue may act in a superficial manner by avoiding expressing their true feelings in their care (Chu, 2024). Nurses experiencing compassion fatigue may disrupt the quality of care by causing ethical violations (Üçüncüoğlu et al., 2024). A review of the extant literature reveals a paucity of studies that seek to address the issue of compassion fatigue levels among professionals who provide health services to individuals. The development of strategies to combat this issue is similarly lacking. (Patole et al., 2024; Yi et al., 2024). Furthermore, the number of studies examining compassion fatigue and emotion control mechanisms in nurses remains comparatively low (Chu, 2024). In view of the potential individual and professional ramifications of compassion fatigue in nurses, there is a necessity for further research on this

subject (Shuai et al., 2024). In conclusion, this study is of significant value in terms of contributing to the limited literature on the subject by examining the context of Turkey. The objective of the present study was to evaluate the levels of compassion, competence, and fatigue in nurses, along with the factors affecting these levels.

## 2. Methods

### Type of Study

The present study was conducted in accordance with a descriptive correlational design.

### Study Population and Sample

This study was conducted with 108 nurses working in a research and practice hospital in Gaziantep province. Power analysis was utilised to determine the study sample. A comparable study on the subject was employed for the purposes of this analysis (Avcı et al., 2022). As a result of the analysis, critical t value is 1.692 and actual power value is 0.95. The course of the study, 54 nurses were employed in adult units and 54 in paediatric units.

**Inclusion criteria;** volunteering to participate in the study and working in a unit actively providing patient care for more than 1 year.

**Exclusion criteria;** The nurse's desire to leave the study or giving misleading answers to the questions.

### Data Collection Tools

The questionnaire form consists of three parts: Socio-Demographic Data Form, Compassion Competence Scale and Compassion Fatigue Scale.

#### Socio-Demographic Data Form

The Socio-Demographic Data Form is a tool developed by the researchers by reviewing the literature and includes various variables related to the socio-demographic characteristics, working conditions, satisfaction and professional experience of the volunteer.

#### Compassion Competence Scale

The scale in question was developed by Lee and Seomun (2016) and aims to measure an individual's level of compassion competence. In 2021, Çiftçi and Aras conducted a study to ascertain the validity and reliability of the scale in the Turkish context. The scale was developed using a 5-point Likert scale and is calculated by taking the average item score. The scale has a scoring scale ranging from minimum 1 to maximum 5. The scale has 3 sub-dimensions (communication, sensitivity and insight). The

Cronbach alpha score of the scale was determined to be 0.795 (Communication= 0.757, Sensitivity= 0.639 and Insight= 0.658). The scale consists of 11 items and has no reverse items (Lee & Seomun, 2016; Çiftçi & Aras, 2021). In this study, cronbach alpha score was 0.932 (Communication= 0.886, Sensitivity= 0.863 and Insight= 0.800).

### Compassion Fatigue Short Scale

The scale was developed by Adams et al. (2006) with the objective of measuring the level of compassion fatigue experienced by an individual. The validity and reliability of the Turkish-language version of the scale were examined in a study conducted by Dinç and Ekinçi in 2019. The scale was developed in the 10-point Likert format; it does not incorporate a scoring feature. The scale comprises two sub-dimensions: secondary trauma and occupational burnout. The scale comprises 13 items, with a minimum score of 13 and a maximum score of 130. The Cronbach alpha score of the scale was determined to be 0.876 (Occupational Burnout = 0.852, Secondary Trauma= 0.748). (Adams et al., 2006; Dinç & Ekinçi, 2019) In this study, cronbach alpha score was 0.892 (Occupational Burnout = 0.826, Secondary Trauma= 0.770).

### Data Collection Process

Within the scope of the study, a questionnaire form was applied to volunteers on an online platform. Before the questionnaire was sent to the participants, they were asked to sign an informed consent form to confirm their agreement to participate in the study. The online form was then sent to them via digital platforms.

### Statistical Analysis

In statistical analyses, mean, standard deviation, maximum and minimum analyses were applied for numerical variables, and percentage and frequency calculations were used for the categorical variables. Kolmogorov-Smirnov test was applied to determine the normality of the distribution of the scale and its sub-dimensions. The findings revealed that the scale showed a normal distribution. Cronbach's alpha coefficient was utilised in the evaluation of scale and sub-dimension reliability and it was found that they were within the acceptable reliability coefficient range. The relationships between the scales and their sub-dimensions were determined by means of dependent sample t-tests and one-way Anova tests and the categorical variables in the socio-demographic data form.

**Ethical Considerations:** The necessary permissions were obtained from the relevant ethics committee

(Gaziantep University Clinical Research Ethics Committee, meeting date: August 3, 2022, study protocol code: 243), institutional authorities and scale authors for the study. The study was conducted in accordance with the 'Principles of the Declaration of Helsinki'. Participants' consent for participation was obtained with an informed consent form.

### 3. Results

The mean age of the nurses participating in present study was 30.38 for nurses caring for adult patients and 30.01 for nurses caring for paediatric patients. The average weekly working hours of nurses caring for adult patients was 45.67, while the average weekly working hours of nurses caring for paediatric patients was 46.16. The majority of nurses were female, both in the adult and paediatric wards (87% and 88.9%, respectively), had at least one child (53.7% and 64.8%, respectively) and had a bachelor's degree (72.2% and 74.1%, respectively). The majority of adult nurses were married (51.9%), while the majority of paediatric nurses were single (51.9%). The vast majority of both adult and paediatric care nurses (63.0% and 64.8%, respectively) stated that they were content with their profession. The majority of the nurses providing care to adults and children (53.7% and 51.9%, respectively) have been in their profession for more than one year and the units they work in do not change frequently (43.7% and 70.4%, respectively). The majority of nurses, including both those in adult and paediatric care, expressed satisfaction with the units in which they work (53.7% and 63.0%, respectively) and working conditions (48.1% for both groups), while fatigue (63.0% and 61.1%, respectively) and inadequate remuneration (51.9% for both groups) were identified as significant challenges. The majority of the nurses providing care to adults and children reported that they could empathise with colleagues (75.9% for both groups) and patients (83.3% and 74.1%, respectively). However, The majority of nurses, including both those in adult and paediatric care (46.3% and 42.6%, respectively) also reported having negative experiences in their professional life. These experiences include the death of a patient (48.1% and 37.0%, respectively), exposure to pain (40.7% and 33.3%, respectively), the impact of the patient's (38.9% and 44.4%, respectively) and family's (50.0% and 46.3%, respectively) emotions, the fact that the patient is a child-young person (51.9% and 55.6%, respectively) or elderly (25.9% and 18.5%, respectively), the attitude of hospital staff (46.3% and 38.9%, respectively), and starting work (16.7% and 29.6%, respectively) (Table 1).

**Table 1. Frequency distribution of variables of nurses**

		Nurses Caring for Adult Patients (n=54)				Nurses Caring for Paediatric Patients (n=54)			
		Min.	Max.	X̄	Sd.	Min.	Max.	X̄	Sd.
Age		19	52	30.38	8.59	20	50	30.01	7.32
Weekly Working Hours		40	72	45.67	6.95	40	72	46.16	7.57
		n			%	n			%
Gender	Female	47			87.0	48			88.9
	Male	7			13.0	6			11.1
Marital Status	Single	26			48.1	28			51.9
	Married	28			51.9	26			48.1
Parenting Status	Parent	29			53.7	35			64.8
	Not a parent	25			46.3	19			35.2
Education Status	High School-Associate Degree	3			5.6	7			13.0
	Licence Degree	39			72.2	40			74.1
	Postgraduate Degree	12			22.2	7			13.0
Profession Satisfaction	Yes	34			63.0	35			64.8
	No	2			3.7	3			5.6
	Partially	18			33.3	16			29.6
Profession Year	Less than 1 year	25			46.3	26			48.1
	More than 1 year	29			53.7	28			51.9
Unit Satisfaction	Yes	29			53.7	34			63.0
	No	25			46.3	20			37.0
Strenuousness of the Unit	Yes	34			63.0	33			61.1
	No	8			14.8	5			9.3
	Partially	12			22.2	16			29.6
Unit Change Status	Evet	25			46.3	16			29.6
	Hayır	29			53.7	38			70.4
Satisfaction with Working Conditions	Yes	26			48.1	26			48.1
	No	9			16.7	5			9.3
	Partially	19			35.2	23			42.6
Satisfaction with the Wage Earned	Yes	4			7.4	2			3.7
	No	28			51.9	28			51.9
	Partially	22			40.7	24			44.4
Ability to Empathise with Colleagues	Yes	41			75.9	41			75.9
	No	13			24.1	13			24.1
Ability to Empathise with the Patients	Yes	45			83.3	40			74.1
	No	9			16.7	14			25.9
Negative Experience in Professional Life	Yes	25			46.3	23			42.6
	No	11			20.4	13			24.1
	Partially	18			33.3	18			33.3
Types of Adverse Experience	Types of Adverse Experience Patient Death	26			48.1	20			37.0
	Exposure to Pain	22			40.7	18			33.3
	Influenced by Patient Emotions	21			38.9	24			44.4
	Influenced by Family Emotions	27			50.0	25			46.3
	Child-young age of the patient	28			51.9	30			55.6
	Old Age of the Patient	14			25.9	10			18.5
	Employee Attitude	25			46.3	21			38.9
	Starting a New Job	9			16.7	16			29.6

n = sample size; % = percent; X̄ = mean; Sd = standard deviation; Min = minimum; Max. = maximum

In Table 2, socio-demographic variables and scales of the nurses participating in the study were compared. Accordingly, it was found that female nurses caring for both adult and paediatric patients exhibited a higher level of compassion competence than their male colleagues ( $p<0.05$ ). This finding was repeated in the sub-dimensions of insight, sensitivity and

communication ( $p<0.05$ ). However, higher levels of compassion competence, insight and communication sub-dimensions were found in married nurses caring for paediatric patients compared to their single colleagues ( $p<0.05$ ). Nurses with children working in paediatric units showed higher levels of compassion competence and communication subscale scores

compared to nurses without children ( $p < 0.05$ ). In addition, paediatric nurses with more than one year of experience had significantly higher scores in the

communication sub-dimension compared to paediatric nurses with less than a year of experience ( $p < 0.05$ ) (Table 2).

**Table 2. Comparison of socio-economic variables of nurses and scales**

		Compassion Fatigue Short Scale				Compassion Competence Scale				
		Scale Total	Job Burnout	Secondary Trauma	Scale Total	Insight	Susceptibility	Communication		
Nurses Caring for Adult Patients (n=54)										
Gender	Female	X <sup>-</sup>	4.42	4.42	4.42	3.99	3.89	4.05	4.00	
		Sd.	1.96	2.06	2.20	0.65	0.73	0.66	0.72	
	Male	X <sup>-</sup>	3.04	3.19	2.80	3.15	3.04	3.09	3.25	
		Sd.	1.58	1.61	1.72	1.37	1.32	1.44	1.39	
			p	0.082*	0.138*	0.069*	<b>0.010*</b>	<b>0.014*</b>	<b>0.004*</b>	<b>0.030*</b>
	Marital Status	Bekar	X <sup>-</sup>	4.20	4.29	4.05	3.90	3.75	3.94	3.97
Sd.			2.18	2.22	2.55	0.71	0.76	0.70	0.82	
Evli		X <sup>-</sup>	4.28	4.24	4.35	3.85	3.80	3.91	3.85	
		Sd.	1.76	1.88	1.85	0.91	0.95	0.98	0.90	
		p	0.876*	0.926*	0.618*	0.817*	0.824*	0.892*	0.593*	
Parenting Status		Parent	X <sup>-</sup>	4.07	4.17	3.93	3.91	3.75	3.96	3.97
	Sd.		2.16	2.22	2.46	0.72	0.77	0.71	0.81	
	Not a parent	X <sup>-</sup>	4.43	4.37	4.53	3.84	3.81	3.89	3.83	
		Sd.	1.72	1.83	1.85	0.92	0.97	1.00	0.91	
			p	0.509*	0.719*	0.319*	0.750*	0.819*	0.760*	0.536*
	Profession Year	Less than 1 year	X <sup>-</sup>	3.86	3.95	3.73	3.76	3.60	3.80	3.84
Sd.			1.83	1.97	2.12	0.90	0.92	0.92	0.97	
More than 1 year		X <sup>-</sup>	4.57	4.53	4.62	3.98	3.94	4.04	3.97	
		Sd.	2.03	2.08	2.21	0.73	0.78	0.78	0.76	
		p	0.192*	0.294*	0.142*	0.326*	0.148*	0.296*	0.578*	
Nurses Caring for Paediatric Patients (n=54)										
Gender	Female	X <sup>-</sup>	4.31	4.27	4.37	4.16	4.09	4.14	4.21	
		Sd.	1.74	1.73	2.02	0.50	0.63	0.66	0.57	
	Male	X <sup>-</sup>	4.56	4.66	4.40	3.36	3.50	3.00	3.50	
		Sd.	1.88	1.87	2.03	0.76	0.78	1.05	0.90	
			p	0.743*	0.606*	0.977*	<b>0.001*</b>	<b>0.038*</b>	<b>0.001*</b>	<b>0.010*</b>
	Marital Status	Bekar	X <sup>-</sup>	4.34	4.33	4.35	3.87	3.76	3.91	3.91
Sd.			1.88	1.85	2.18	0.57	0.55	0.80	0.63	
Evli		X <sup>-</sup>	4.34	4.30	4.40	4.29	4.32	4.12	4.36	
		Sd.	1.62	1.64	1.83	0.52	0.66	0.78	0.59	
		p	0.999*	0.954*	0.938*	<b>0.008*</b>	<b>0.001*</b>	0.334*	<b>0.009*</b>	
Parenting Status		Yes	X <sup>-</sup>	4.16	4.14	4.21	3.93	3.91	3.96	3.93
	Sd.		1.75	1.72	2.06	0.60	0.64	0.86	0.63	
	No	X <sup>-</sup>	4.65	4.63	4.68	4.32	4.24	4.12	4.49	
		Sd.	1.72	1.77	1.77	0.48	0.67	0.66	0.52	
			p	0.333*	0.322*	0.413*	<b>0.019*</b>	0.081*	0.484*	<b>0.002*</b>
	Profession Year	Less than 1 year	X <sup>-</sup>	4.15	4.10	4.23	3.93	3.91	4.05	3.88
Sd.			1.78	1.77	2.07	0.57	0.61	0.82	0.59	
More than 1 year		X <sup>-</sup>	4.51	4.51	4.51	4.20	4.14	3.98	4.36	
		Sd.	1.72	1.71	1.96	0.58	0.70	0.78	0.62	
		p	0.447*	0.384*	0.608*	0.100*	0.204*	0.774*	<b>0.006*</b>	

X<sup>-</sup> = mean; Sd = Standard deviation; p = p-value

\* p < 0.05; Independent Sample T Test was used for the comparison of two independent groups.

In Table 3, the variables related to the nursing profession and the scales used in the study were compared in terms of nurses caring for adult patients. Consequently, it was established that the levels of

compassion fatigue, occupational burnout and secondary trauma sub-dimensions among adult patient nurses who expressed dissatisfaction with their place of work exceeded those of their satisfied



counterparts ( $p < 0.05$ ). It was found that adult patient nurses who had previously had negative experiences in their working life had higher levels of compassion fatigue, occupational burnout and secondary trauma ( $p < 0.05$ ). In addition, it was determined that the

occupational burnout sub-dimension levels of adult patient nurses who were dissatisfied with their working conditions and thought that they received inadequate wages were significantly higher ( $p < 0.05$ ) (Table 3).

**Table 3. Comparison of variables related to nursing profession and scales in terms of nurses caring for adult patients**

			Nurses Caring for Adult Patients (n=54)						
			Compassion Fatigue Short Scale			Compassion Competence Scale			
			Scale Total	Job Burnout	Secondary Trauma	Scale Total	Insight	Susceptibility	Communication
Love for the Profession	Yes	X <sup>-</sup>	3.97	3.86	4.14	3.93	3.88	3.96	3.95
		Sd.	1.76	1.72	2.15	0.95	0.95	1.02	0.97
	No	X <sup>-</sup>	7.03	7.37	6.50	3.45	3.16	4.00	3.30
		Sd.	4.18	3.71	4.94	0.89	0.70	0.47	1.27
	Partially	X <sup>-</sup>	4.45	4.68	4.08	3.82	3.66	3.87	3.88
		Sd.	1.94	2.17	1.99	0.47	0.66	0.47	0.54
	p		0.083**	0.031**	0.331**	0.676**	0.416**	0.933**	0.579**
Strenuousness of the Unit	Yes	X <sup>-</sup>	4.17	4.17	4.17	3.96	3.84	4.01	4.01
		Sd.	1.72	1.84	2.04	0.73	0.77	0.81	0.76
	No	X <sup>-</sup>	3.25	3.21	3.30	4.06	4.12	4.04	4.05
		Sd.	2.00	1.84	2.47	0.89	0.94	0.89	0.91
	Partially	X <sup>-</sup>	5.10	5.22	4.91	3.51	3.38	3.61	3.53
		Sd.	2.32	2.40	2.39	0.94	0.97	0.93	1.03
	p		0.107**	0.086**	0.276**	0.201**	0.141**	0.343**	0.228**
Unit Satisfaction	Yes	X <sup>-</sup>	3.49	3.46	3.55	3.72	3.64	3.75	3.75
		Sd.	1.92	1.95	2.14	0.98	0.99	1.01	1.01
	No	X <sup>-</sup>	5.11	5.19	4.97	4.06	3.94	4.13	4.09
		Sd.	1.64	1.74	2.05	0.50	0.65	0.56	0.59
	p		<b>0.002*</b>	<b>0.001*</b>	<b>0.016*</b>	0.126*	0.202*	0.109*	0.144*
Unit Change Status	Yes	X <sup>-</sup>	4.38	4.45	4.28	3.95	3.85	3.96	4.00
		Sd.	2.28	2.33	2.40	0.67	0.78	0.64	0.77
	No	X <sup>-</sup>	4.12	4.10	4.15	3.82	3.72	3.90	3.82
		Sd.	1.66	1.77	2.04	0.92	0.93	1.01	0.93
	p		0.624*	0.532*	0.833*	0.560*	0.589*	0.826*	0.448*
Satisfaction with Working Conditions	Yes	X <sup>-</sup>	3.66	3.49	3.94	3.85	3.79	3.85	3.88
		Sd.	2.11	2.02	2.44	1.06	1.09	1.07	1.10
	No	X <sup>-</sup>	4.89	5.48	3.95	3.89	3.81	4.07	3.84
		Sd.	1.79	2.09	1.97	0.46	0.37	0.68	0.55
	Partially	X <sup>-</sup>	4.72	4.74	4.69	3.91	3.75	3.96	3.97
		Sd.	1.65	1.65	1.96	0.53	0.69	0.57	0.59
	p		0.110**	<b>0.016**</b>	0.502**	0.969**	0.982**	0.798**	0.910**
Satisfaction with the Wage Earned	Yes	X <sup>-</sup>	4.44	4.43	4.45	3.13	3.08	3.16	3.15
		Sd.	1.82	2.00	2.43	1.58	1.42	1.73	1.66
	No	X <sup>-</sup>	4.71	4.88	4.45	3.83	3.75	3.91	3.84
		Sd.	2.24	2.33	2.43	0.81	0.91	0.84	0.85
	Partially	X <sup>-</sup>	3.60	3.44	3.85	4.07	3.95	3.95	4.13
		Sd.	1.40	1.29	1.87	0.56	0.61	0.61	0.60
	p		0.133**	<b>0.043**</b>	0.623**	0.096**	0.173**	0.137**	0.088**
Negative Experience in Professional Life	Yes	X <sup>-</sup>	5.08	5.12	5.02	4.03	3.93	4.12	4.04
		Sd.	1.99	2.14	2.19	0.51	0.62	0.50	0.63
	No	X <sup>-</sup>	2.86	3.09	2.49	3.40	3.39	3.42	3.40
		Sd.	1.82	2.13	1.36	1.12	1.12	1.13	1.13
	Partially	X <sup>-</sup>	3.92	3.79	4.13	3.95	3.81	3.98	4.03
		Sd.	1.42	1.24	2.08	0.87	0.95	0.96	0.87
	p		<b>0.003**</b>	<b>0.009**</b>	<b>0.004**</b>	0.087**	0.225**	0.074**	0.085**

X<sup>-</sup> = mean; Sd = Standard deviation; p = p-value

\*  $p < 0.05$ ; Independent Sample T Test was used for the comparison of two independent groups.

\*\*  $p < 0.05$ ; One Way Anova test was used to compare three and more independent groups that did not have normal distribution.

For nurses caring for paediatric patients, some variables related to the nursing profession and the scales used in the study were compared (Table 4). The findings of the study indicated that the prevalence of compassion fatigue, occupational burnout, and secondary trauma among pediatric patient nurses who expressed discontent with their profession, found their

unit to be tiring, and had endured negative professional experiences was found to be significantly higher than that of their counterparts ( $p < 0.05$ ). Furthermore, it was determined that the compassion competence insight sub-dimension scores of paediatric patient nurses who remained on the same unit were higher ( $p < 0.05$ ).

**Table 4. Comparison of variables related to nursing profession and scales in terms of nurses caring for paediatric patients**

		Nurses Caring for Paediatric Patients (n=54)							
		Compassion Fatigue Short Scale			Compassion Competence Scale				
			Scale Total	Job Burnout	Secondary Trauma	Scale Total	Insight	Susceptibility	Communication
Love for the Profession	Yes	X <sup>-</sup>	3.95	3.97	3.92	4.14	4.13	4.02	4.22
		Sd.	1.55	1.58	1.82	0.60	0.67	0.84	0.66
	No	X <sup>-</sup>	7.64	7.45	7.93	3.96	3.77	4.11	4.00
		Sd.	2.34	2.62	1.92	0.89	1.07	1.01	0.91
	Partially	X <sup>-</sup>	4.55	4.46	4.70	3.93	3.85	3.97	3.95
		Sd.	1.40	1.34	1.74	0.50	0.55	0.70	0.56
		p	<b>0.001**</b>	<b>0.002**</b>	<b>0.002**</b>	0.462**	0.310**	0.960**	0.351**
Strenuousness of the Unit	Yes	X <sup>-</sup>	4.89	4.89	4.90	4.04	3.98	4.05	4.07
		Sd.	1.76	1.79	2.04	0.51	0.60	0.74	0.59
	No	X <sup>-</sup>	2.66	2.62	2.72	4.05	4.00	3.60	4.36
		Sd.	0.87	0.63	1.54	0.70	0.94	0.59	0.68
	Partially	X <sup>-</sup>	3.71	3.66	3.80	4.13	4.12	4.08	4.17
		Sd.	1.35	1.27	1.66	0.72	0.73	0.94	0.76
		p	<b>0.005**</b>	<b>0.003**</b>	<b>0.026**</b>	0.884**	0.803**	0.472**	0.646**
Unit Satisfaction	Yes	X <sup>-</sup>	4.13	4.02	4.30	4.14	4.10	4.09	4.19
		Sd.	1.57	1.54	1.92	0.58	0.63	0.87	0.66
	No	X <sup>-</sup>	4.69	4.81	4.50	3.95	3.90	3.88	4.03
		Sd.	2.00	1.96	2.18	0.58	0.71	0.64	0.63
		p	0.260*	0.109*	0.735*	0.257*	0.273*	0.344*	0.377*
Unit Change Status	Yes	X <sup>-</sup>	4.09	3.97	4.28	3.96	3.72	4.04	4.06
		Sd.	1.42	1.39	1.67	0.46	0.57	0.67	0.59
	No	X <sup>-</sup>	4.44	4.46	4.41	4.11	4.15	4.00	4.16
		Sd.	1.87	1.86	2.14	0.63	0.66	0.85	0.68
		P	0.510*	0.355*	0.832*	0.386*	<b>0.030*</b>	0.891*	0.609*
Satisfaction with Working Conditions	Yes	X <sup>-</sup>	4.18	4.05	4.40	4.07	3.92	4.00	4.21
		Sd.	1.75	1.74	2.04	0.47	0.68	0.55	0.55
	No	X <sup>-</sup>	5.09	5.22	4.88	4.03	4.00	4.40	3.84
		Sd.	2.91	2.84	3.14	0.60	0.74	0.59	0.68
	Partially	X <sup>-</sup>	4.34	4.41	4.23	4.07	4.15	3.95	4.10
		Sd.	1.45	1.43	1.74	0.71	0.64	1.03	0.74
		p	0.579**	0.368**	0.810**	0.989**	0.471**	0.531**	0.489**
Satisfaction with the Wage Earned	Yes	X <sup>-</sup>	3.57	3.56	3.60	4.00	4.33	4.16	3.70
		Sd.	1.35	2.20	0.00	0.89	0.94	1.17	0.70
	No	X <sup>-</sup>	4.57	4.52	4.64	4.03	3.95	4.00	4.10
		Sd.	1.98	1.93	2.33	0.67	0.70	0.96	0.71
	Partially	X <sup>-</sup>	4.13	4.13	4.13	4.12	4.09	4.02	4.20
		Sd.	1.47	1.49	1.62	0.46	0.62	0.62	0.57
		p	0.556**	0.602**	0.573**	0.833**	0.605**	0.959**	0.538**
Negative Experience in Professional Life	Yes	X <sup>-</sup>	4.89	4.85	4.97	4.00	3.91	3.92	4.10
		Sd.	2.00	2.07	2.15	0.62	0.71	0.88	0.66
	No	X <sup>-</sup>	3.10	3.13	3.06	4.22	4.17	4.20	4.26
		Sd.	1.16	1.11	1.46	0.47	0.66	0.53	0.50
	Partially	X <sup>-</sup>	4.51	4.48	4.56	4.05	4.07	4.00	4.07
		Sd.	1.31	1.22	1.78	0.62	0.61	0.85	0.74
		p	<b>0.009**</b>	<b>0.013**</b>	<b>0.017**</b>	0.562**	0.496**	0.608**	0.720**

X̄ = mean; Sd = Standard deviation; p = p-value

\*  $p < 0.05$ ; Independent Sample T Test was used for the comparison of two independent groups.

\*\*  $p < 0.05$ ; One Way Anova test was used to compare three and more independent groups that did not have normal distribution

#### 4. Discussion

While the majority of nurses caring for adult and paediatric patients who were included in the study stated that they liked their profession, it was determined that nurses caring for paediatric patients who did not like their profession experienced more compassion fatigue ( $p<0.05$ ). The importance of a positive attitude towards one's profession is widely acknowledged, and this is equally true of nursing as it is of all professions. Nurses' love for their profession enables them to focus on the quality of care instead of the negative factors created by the work environment and working conditions (Adib-Hajbaghery et al., 2021). The decision to choose the nursing profession is related to the individual's self-concept as well as early socialisation experiences such as the interactions with nurses and health environments. Even if nurses come with an idealistic perception before starting work, the nursing culture in the working environment causes nurses to build new ideals (Price, 2009). In his study, Prosen stated that female students generally choose the nursing profession due to emotional factors, while male students are more inclined to the profession for concrete reasons such as leadership and management (Prosen, 2022).

In the study, it was determined that compassion competence, insight and communication scores of female nurses were higher than male nurses in both adult and paediatric patient care groups ( $p<0.05$ ). Mao et al. emphasised that male nurses had better coping strategies with patient outcomes and generally made a positive contribution to the profession (Mao et al. 2021). In the study carried out by Martínez-Morato and colleagues, it was mentioned that in today's professional care, male nurses are conditioned by environmental thoughts that they are not good at recognising and managing emotion, but male nurses are in search of new strategic methods in emotion management, which is very important especially for nurses working in paediatric units (Martínez-Morato et al., 2021).

Among nurses caring for pediatric patients, married nurses showed a higher level of compassion competence compared to single nurses ( $p<0.05$ ). In addition, married nurses also had higher insight and communication subscale scores ( $p<0.05$ ). Marital status is another concept that has the potential to affect professional life among nurses. In their study, Zhang et al. stated that marital status was effective on emotional burnout and found that nurses who were married or divorced experienced more emotional burnout (Zhang et al., 2021). Sheikhbardsiri et al. found that married nurses experienced more anxiety and depression compared to single nurses

(Sheikhbardsiri et al., 2021). Furthermore, the study conducted by Shan et al. determined that married nurses exhibited higher levels of attendance behaviour in order to care for their families, even in instances of illness (Shan et al., 2021). This situation reveals the concept of presenteeism, which is qualitatively interpreted as "not being present at work", and this concept is defined as a factor that reduces the quality of care provided (Baldonado-Mosteiro et al., 2020). While these studies emphasize that married nurses are more disadvantaged compared to single nurses, the result that the compassion competence, insight and communication levels of married nurses in the study were higher compared to single nurses can be considered as an advantage.

A study of a group of nurses caring for paediatric patients revealed that those who were married and had children demonstrated higher levels of compassion competence and communication skills ( $p<0.05$ ). In the literature, the negative sides of nurses having children have been mentioned especially in terms of practicing the profession. In their study, Kaplan et al. revealed that nurses who did not have children exhibited a better attitude towards the caregiving role compared to those who did (Kaplan et al., 2021). Aktaş and Özvurmaz found that nurses without children had a higher quality of life level compared to those with children (Aktaş & Özvurmaz, 2019). In the study conducted by Ünal and Ayyıldız, it was concluded that single and childless nurses had a higher level of participatory humor compared to married and childless nurses (Ünal & Ayyıldız, 2023). A study showed that nurses with children exhibited higher levels of emotional burnout compared to their colleagues without children (Eldemir & Aygün, 2023). The result that pediatric nurses who have children have higher levels of compassion competence and communication levels in this study reveals the positive aspect of having children, contrary to the literature.

In the group of nurses caring for paediatric patients, those with more than one year of experience demonstrated a higher level of communication in comparison to those with less than one year of experience ( $p<0.05$ ). It has been demonstrated by earlier research that the notion of occupational strain has the potential to manifest among nurses who have been in the profession for a considerable duration. This phenomenon has been observed to exert detrimental repercussions on the quality of life, care behaviours, and occupational performance of such individuals (Babapour et al., 2022; Kouhnavard et al., 2020). In the present study, it is posited that the higher communication levels of nurses with more years of service can be considered a positive result of the experience gained over the years.

Nurses caring for adult and pediatric patients stated that they were mostly satisfied with their units and working conditions, but that the unit they worked in was tiring and the salary they received was insufficient. Furthermore, it was ascertained that the levels of compassion fatigue, occupational burnout and secondary trauma were elevated in the group of nurses caring for adult patients ( $p<0.05$ ). A study of a group of nurses caring for paediatric patients revealed that those who perceived their unit to be tiring exhibited elevated levels of compassion fatigue, occupational burnout and secondary trauma ( $p<0.05$ ). In addition, an elevated level of insight was observed among nurses caring for paediatric patients who did not change their unit of work in comparison to those whose units were subject to frequent changes ( $p<0.05$ ). The working environment and conditions have many effects on nurses. Labrague et al. mentioned in their study that the working environment can increase job satisfaction in nurses (Labrague et al., 2022). Al Sabei et al. associated the dissatisfaction experienced by nurses in the work environment with the intention to quit (Al Sabeive et al., 2022). Roth et al. characterized workplace pressure as a factor that causes nurses to leave their jobs (Roth et al., 2022). The result obtained in this study that dissatisfaction with the work unit and working conditions affects compassion fatigue supports the literature.

Nurses caring for adult and pediatric patients are exposed to various negative experiences throughout their professional lives. Among the cohort of nurses responsible for the care of adult patients, those who reported a history of negative experiences during their professional careers exhibited heightened levels of compassion fatigue, occupational burnout, and secondary trauma ( $p<0.05$ ). There are many different consequences of having negative experiences in nurses. In their study, Guttormson et al. emphasized that encountering poor patient prognosis causes stress in nurses (Guttormson et al., 2022).

The investigation revealed that the prevalence of occupational burnout was higher among nurses who perceived themselves to be underpaid, in both groups ( $p<0.05$ ). Remuneration plays a key role in keeping the individual in the organization, providing qualified and professional work and increasing the motivation of the employee (Rahmawati & Nadjib, 2023). Exposure of nurses to inadequate remuneration in the organizations where they work has various negative effects. To illustrate, insufficient remuneration of nurses can result in their migration from one institution to another. This phenomenon has the potential to diminish the number of qualified personnel, thereby compromising the quality of patient care (Washeya & Fürst, 2021). Marufu et al. characterized remuneration

as the main reason for nurses to leave their jobs (Marufu et al., 2021). The finding of occupational burnout in the study is only one of the negative effects of inadequate remuneration of nurses on the health system, which is stated in the literature.

### Limitations of the Study

The researchers encountered difficulties in finding volunteers to participate in the study during the data collection phase. For example, the participation rate of nurses was found to be insufficient, and many nurses cited their busy work schedules as the main reason for not participating. This situation led to the inability to reach the sample size envisaged in the design phase of the study. The single-centre nature of the study constitutes a limitation in terms of the generalisability of the results.

### 5. Conclusions

The study revealed that there were both common and distinct outcomes associated with compassion fatigue and compassion competence in nurses caring for adult and paediatric patients. Upon thorough examination of the results obtained, it becomes imperative to ascertain the factors that exert influence on the compassion, competence and fatigue levels of nurses. This is of paramount importance in order to enhance the quality and sustainability of care, as well as to identify and address the variables that have a detrimental effect. Furthermore, the implementation of training and support programmes within institutions is recommended, with the aim of developing nurses' compassion competence and reducing compassion fatigue. The development of policies to support this initiative is also recommended.

**Conflict of Interest:** There is no conflict of interest between the authors.

**Author Contributions:** Study Concept and Design: PG. Data Collection/Literature Search: PG, BÇ. Data Analysis and Interpretation: PG, BÇ. Article Preparation: PG, BÇ. Approval of Final Version to be Published: PG.

**Financial and Institutional Support:** This study does not have any financial or institutional support.

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## The Impact of Nursing Care Provided to Patients Undergoing Coronary Artery Bypass Grafting on Discharge Learning Needs, Meeting of These Needs, Perception of Recovery, Coping-Adaptation Level, and Quality of Life

Koroner Arter Baypas Greftli Hastalara Verilen Hemşirelik Bakımının Taburculuk Öğrenim Gereksinimleri ile Bu Gereksinimlerin Karşıllanması, İyileşme Algısı, Başetme-Uyum Düzeyi ve Yaşam Kalitesi Üzerine Etkisi

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### ABSTRACT

**Background/ Objective:** Globally, coronary artery bypass graft surgery is increasing in parallel with the increase in coronary artery disease, and home care management of patients after this major surgery is becoming more important. To examine the impact of nursing care provided to patients undergoing coronary artery bypass graft surgery on discharge learning needs, meeting these needs, perception of recovery, coping and adaptation levels, and quality of life.

**Material and Methods:** The study was conducted using a quasi-experimental, prospective, and longitudinal research design. The study sample consisted of 80 patients, 40 intervention and 40 control. Data were collected in the cardiovascular surgery clinics and outpatient clinics of a university and a training and research hospital in Antalya Province. Data were collected via face-to-face interviews, including initial preoperative measurements and repeated measurements at the first and third months. The control group received routine clinical care.

**Results:** In the intervention group patients undergoing coronary artery bypass graft surgery, the level of discharge learning needs met, perception of recovery, coping and adaptation levels, and quality of life levels were significantly higher than in the control group across all subscales and measurements ( $p<0.05$ ). The highest priority for discharge learning needs was reported in the "Activities of living" subscale in both the intervention and control groups. At discharge, in all measurements at one and three months, intervention group patients reported their learning needs as "fully met", while patients receiving routine clinical care reported their needs as "neither more nor less met".

**Conclusion:** Nursing care provided to patients undergoing coronary artery bypass graft surgery was found to improve the level of discharge learning needs met, perception of recovery, coping and adaptation levels, and quality of life.

**Keywords:** Adaptation; coping skills; coronary artery bypass grafting; nursing care; quality of life.

### ÖZ

**Giriş/Amaç:** Küresel ölçekte, koroner arter hastalığı artışına paralel olarak koroner arter baypas greft cerrahisi de giderek artmaktadır ve bu majör cerrahi sonrası hastaların evde bakım yönetimi çok daha önem kazanmaktadır. Koroner arter baypas greft cerrahisi uygulanan hastalara verilen hemşirelik bakımının; taburculuk öğrenim gereksinimleri ile bu gereksinimlerin karşılanması, iyileşme algısı, başetme-uyum düzeyi ve yaşam kalitesine etkisinin incelenmesidir.

**Gereç ve Yöntemler:** Araştırma; yarı-deneyssel, prospektif ve longitudinal araştırma tasarımına uygun yürütülmüştür. Koroner arter baypas greft cerrahisi geçiren hastalara verilen hemşirelik bakımının etkisi deney ve kontrol grubu verileri karşılaştırılarak sınanmıştır. Araştırma örneklemini 40 girişim ve 40 kontrol olmak üzere 80 hasta oluşturmuştur. Veriler Antalya İli'ndeki bir üniversite ve bir eğitim araştırma hastanesinde kalp-damar cerrahisi klinik ve polikliniklerinde toplanmıştır. Veriler yüz yüze görüşme yöntemiyle; ameliyat öncesi ilk ölçümler, birinci ay ve üçüncü ay tekrarlı ölçümlerde toplanmıştır. Kontrol grubu, klinik rutin bakım almıştır.

**Bulgular:** Koroner arter baypas greft cerrahisi geçiren girişim grubu hastalarda, taburculuktaki öğrenim gereksinimlerinin karşılanma düzeyi, iyileşme algısı, başetme-uyum düzeyi ve yaşam kalitesi düzeylerinin tüm alt boyutlarda ve ölçümlerde kontrol grubundan anlamlı şekilde yüksek olduğu saptanmıştır ( $p<0.05$ ). Girişim ve kontrol grubu hastalarda taburculuktaki öğrenim gereksinimindeki önceliğin en yüksek "yaşam aktiviteleri" alt boyutunda bildirildiği bulunmuştur. Taburculukta, birinci ve üçüncü aydaki tüm ölçümlerde girişim grubu hastalar öğrenim gereksinimlerini "tamamen karşılandı" olarak belirtirken, klinik rutin bakım alan hastalar ise "ne az ne çok karşılandı" olarak belirtmiştir.

**Sonuç:** Koroner arter baypas greft cerrahisi geçiren hastalara verilen hemşirelik bakımının; taburculuktaki öğrenim gereksinimlerinin karşılanma düzeyi, iyileşme algısı, başetme-uyum düzeyi ve yaşam kalitesini arttırdığı görülmüştür.

**Anahtar Kelimeler:** Başa çıkma yöntemleri; hemşirelik bakımı; koroner arter baypas greftleme; uyum; yaşam kalitesi.

Received: 7 August 2025

Accepted: 28 August 2025

Publication Date: 30 August 2025

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## 1. Introduction

According to the World Health Organization data, cardiovascular diseases are the leading cause of death among men and women in both developed and developing countries, and they are expected to remain the number one cause of death for a long time (<https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>, Accessed on: 06.08.2024). Within the causes of death defined worldwide and in Türkiye, coronary artery disease (CAD) and hypertension hold the largest share (ESC, 2021; Lawton et al., 2022; WHO, 2023). In the report published by the Ministry of Health of the Republic of Türkiye for the “Türkiye Cardiovascular Diseases Prevention and Control Program (2021-2026)”, according to the 2018 cause of death statistics, circulatory system diseases are reported as the leading disease group causing death in Türkiye with 38.5%, and it is seen that 39.8% of those who died from ischemic heart disease, 22.3% from cerebrovascular diseases, and 24.5% from other heart diseases ([https://hsgm.saglik.gov.tr/depo/birimler/kronik-hastaliklar-ve-yasli-sagligi-db/Dokumanlar/Kitaplar/KalpDamarEylemPlani\\_2021-2026.pdf](https://hsgm.saglik.gov.tr/depo/birimler/kronik-hastaliklar-ve-yasli-sagligi-db/Dokumanlar/Kitaplar/KalpDamarEylemPlani_2021-2026.pdf), Accessed on: 24.08.2025). Coronary artery bypass grafting (CABG) surgery is one of the standard treatment methods in myocardial revascularization for atherosclerotic vascular diseases. The aim of CABG surgery is to improve symptoms and prolong survival (Durmaz Eder and Kankaya, 2025; Lawton et al., 2022). The technique performed with cardiopulmonary bypass in CABG is the standard technique and provides similar results to off-pump procedures (Yıldırım et al., 2022). However, CABG performed with cardiopulmonary bypass is a major surgical intervention that directly affects vital functions. It is important to reduce the risks and costs associated with surgery and anesthesia, return the patient to the desired functional level as soon as possible, and improve the quality of perioperative care (Durmaz Eder and Kankaya, 2025). In postoperative home care, the aim is to reorganize homeostatic balance, maintain cardiovascular function, and improve quality of life for rapid recovery (Aydın and Gürsoy, 2019; Boggess et al., 2024; Çayırtepe, Esatoğlu, Aral, 2020; Kaya and Dal Yılmaz, 2024; Park et al., 2025; Totur Dikmen and Yavuz van Giersbergen, 2021). For all these reasons, all healthcare professionals involved in treatment and care, especially nurses, aim to meet the care needs of patients undergoing CABG during their hospital stay, prepare patients and their relatives for home care processes, and thus help patients to adapt to their lives as quickly as possible, which is a very important part of this care (Altınbas and Yavuz van Giersbergen,

2021; Çatal, 2025). However, CABG surgery, as a major surgical intervention, is an important factor affecting individuals' adaptation levels and disrupts a person's bio-psycho-social balance and adaptation as a physiological and psychosocial stressor (Çatal and Dicle, 2011; Kan, 2009; Kendirkıran and Batmaz, 2020; Köseoğlu Örnek et al., 2022; Redeker, 1992; Toit, 2003; Tung, Hunter, Wei, 2008). There is increasing interest in research examining quality of life in patients undergoing CABG, but patient outcomes are still not at the desired level (Çayırtepe, Esatoğlu, Aral, 2020; Yavuz, 2019; Yılmaz and Çifçi, 2011). Additionally, there is a need to meet the learning needs of these patients and to define the stimuli/stressors and coping behaviors. CABG surgery is a significant factor affecting individuals' adaptation levels; it disrupts a person's bio-psycho-social balance and harmony as a physiological and psychosocial stressor. However, it requires a personalized assessment for each individual. This study aims to investigate the impact of nursing care provided to patients after CABG surgery on their discharge learning needs, the level of meeting of these needs, perception of recovery, coping-adaptation level, and quality of life. The theoretical framework for this research was formed by Roy's Adaptation Model. Because the central concept in the model is adaptation, and in this study, CABG surgery is a focal stimulus affecting individuals' adaptation levels. According to the Roy Adaptation Model, effective adaptation behaviors in the areas of physiology, self-concept, role function, and interdependence are achieved through coping and control systems. Knowledge and learning processes are crucial for an individual's cognitive-emotional coping behaviors (Roy, 2009). Considering the purpose, variables, intervention and measurement tools of this research, it is seen that it overlaps with the concepts of the Roy Adaptation Model. In this context, this research, is unique in that it allows for the simultaneous testing of many aspects of the Roy Adaptation Model.

## 2. Methods

### Type of Research

This research was conducted according to a quasi-experimental, prospective, and longitudinal research design.

### Research Hypotheses

•H1-1: There are differences between the intervention group receiving nursing care after CABG surgery and the control group receiving routine clinical care in terms of the importance attributed to learning needs.

•H1-2: There are differences between the intervention group receiving nursing care after CABG surgery and the control group receiving routine clinical care in terms of the level of meeting of learning needs.

•H1-3: There are differences between the intervention group receiving nursing care after CABG surgery and the control group receiving routine clinical care in terms of the levels of perception of recovery.

•H1-4: There are differences between the intervention group receiving nursing care after CABG surgery and the control group receiving routine clinical care in terms of the levels of coping-adaptation.

•H1-5: There are differences between the intervention group receiving nursing care after CABG surgery and the control group receiving routine clinical care in terms of the levels of quality of life.

### Population and Sample of the Research

The population of the research consisted of patients who underwent CABG surgery in the cardiovascular surgery clinic of a university and a training research hospital in Antalya. The sample size was calculated using NCCS-PASS and MINITAB programs at a significance level of 0.20 and 0.05, considering a 95% confidence interval; 40 patients were selected for the intervention group and 40 for the control group, totaling 80 patients. The sample criteria and distributions of CABG patients included in the research are presented in Figure 1.

### Data Collection

In the study, to prevent clinical contamination and control confounding factors (that may change the actual effect of the intervention, such as dissemination of the content of the training booklet, monitoring of the intervention content by the clinical team, changes in clinical practice afterward, etc.), data for the control group were collected first, followed by data for the intervention group. The nursing care applied to the intervention group included discharge education, a booklet titled "Living in Harmony with Your Renewed Heart and Vessels", intensive care visits, telephone counseling, and follow-up. The steps of the data collection process according to the research design are detailed in Figure 2.

### Data Collection Tools

The following tools were used for data collection:

**Form I: Sociodemographic and Clinical Characteristics Form:** This form includes sociodemographic characteristics such as age, gender, marital status, education level, as well as items related to health

history, data during hospitalization, and surgery-specific data.

**Form II: Perception of Recovery and Postoperative Monitoring Information Form:** This form assesses patients' perceptions of recovery using a scale developed by Yount & Casper in 1993, where patients evaluate their recovery perception on a scale of 0-10 (0=Not Recovered, 10=Fully Recovered) (Kan, 2007). It also includes follow-up items such as readmission status, reasons, pain at the incision site, and presence of discharge.

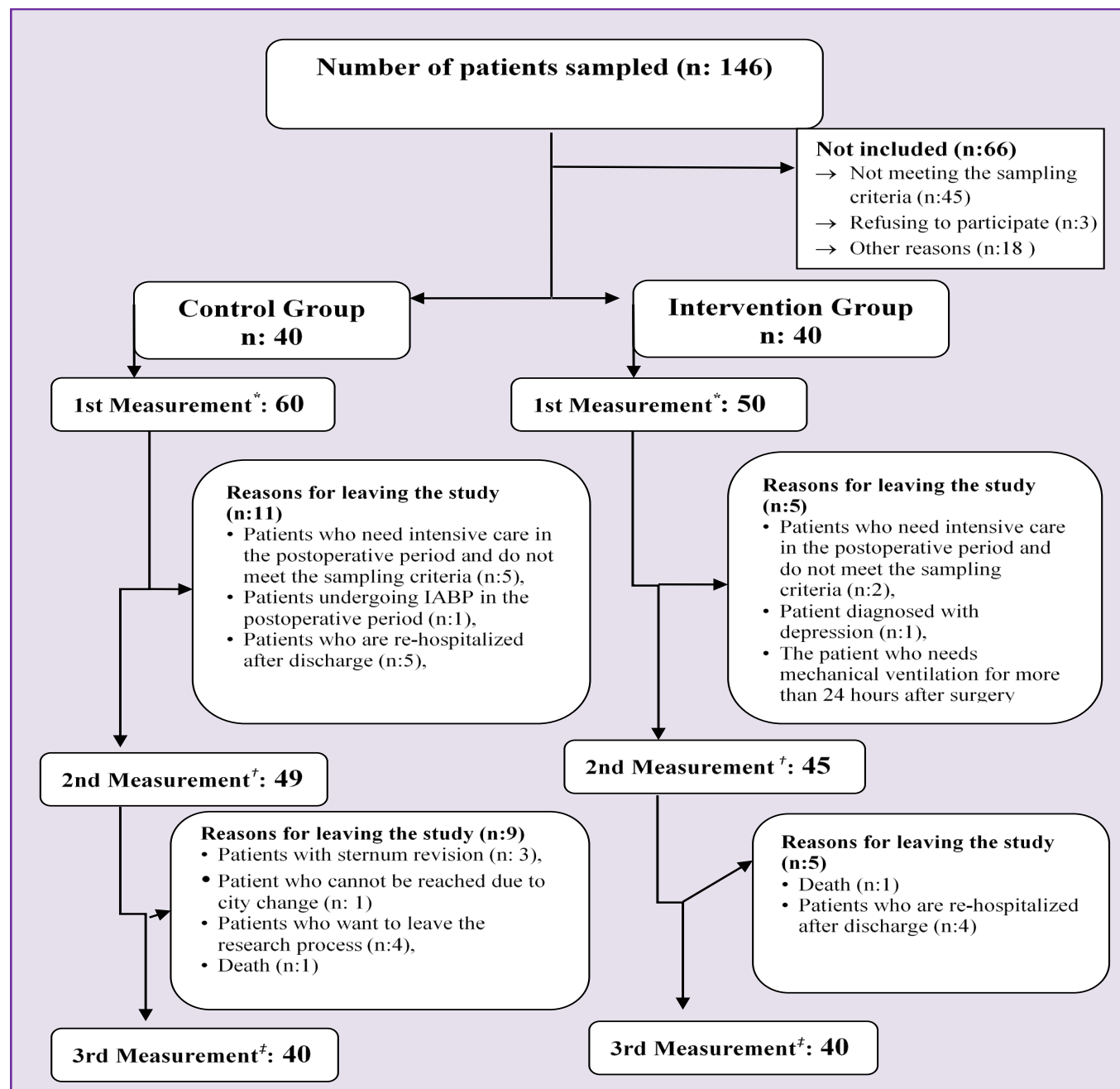
**Patient Learning Needs Scale (PLNS):** PLNS, developed by Bubela et al. in 1990, consists of 50 items and 7 subscales to determine patients' learning needs at discharge. The scale items are evaluated using a Likert-type scale ranging from "1=not important" to "5=extremely important." The "Needs Met Score-NMS" section of the scale determines whether information was provided before discharge and the status of fulfilling those needs. Patients evaluate the information provided for each scale item on a Likert-type scale from "1=not suitable at all" to "5=completely suitable", with an option to indicate "0=no information provided to meet my needs." The scale and subscale scores are interpreted by dividing the total scale and all subscale item counts, yielding importance levels and fulfillment levels between 1 and 5. The validity and reliability of the Turkish version of the scale were established by Çatal and Dicle (2008), with a Cronbach's alpha of 0.93 for the total scale and between 0.57-0.83 for the subscales. The Cronbach alpha value calculated for this study was 0.81 for PLNS-IS and 0.99 for PLNS-NMS.

**Coping and Adaptation Process Scale (CAPS):** CAPS, developed by Callista Roy (2004), is a scale that allows for the identification of individuals' coping and adaptation strategies in critical and challenging situations, based on the Roy Adaptation Model (Roy, 2004). CAPS consists of 47 items and five subscales, with items rated on a Likert-type scale from 1=never to 4=always (Roy, 2004). The original language of CAPS is English, and it has been adapted into Thai, Spanish, and Japanese. The validity and reliability of CAPS in Turkey were tested by Çatal and Dicle, with a Cronbach's alpha of 0.82 for the total scale and between 0.65-0.77 for the subscales. The Cronbach alpha value calculated for this study was 0.83 for CAPS.

**Short Form-36 (SF-36) Quality of Life Scale:** The Short Form-36 Quality of Life Scale is the most widely used quality of life scale with a generic criterion (not disease-specific) feature that provides broad measurements.

The scale was developed by Ware in 1992. The SF-36 is a self-assessment scale composed of 36 questions and eight subcomponents. The Cronbach's alpha values for the subcomponents of the original form range from 0.62 to 0.94 (Ware, 1992). The Turkish adaptation of the SF-36 was conducted by Pinar (1995; 1996) and Koçyiğit et al. (Koçyiğit,

Aydemir, Ölmez, 1999). Various measurement tools are used to assess quality of life in this patient group, but SF-36 is reported to be one of the most suitable generic tools (Çayırtepe, Esatoğlu, Aral, 2020). The Cronbach alpha value calculated for this study was 0.57 for Physical Health Summary Score and 0.65 for Mental Health Summary Score of SF-36.



1st measurement: Preoperatively, before discharge, and on the day of discharge, †2nd measurement: 1st month postoperatively, ‡3rd measurement: 3rd month postoperatively

**Figure 1.** Sample Criteria and Distributions of Patients Included in the Research Sample

### Data Analysis

Data were analyzed using the Statistical Package for Social Science (SPSS 20.0) software. The content validity of the educational booklet prepared for the intervention group was evaluated using Kendall's

Coefficient of Concordance by expert opinions. Patients in the intervention and control groups were compared for homogeneity in terms of relevant variables using descriptive statistics (numbers and percentages) and Chi-square ( $\chi^2$ ) tests. The normal

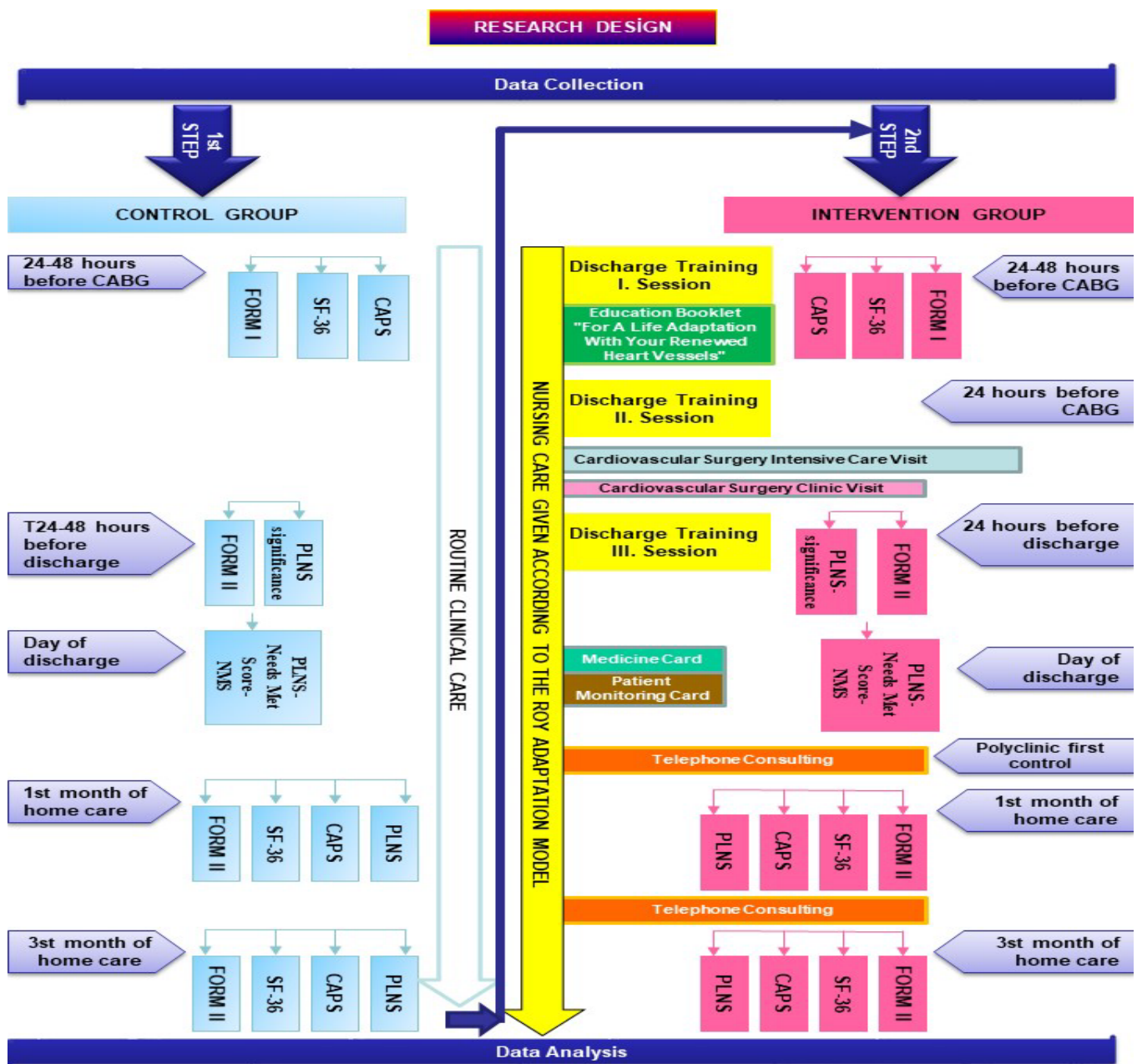


distribution of the data was assessed using the Shapiro-Wilk test before group comparisons. For subsequent comparative analyses, t-tests, one-way ANOVA, two-way ANOVA, and Tukey's HSD (Honestly Significant Difference) multiple comparison tests for advanced analyses were used, with a significance level of  $p < 0.05$  accepted for all tests.

### Ethical Aspects of the Research

This research was planned as a doctoral thesis project and received the necessary approval from the Clinical and Laboratory Research Ethics Committee of the Dokuz Eylül University Faculty of Medicine (Approval No: 02.08.2005/170). Subsequently, due to name

changes during the doctoral thesis monitoring process, new ethics committee approvals were obtained (Approval No: 09/17/2009-133/2005, Approval No: 2011/20-14, Approval No: 2015/10-44). Institutional permissions were obtained from the university hospital where the research was conducted (Approval No: B.30.2.AKD.0.1H.00.00/PER-16) and the training and research hospital (Approval No: B.10.4.ISM.4.07.00.38/9796). Permissions for the measurement tools used in the research were also obtained. The purpose of the research was explained to the participating patients, and their written and verbal consents were obtained. Throughout the research, all principles of the Helsinki Declaration were fully adhered to.



**Figure 2.** Data Collection Process in Intervention and Control Group Patients

### 3. Results

#### Basic Measurement Results

Initially, the sociodemographic and clinical characteristics of patients in the intervention and control groups were examined, and the homogeneity of the groups was tested, with the results detailed in Table 1. The sociodemographic and clinical

characteristics of patients in both the intervention and control groups were homogeneous in all respects ( $p>0.05$ ). Additionally, the baseline data for coping-adaptation and quality of life in both groups were evaluated, revealing that the differences in the total scale and all subscale scores of CAPS and SF-36 were statistically insignificant ( $p>0.05$ ), indicating that the groups were similar at baseline.

**Table 1.** Comparison of Intervention and Control Group Patients According to Socio-Demographic and Clinical Characteristics (n=80)

Socio-Demographic Characteristics		Intervention Group (n: 40)		Control Group (n: 40)		Total (n:80)		Statistical significance
		n	%	n	%	n	%	
Age	30-39	0	0.0	1	2.5	1	1.2	$\chi^2=1.435$ $p=0.838$
	40-49	4	10.0	5	12.5	9	11.2	
	50-59	14	35.0	13	32.5	27	33.8	
	60-69	13	32.5	14	35.0	27	33.8	
	70 and older	9	22.5	7	17.5	16	20.0	
Gender	Female	14	35.0	12	30.0	26	32.5	$\chi^2=0.228$ $p=0.633$
	Male	26	65.0	28	70.0	54	67.5	
Marital Status	Single	8	20.0	8	20.00	40	50.00	$\chi^2=0.000$ $p=1.000$
	Married	32	80.0	32	80.00	40	50.00	
Educational Status	Elementary School	28	72.5	33	82.5	61	76.3	$\chi^2=1.986$ $p=0.738$
	Middle School	5	12.5	3	7.5	8	10.0	
	High School	6	15.0	3	7.5	9	11.2	
	University	1	2.5	1	2.5	2	2.5	
Social Security	Social Security Institution	36	90.0	35	87.5	71	89.8	$\chi^2=1.104$ $p=0.776$
	Paid	4	10.0	5	12.5	9	11.2	
Working Status	Worker	4	10.0	2	5.0	6	7.5	$\chi^2=2.522$ $p=0.641$
	Civil Servant	2	5.0	2	5.0	4	5.0	
	Self-Employed	5	12.5	10	25.0	15	18.8	
	Retired	15	37.5	14	35.0	29	36.2	
	Unemployed	14	35.0	12	30.0	26	32.5	
Clinical Characteristics								
Institution of Treatment	University Hospital	20	25.0	20	25.0	40	50.0	$\chi^2=0.000$ $p= 1.000$
	Training and Research Hospital	20	25.0	20	20.0	40	50.0	
Condition Accompanying CAD**	DM	21	33.3	17	29.3	38	31.4	$\chi^2=1.816$ $p= 0.874$
	HT	20	31.7	19	32.8	39	32.2	
	COPD	2	3.2	2	3.4	4	3.3	
	CHF	1	1.6	0	0	1	0.8	
	History of previous MI	16	25.4	17	29.3	33	27.3	
Smoking History	History of angina	3	4.8	3	5.2	6	5.0	$\chi^2=2.196$ $p=0.138$
	Yes	28	70.0	24	60.0	52	65.0	
	No	12	30.0	16	40.0	28	35.0	
Smoking Duration (years)	10-19 years	1	3.6	3	12.5	4	7.7	$\chi^2=13.586$ $p=0.328$
	20-29 years	7	25.0	6	25.0	13	25.0	
	30 years and above	20	71.4	15	62.5	35	67.3	
Cigarette Consumption (packs/day)	≤ 1/2 packs/day	7	25.0	1	4.2	8	15.4	$\chi^2=5.804$ $p=0.326$
	1 pack/day	11	39.3	11	45.8	22	42.3	
	≥ 2 packs/day	10	35.7	12	50.0	22	42.3	
Body MaSD Index (BMI)	<18.5	3	7.5	2	5.0	5	6.2	$\chi^2=4.327$ $p=0.943$
	18.5-24.9	10	25.0	12	30.0	22	27.5	
	25.0-29.9	16	40.0	18	45.0	34	42.5	
	≥30	11	27.5	8	20.0	19	23.8	
Presence of Preoperative Pain Complaints	Yes	21	52.5	17	42.5	38	47.5	$\chi^2=0.802$ $p=0.370$
	No	19	47.5	23	57.5	42	52.5	
Presence of Preoperative Fatigue Complaints	Yes	25	62.5	26	65.0	51	63.8	$\chi^2=0.054$ $p=0.816$
	No	15	37.5	14	35.0	29	36.2	
Graft Type	IMA	1	2.5	1	2.5	2	2.5	$\chi^2=2.077$ $p=0.150$
	IMA + radial artery	5	12.5	6	15.0	11	13.7	
	IMA + saphenous vein	5	12.5	10	25.0	15	18.8	
	IMA + saphenous vein + radial artery	29	72.5	23	57.5	52	65.0	

<b>Duration of Surgical Procedure</b>	60-90 minutes	2	5.0	1	2.5	3	3.8	$\chi^2=2.502$ p=0.550
	91-120 minutes	4	10.0	7	17.5	11	13.7	
	121-150 minutes	28	70.0	23	57.5	44	55.0	
	151 minutes and above	6	15.0	9	22.5	22	27.5	
<b>Cardiopulmonary Bypass Duration</b>	30-60 minutes	2	5.0	1	2.5	3	3.8	$\chi^2=2.134$ p= 0.715
	61-90 minutes	33	82.5	32	80.01	65	81.2	
	91 minutes and above	5	12.5	7	7.5	12	15.0	
<b>Length of Stay in Intensive Care</b>	LeSD than 24 hours	28	70.0	24	60.0	52	65.0	$\chi^2=5.710$ p= 0.956
	24-48 hours	12	30.0	16	40.0	28	35.0	
<b>Duration of Mechanical Ventilation</b>	LeSD than 8 hours	22	55.0	27	67.5	49	61.2	$\chi^2=3.338$ p= 0.949
	9-14 hours	18	45.0	13	32.5	31	38.8	

\*  $p>0.05$ ,  $^\dagger\chi^2$ = Chi-Square test result, n: Number, %: Percentage; \*\*More than one option was selected.; CAD: Coronary Artery Disease, DM: Diabetes Mellitus, HT: Hypertension, COPD: Chronic Obstructive Pulmonary Disease, CHF: Congestive Heart Failure, MI: Myocardial Infarction, IMA: Internal Mammary Artery

### Importance of Discharge Learning Needs and the Level of Meeting of These Needs

In the study, during the phase of determining how important the learning needs were for patients undergoing CABG surgery in both the intervention and control groups, the total scale score of PLNS-IS (Importance Score) was found to be  $175.35\pm18.68$  ( $3.50\pm0.37$ ) for the intervention group and  $165.90\pm13.69$  ( $3.31\pm0.27$ ) for the control group. Additionally, the learning needs in the subdimension of "Activities of living" ranked first in both groups. The comparison results of the total scale scores of PLNS-IS for patients undergoing CABG before discharge, in the first month, and in the third month showed statistically significant differences between the

intervention and control groups in terms of group ( $F=63.064$ ,  $p=0.000$ ) and time ( $F=272.342$ ,  $p=0.000$ ) interactions, while no significant difference was found regarding group\*time ( $F=0.655$ ,  $p=0.520$ ). The level of importance given to the discharge learning needs by patients in the intervention group was found to be significantly higher than that of the control group ( $p<0.05$ ). To determine which measurement contributed to the difference in the average total scale scores of PLNS-IS, tests indicated statistically significant differences among the intervention and control group average scores before discharge ( $t=-2.580$ ,  $p=0.012$ ), one month post-surgery ( $t=-6.512$ ,  $p=0.000$ ), and three months post-surgery ( $t=-8.060$ ,  $p=0.000$ ) (Table 2).

**Table 2.** Comparison of the Importance of Learning Needs of Intervention and Control Group Patients Before Discharge, the First Month and the Third Month After Surgery (n:80)

Time	Before Discharge (BD)	1st Month Post-Surgery (PS1)	1st Month Post-Surgery (PS2)	Comparison	F <sup>†</sup>	p*	Significant difference
Groups	(Mean±SD <sup>†</sup> )	(Mean±SD)	(Mean±SD)				
<b>Medications-IS</b>							
Intervention Group (n: 40)	3.48±0.42	4.07±0.27	4.34±0.22	Group	<b>61.760</b>	<b>0.000</b>	BD<PS1<PS3
Control Group (n: 40)	3.22±0.39	3.76±0.28	3.93±0.27	Time	<b>128.830</b>	<b>0.000</b>	BD<PS1,PS3
				Group*Time	1.119	0.328	
<b>Activities of living-IS</b>							
Intervention Group (n:40)	3.73±0.26	4.33±0.20	4.62±0.18	Group	<b>41.930</b>	<b>0.000</b>	BD<PS1<PS3
Control Group (n:40)	3.70±0.25	4.06±0.28	4.32±0.22	Time	<b>210.544</b>	<b>0.000</b>	BD<PS1<PS3
				Group*Time	<b>7.615</b>	<b>0.001</b>	
<b>Community and follow-up-IS</b>							
Intervention Group (n:40)	3.18±0.51	3.94±0.40	4.02±0.35	Group	<b>8.972</b>	<b>0.000</b>	BD<PS1<PS3
Control Group (n:40)	3.02±0.43	3.77±0.33	3.90±0.29	Time	<b>112.788</b>	<b>0.000</b>	BD<PS1<PS3
				Group*Time	0.076	0.926	
<b>Feelings related to condition-IS</b>							
Intervention Group (n:40)	3.31±0.42	4.38±0.43	4.51±0.41	Group	1.358	0.245	
Control Group (n:40)	3.23±0.37	4.37±0.42	4.42±0.38	Time	211.337	<b>0.000</b>	BD<PS1<PS3
				Group*Time	0.245	0.783	
<b>Treatment and complications-IS</b>							
Intervention Group (n:40)	3.66±0.40	4.23±0.27	4.63±0.18	Group	<b>80.071</b>	<b>0.000</b>	BD<PS1<PS3
Control Group (n:40)	3.39±0.31	3.79±0.25	4.36±0.20	Time	<b>232.786</b>	<b>0.000</b>	BD<PS1<PS3
				Group*Time	2.125	0.122	
<b>Enhancing quality of life-IS</b>							
Intervention Group (n:40)	3.48±0.49	4.29±0.25	4.46±0.18	Group	<b>97.125</b>	<b>0.000</b>	BD<PS1<PS3
Control Group (n:40)	3.21±0.31	3.84±0.27	4.00±0.24	Time	<b>181.594</b>	<b>0.000</b>	BD<PS1<PS3
				Group*Time	2.672	0.071	

<b>Skin care-IS</b>							
Intervention Group (n:40)	3.47±0.55	3.55±0.42	3.56±0.42	Group Time Group*Time	0.215	0.643	<i>p&gt;0.05</i>
Control Group (n:40)	3.24±0.52	3.62±0.46	3.64±0.45		<b>6.797</b>	<b>0.001</b>	<i>BD&lt;PS1,PS3</i>
					2.727	0.067	
<b>TOTAL PLNS-IS</b>							
Intervention Group (n:40)	3.50±0.37	4.14±0.17	4.36±0.14	Group Time Group*Time	<b>63.064</b>	<b>0.000</b>	<i>BD&lt;PS1&lt;PS3</i>
Control Group (n:40)	3.31±0.27	3.88±0.18	4.10±0.14		<b>272.342</b>	<b>0.000</b>	<i>BD&lt;PS1&lt;PS3</i>
					0.655	0.520	

\**p*<0.05, †SD: Standard Deviation, ‡F: Two-way analysis of variance; PLNS: Patient Learning Needs Scale, IS: Importance Score

Accordingly, the analysis of the “PLNS-NMS total score” for both groups revealed statistically significant differences in terms of group (*F*=7878.263, *p*=0.000), time (*F*=19.844, *p*=0.000), and grouptime (*F*=0.655, *p*=0.520) interactions. In the intervention group, the repeated measurements of PLNS-NMS total scores

showed significant increases in the average scores for the first and third months post-surgery (*p*<0.05), while in the control group, the differences between the measurements on the day of discharge, one month post-surgery, and three months post-surgery were statistically insignificant (*p*>0.05) (Table 3).

**Table 3.** Comparison of the Levels of Meeting Learning Needs of the Intervention and Control Group Patients on the Day of Discharge, the First Month and the Third Month After Surgery (n:80)

Time	Discharge Day (DD)	1st Month Post-Surgery (PS1)	1st Month Post-Surgery (PS2)	Comparison	F‡	p*	Significant difference
Groups	(Mean±SD†)	(Mean±SD)	(Mean±SD)				
<b>Medications-IS</b>							
Intervention Group (n: 40)	4.80±0.10	4.98±0.03	4.98±0.03	Group Time Group*Time	<b>4085.808</b>	<b>0.000</b>	<i>DD&lt;PS1,PS3</i>
Control Group (n: 40)	3.06±0.32	3.30±0.26	3.30±0.26		<b>28.340</b>	<b>0.000</b>	<i>DD&lt;PS1,PS3</i>
					0.392	0.676	
<b>Activities of living-NMS</b>							
Intervention Group (n:40)	4.74±0.13	4.84±0.11	4.87±0.09	Group Time Group*Time	<b>3721.398</b>	<b>0.000</b>	<i>DD&lt;PS1,PS3</i>
Control Group (n:40)	3.32±0.23	3.36±0.23	3.36±0.23		<b>4.781</b>	<b>0.009</b>	<i>p&gt;0.05</i>
					1.315	0.271	
<b>Community and follow-up-NMS</b>							
Intervention Group (n:40)	4.70±0.13	4.70±0.14	4.72±0.13	Group Time Group*Time	<b>2697.374</b>	<b>0.000</b>	<i>p&gt;0.05</i>
Control Group (n:40)	2.81±0.35	2.81±0.35	2.81±0.35		0.014	0.986	<i>p&gt;0.05</i>
					0.014	0.986	
<b>Feelings related to condition-NMS</b>							
Intervention Group (n:40)	4.47±0.22	4.72±0.18	4.72±0.18	Group Time Group*Time	<b>2508.111</b>	<b>0.000</b>	<i>DD&lt;PS1,PS3</i>
Control Group (n:40)	2.64±0.37	2.65±0.39	2.65±0.39		<b>5.130</b>	<b>0.007</b>	<i>p&gt;0.05</i>
					4.053	0.019	
<b>Treatment and complications-NMS</b>							
Intervention Group (n:40)	4.58±0.18	4.85±0.09	4.90±0.07	Group Time Group*Time	3511.44	<b>0.000</b>	<i>DD&lt;PS1,PS3</i>
Control Group (n:40)	2.90±0.33	3.00±0.29	3.00±0.29		18.721	<b>0.000</b>	<i>p&gt;0.05</i>
					4.429	<b>0.013</b>	
<b>Enhancing quality of life-NMS</b>							
Intervention Group (n:40)	4.35±0.15	4.75±0.15	4.75±0.15	Group Time Group*Time	<b>3273.6803</b>	<b>0.000</b>	<i>DD&lt;PS1,PS3</i>
Control Group (n:40)	2.96±0.26	3.05±0.26	3.05±0.26		<b>3.680</b>	<b>0.000</b>	<i>p&gt;0.05</i>
					<b>13.840</b>	<b>0.000</b>	
<b>Skin care-NMS</b>							
Intervention Group (n:40)	4.85±0.10	4.78±0.16	4.78±0.16	Group Time Group*Time	<b>1841.162</b>	<b>0.000</b>	<i>DD&gt;PS1,PS3</i>
Control Group (n:40)	3.10±0.42	3.03±0.41	3.03±0.41		1.312	0.271	<i>p&gt;0.05</i>
					0.007	0.993	
<b>TOTAL PLNS-NMS</b>							
Intervention Group (n:40)	4.64±0.06	4.82±0.05	4.83±0.04	Group Time Group*Time	<b>7878.263</b>	<b>0.000</b>	<i>DD&lt;PS1,PS3</i>
Control Group (n:40)	2.99±0.22	3.06±0.19	3.06±0.19		<b>19.844</b>	<b>0.000</b>	<i>p&gt;0.05</i>
					<b>3.878</b>	<b>0.022</b>	

\**p*<0.05, †SD: Standard Deviation, ‡F: Two-way analysis of variance; PLNS: Patient Learning Needs Scale, NMS: Needs Met Score

### Perception of Recovery

In comparing the perception of recovery scores of CABG patients in the intervention and control groups, statistically significant differences were found based on group (*F*=26.894, *p*=0.000), time (*F*=201.156,

*p*=0.000), and group\*time (*F*=5.923, *p*=0.003) interactions. In both groups, the average scores for perception of recovery significantly increased compared to pre-discharge measurements at one month and three months post-surgery (Table 4).

**Table 4.** Comparison of the Perception of Recovery and Control Group Patients Before Discharge, the First Month and the Third Month After Surgery (n:80)

Time	Groups	Before Discharge (BD) (Mean±SD <sup>†</sup> )	1st Month Post-Surgery (PS1) (Mean±SD)	1st Month Post-Surgery (PS2) (Mean±SD)	Comparison	F <sup>‡</sup>	p*	Significant difference
<b>Perception of Recovery</b>								
	Intervention Group (n: 40)	4.50±1.63	7.87±1.26	8.95±0.95	Group	<b>26.894</b>	<b>0.000</b>	BD<PS1<PS3
	Control Group (n: 40)	4.02±1.81	6.05±1.51	8.42±1.03	Time	<b>201.156</b>	<b>0.000</b>	BD<PS1<PS3
					Group*Time	<b>5.923</b>	<b>0.003</b>	

\*p<0.05, <sup>†</sup>SD: Standard Deviation, <sup>‡</sup>F: Two-way analysis of variance.

### Coping-Adaptation Level

When comparing the coping-adaptation levels of CABG patients in the intervention and control groups, statistically significant differences were found in terms of “CAPS total score” for group (F=36.187, p=0.000), time (F=12.532, p=0.000), and group\*time (F=4.496, p=0.012) interactions. According to advanced analysis results, the average scores for the intervention group at one month and three months post-surgery were statistically significantly higher than their pre-surgery

average scores (p<0.05). In the control group, however, the differences between measurements were not statistically significant (p>0.235). In comparing the average scores of both groups in all subdimensions of “Resourceful and focused”, “Physical and fixed”, “Alert processing”, “Systematic processing”, and “Knowing and relating” statistically significant differences were also observed between the two groups at one month and three months post-surgery (p=0.000) (Table 5).

**Table 5.** Comparison of Coping-Adaptation Level of Intervention and Control Group Patients Before Discharge, the First Month and the Third Month After Surgery (n:80)

Time	Groups	Before Surgery (BS) (Mean±SD <sup>†</sup> )	1st Month Post-Surgery (PS1) (Mean±SD)	1st Month Post-Surgery (PS2) (Mean±SD)	Comparison	F <sup>‡</sup>	p*	Significant difference
<b>Resourceful and focused</b>								
	Intervention Group (n: 40)	26.35±3.69	28.60±3.11	29.82±2.98	Group	<b>15.388</b>	<b>0.000</b>	BS<PS1,PS3
	Control Group (n: 40)	26.15±3.71	26.32±3.66	27.05±3.47	Time	<b>8.046</b>	<b>0.000</b>	p>0.05
					Group*Time	3.123	0.046	
<b>Physical and fixed</b>								
	Intervention Group (n:40)	39.20±3.86	40.40±3.57	42.90±3.34	Group	<b>11.033</b>	<b>0.001</b>	BS,PS1<PS3
	Control Group (n:40)	39.22±4.42	38.32±4.54	39.87±3.77	Time	<b>7.585</b>	<b>0.001</b>	3
					Group*Time	3.130	0.046	p>0.05
<b>Alert processing</b>								
	Intervention Group (n:40)	25.12±4.64	26.77±4.87	27.90±2.44	Group	<b>18.123</b>	<b>0.000</b>	BS<PS3
	Control Group (n:40)	23.85±2.76	24.50±2.69	24.67±2.71	Time	<b>3.298</b>	<b>0.039</b>	p>0.05
					Group*Time	0.518	0.597	
<b>Systematic processing</b>								
	Intervention Group (n:40)	15.82±2.07	17.37±1.42	18.07±1.62	Group	<b>46.096</b>	<b>0.000</b>	BS<PS1,PS3
	Control Group (n:40)	15.22±2.00	15.22±2.00	16.00±1.78	Time	<b>13.592</b>	<b>0.000</b>	3
					Group*Time	<b>4.538</b>	<b>0.012</b>	p>0.05
<b>Knowing and relating</b>								
	Intervention Group (n:40)	21.92±2.52	23.82±2.36	25.35±2.43	Group	<b>8.647</b>	<b>0.004</b>	BS<PS3
	Control Group (n:40)	21.55±2.49	21.77±2.49	21.92±2.69	Time	<b>2.641</b>	<b>0.037</b>	p>0.05
					Group*Time	0.904	0.406	
<b>TOTAL CAPS</b>								
	Intervention Group (n:40)	128.42±10.45	135.97±9.85	141.05±9.65	Group	<b>36.187</b>	<b>0.000</b>	BS<PS1,PS3
	Control Group (n:40)	126.00±10.40	126.15±10.26	129.52±10.54	Time	<b>12.532</b>	<b>0.000</b>	3
					Group*Time	<b>4.496</b>	<b>0.012</b>	p>0.05

\*p<0.05, <sup>†</sup>SD: Standard Deviation, <sup>‡</sup>F: Two-way analysis of variance; CAPS: Coping and Adaptation Processing Scale

## Quality of Life

Finally, the quality of life levels of patients in the intervention and control groups were examined in terms of physical health and mental health. For the “Physical Health Summary Score” and “Mental Health Summary Score”, two-way ANOVA results indicated

statistically significant differences in terms of group (FPhysical Health=14.677,  $p=0.000$ ) (FMental Health=5.170,  $p=0.024$ ), time (FPhysical Health=44.119,  $p=0.000$ ) (FMental Health=77.817,  $p=0.000$ ), and group\*time (FPhysical Health=13.269,  $p=0.000$ ) (FMental Health=10.203,  $p=0.000$ ) interactions (Table 6).

**Table 6.** Comparison of Quality of Life of Intervention and Control Group Patients Before Discharge, the First Month and the Third Month After Surgery (n:80)

Time  Groups	Before Surgery (BS) (Mean±SD <sup>†</sup> )	1st Month Post-Surgery (PS1) (Mean±SD)	1st Month Post- Surgery (PS2) (Mean±SD)	Comparison	F <sup>‡</sup>	p <sup>*</sup>	Significant difference
Physical function							
Intervention Group (n: 40)	55.12±24.48	82.37±7.16	99.00±2.81	Group Time Group*Time	7.757	0.005	BS<PS1<PS3
Control Group (n: 40)	64.87±23.30	74.00±14.10	92.25±11.26		99.730	0.000	BS<PS1<PS3
Physical role							
Intervention Group (n:40)	36.25±48.02	85.00±29.30	95.62±15.89	Group Time Group*Time	11.555	0.001	BS<PS1,PS3
Control Group (n:40)	40.62±47.93	40.62±47.93	85.00±29.30		36.441	0.000	BS, PS1<PS3
Pain							
Intervention Group (n:40)	55.82±30.57	78.97±10.90	91.90±9.94	Group Time Group*Time	7.588	0.006	BS<PS1<PS3
Control Group (n:40)	61.50±29.59	49.12±11.12	95.50±8.88		76.570	0.000	PS1,BS <PS3
General Health							
Intervention Group (n:40)	62.25±17.43	79.77±12.08	79.77±12.08	Group Time Group*Time	6.197	0.013	BS< PS1,PS3
Control Group (n:40)	64.65±14.26	66.17±20.00	76.17±14. 62		18.485	0.000	BS<PS1,PS3
Physical Health Summary Score							
Intervention Group (n:40)	39.84±11.34	52.42±9.89	55.04±7.61	Group Time Group*Time	14.677	0.000	BS<PS1,PS3
Control Group (n:40)	40.05±12.13	38.00±10.56	54.33±7.94		44.119	0.000	PS1<BS<PS3
Vitality							
Intervention Group (n: 40)	42.37±17.79	77.37±9.80	90.50±8.75	Group Time Group*Time	36.622	0.000	BS<PS1<PS3
Control Group (n: 40)	40.12±22.17	45.37±21.93	86.75±10.71		172.052	0.000	BS<PS1<PS3
Social function							
Intervention Group (n:40)	57.18±29.94	72.81±12.62	99.37±3.95	Group Time Group*Time	6.751	0.010	BS<PS1<PS3
Control Group (n:40)	65.62±31.10	47.81±20.58	95.00±11.60		81.349	0.000	PS1,BS <PS3
Mental function							
Intervention Group (n:40)	52.50±17.28	81.70±15.68	83.70±14.13	Group Time Group*Time	16.190	0.000	BS<PS1,PS3
Control Group (n:40)	54.40±20.65	54.10±19.15	83.10±13.07		63.013	0.000	PS1, BS<PS3
Mental role							
Intervention Group (n:40)	48.33±50.04	82.50±38.48	82.50±38.48	Group Time Group*Time	3.760	0.045	BS< PS3
Control Group (n:40)	50.83±50.06	50.83±50.06	78.33±36.63		9.689	0.000	BS,PS1< PS3
Mental Health Summary Score							
Intervention Group (n:40)	40.48±10.11	50.75±4.80	56.46±3.43	Group Time Group*Time	5.170	0.024	BS<PS1<PS3
Control Group (n:40)	43.37±8.79	43. 75±7.28	54.48±4.45		77.817	0.000	BS,PS1<PS3

\* $p<0.05$ , <sup>†</sup>SD: Standard Deviation, <sup>‡</sup>F: Two-way analysis of variance



#### 4. Discussion

The results obtained from the research were discussed under separate headings regarding the importance of discharge learning needs, the status of meeting of these needs, perception of recovery, coping-adaptation level, and quality of life levels.

##### Examination of Discharge Learning Needs and Their Meeting Status

Determining patients' learning needs and providing individualized care according to these priorities leads to patients experiencing less anxiety in home care management, positively affecting their coping and adaptation, thus increasing their quality of life (Fredericks, İbrahim, Puri, 2009). The significant differences observed in almost all areas and measurements regarding the importance of learning needs for discharge among patients in both the intervention and control groups ( $p < 0.05$ ) are noteworthy (Table 2). Additionally, it is striking that patients evaluated their learning needs at discharge as "very important" in the intervention group and "neither less nor more important" in the control group, suggesting that the information provided during the initial two educational sessions of nursing care in the intervention group significantly influenced these high scores. Furthermore, it is important that the most significant items identified by both the intervention and control groups of patients undergoing CABG were related to the subdimension of "Activities of living". Similar results were reported in studies conducted with CABG patients in our country (Uzun and Demirkiran, 2012; Erdoğan and Yılmaz, 2025; Sarıtaş, Erci, Boyraz, 2018). The results of Jickling and Graydon (1997) and Chesnick (1992) were similar. However, in Erdoğan's (2012) study, the highest learning needs were reported for treatment and complications, quality of life, and medications. It is noteworthy that studies conducted with CABG patients in the literature emphasize issues related to physical activity (Çayırtepe, Esatoğlu, Aral, 2020; Çelik, 2025), supporting our research findings.

The level of meeting of learning needs for patients undergoing CABG surgery is one of the important results of this research. This is because statistically significant differences were revealed in the meeting of learning needs between the intervention and control groups in terms of the total score of PLNS-NMS and the sub-dimensions of "Feelings related to condition-NMS", "Treatment and complications-NMS", and "Enhancing quality of life -NMS" ( $p < 0.05$ ) (Table 3). In the prominent subdimension of learning needs, "Activities of Living-NMS," significantly higher scores were reported in the intervention group at one month

and three months post-surgery compared to pre-surgery measurements, while no difference was observed in the control group. Moreover, it is noteworthy that patients in the intervention group receiving nursing care reported that their needs were "fully met" in all measurements at discharge, one month, and three months, while patients receiving clinical routine care indicated that their needs were "neither less nor more met". Given these results, it can be stated that the topics of the educational sessions conducted for the intervention group, the discharge education booklet, follow-up, and the information provided during telephone counseling were effective. There have been no studies found in the literature that used PLNS-NMS in patients undergoing CABG. This indicates a need to evaluate the meeting status of learning needs in the CABG patient group. In addition, considering the studies conducted with patients who underwent CABG surgery, the results showing that the training booklet was effective (Olgun and Özşaker, 2024), showing that telephone follow-up was effective (Emre and Tuna, 2021), and showing that counseling was effective (Avcı Işık and Karaöz, 2022; İlgin et al., 2024) support our research findings.

##### Examination of Perception of Recovery

When comparing the perception of recovery in patients in the intervention and control groups, statistically significant differences were found in the measurements before discharge, one month, and three months post-surgery ( $p < 0.05$ ). The doubling of the perception of recovery score in the intervention group at one month post-surgery and the near value of "I have recovered" in the last measurement are quite significant. In this context, especially the average perception of recovery score of  $7.87 \pm 1.26$  in the intervention group is higher than that of the control group and the patient results from Kan's (2007) study, which can be explained by the effectiveness of the intervention and is clinically noteworthy. In the literature, negative outcomes regarding the recovery process of patients with CABG have been reported (Çakır, Karacabay, Karaveli Çakır, 2024; Makino, Nakata, & Yoshida, 2024), which may indicate the need for new studies.

##### Examination of Coping-Adaptation Levels

The statistically significant differences found in the total score of CAPS and in the subdimensions of "Resourceful and Focused", "Physical and Fixed", and "Systematic Processing" ( $p < 0.05$ ) regarding the coping-adaptation levels of patients in the intervention and control groups are noteworthy. It was determined that the significant difference observed in the intervention group was due to higher scores in the

one-month and three-month post-surgery measurements compared to the initial measurements, while no significant difference was observed in the control group ( $p>0.05$ ). According to the Roy Adaptation Model, CABG surgery is a focal stimulus affecting individuals' adaptation levels, and patients return to a conciliatory adaptation level with surgery (Çatal and Dicle, 2011; Roy, 2009). Although several studies have examined coping and adaptation in patients undergoing CABG using various psychological and coping instruments, no study to date has specifically assessed coping-adaptation levels using the CAPS (Tung et al. 2008, Boudrez and De Backer 2001). When examining the results of studies that investigated patients' coping post-surgery using different measurement tools, it was found that CABG patients showed improvement in coping from the fourth week post-surgery, with further increases until the sixth month, but no changes were observed in the period between six months and one year (Boudrez and De Becker, 2001). Tung, Hunter, and Wei (2008) reported that self-blame was a common approach for patients to cope. Redeker (1992) stated that there is a need to improve coping in patients post-cardiac surgery. In a review, the emphasis on the need for studies on the effects of surgery and coping, particularly in female patients undergoing CABG, is noteworthy (Çayırtepe, Esatoğlu, Aral, 2020). Despite this limitation in the discussion, the results obtained from this research significantly contribute to the literature regarding the positive effects of nursing care based on the Roy Adaptation Model on patients' coping-adaptation levels.

### Examination of Quality of Life Levels

Finally, the quality of life levels of patients in the intervention and control groups who underwent CABG surgery were examined. Many studies have evaluated the quality of life in patients post-CABG surgery. In the assessment of quality of life through repeated measurements in terms of physical health and mental health in both the intervention and control groups, the higher average quality of life scores in the intervention group at one month and three months post-surgery in all components except for the "Pain" component is a significant finding. Moreover, it is noteworthy that patients in the intervention group reported significant increases in quality of life levels across all eight subcomponents at one month post-surgery compared to the pre-surgery period. In this context, it can be stated that the discharge education provided, telephone follow-ups, and counseling were effective in improving the quality of life of patients undergoing CABG in the intervention group. Contrary to our research, in the study by Özdemir and Önlü (2021), which tested the effect of structured education,

significant quality of life scores were only reported in favor of the intervention group concerning general health and social functioning. In the systematic review of studies evaluating quality of life post-CABG by Çayırtepe, Esatoğlu, and Aral (2020), 26 studies were examined, and negative effects of physical condition, living alone, and acute cardiac and cerebrovascular events were reported. Based on these results, it can be stated that there will continue to be a need for the evaluation of quality of life in patients undergoing CABG.

**Limitations of the Study:** Although a randomised controlled design would provide stronger evidence, practical constraints such as data collection in a clinical setting, continuity of care in the intervention, repeated measurements, and the inability to prevent patient interactions within the same unit necessitated the use of a quasi-experimental design. Consequently, the absence of randomisation may compromise the internal validity and generalisability of the findings.

### 5. Conclusions

According to the results obtained from the research, all hypotheses were confirmed; it was concluded that the nursing care provided to patients undergoing CABG has an effective impact on the importance of learning needs, the meeting status of learning needs, perception of recovery, coping-adaptation level, and quality of life in terms of physical and mental health. Additionally, many concepts of the Roy Adaptation Model, which also formed the theoretical framework of this study, were able to be tested.

### Ethical Statement

\*This research is the doctoral dissertation of the first author, and the second author is the thesis advisor. The relevant doctoral dissertation can be accessed through the National Thesis Center.

\*\*The results of this research were presented as an oral presentation in the "Award-Nominated Abstracts" category at the 14th Turkish Society of Cardiovascular Surgery Congress held in Antalya in 2016 (November 2-6, 2016), and an abstract was published in the relevant congress's Abstract Book. It has not been published in any other journal or other publication, nor is it registered on any platform for publication.

**Ethics Committee Approval:** This research was planned as a doctoral thesis project, and the necessary approval was received from the Dokuz Eylül University Faculty of Medicine Clinical and Laboratory Research Ethics Committee (Issue no: 02.08.2005/170). Later, because name changes were made during the doctoral thesis monitoring process, new ethics committee approvals were obtained (Issue no: 09/17/2009-133/2005, Issue no: 2011/20-14, Issue no: 2015/10-44).

**Conflict of Interest:** The authors have no conflict of interest.

**Financial Support:** The authors did not receive financial support from any institution or organization for this research; the research budget was covered by the researcher(s).

**Author Contributions:** Research design: EÇ and AS; Data collection: EÇ; Data analysis: EÇ; Manuscript writing: EÇ and AS; Critical revisions for important intellectual content: EÇ and AS.

**Acknowledgements:** The researchers would like to thank all patients and their families who supported the research through their participation.

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# Perspectives in Palliative & Home Care

Case Report/Olgu Raporu

## Pacifier Use in an 80-Year-Old Patient with Orofacial Paralysis After Stroke: A Case Report

İnme Sonrası Orofasial Paralizisi Olan 80 Yaşında Bir Hastada Emzik Kullanımı: Olgu Sunumu

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### ABSTRACT

**Background/ Objective:** Stroke is considered one of the most important causes of disability in the world due to its sudden onset and duration. Stroke-related significant changes and difficulties are experienced in the living conditions of stroke survivors and their caregivers.

**Material and Methods:** In this case presentation, an 80-year-old female patient was initially admitted to the internal medicine intensive care unit due to intracranial hemorrhage that developed at home. Following an assessment of her clinical condition, she was transferred to the palliative care unit for further treatment. During the treatment and care process in the palliative care unit, the patient's relatives used a pacifier in a controlled manner in partial orofacial paralysis due to stroke.

**Results:** In this case report, the pacifier method used by caregivers in patients with orofacial paralysis and the findings of this process are presented.

**Conclusion:** In the follow-up of the patient's treatment and care process, it was observed that using a pacifier contributed to improvements in the patient's oral structure.

**Keywords:** Facial paralysis; pacifier; stroke.

### ÖZ

**Giriş/Amaç:** İnme, ani başlangıcı ve süresi nedeniyle dünyada en önemli sakatlık nedenlerinden biri olarak kabul edilir. İnme sonrasında hayatta kalan hastaların ve bu hastalara bakım veren bireylerin yaşam koşullarında inmeye bağlı önemli değişiklikler ve zorluklar yaşanmaktadır.

**Gereç ve Yöntemler:** Bu olgu sunumunda, 80 yaşındaki kadın hasta, ev ortamında gelişen intrakraniyal kanama nedeniyle öncelikle dahiliye yoğun bakım ünitesine kabul edilmiş, ardından klinik durumu değerlendirilerek palyatif bakım ünitesinde bakım sürecine alınmıştır. Palyatif bakım ünitesinde tedavi ve bakım sürecinde inmeye bağlı hastada görülen kısmi oro-fasiyal paralizde hasta yakını hastada kontrollü bir şekilde emzik kullanmıştır.

**Bulgular:** Bu olgu sunumunda bakım verenlerin orofasiyal paralizisi olan hastalarında uyguladıkları emzik yöntemi ve bu sürece ait bulgular verilmiştir.

**Sonuç:** Hastanın tedavi ve bakım süreci takibinde emzik kullanımı hastanın ağız yapısında iyileşmelere katkı sağladığı gözlemlenmiştir.

**Anahtar Kelimeler:** Fasiyal paralizi; emzik; felç.

Received: 31 January 2025

Accepted: 28 August 2025

Publication Date: 30 August 2025

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## 1. Introduction

Stroke is among the leading causes of mortality and morbidity worldwide. A stroke is defined as a sudden interruption of blood flow to the brain (ischemic) or bleeding into the brain (hemorrhagic) (Coupland et al., 2017). Worldwide, 15 million people experience a stroke every year, 5 million die, and 5 million continue their lives dependent on family members with permanent sequelae (WHO, 2023). In our country, the cerebrovascular-related mortality rate was 18.6% among all mortality rates in 2024 (TSI, 2023). After stroke, the permanent sequelae that occur in individuals and the consequences of the burden of care constitute approximately 3-4% of health expenditures (Johnson et al., 2016).

Short, medium and long-term sequelae occur in approximately 74% of patients who survive after stroke, and patients continue the rest of their lives as dependent individuals (Chen et al. 2019). These sequelae can be physical (motor impairments, aphasia, sensory impairments), psycho-intellectual (cognition, depression), functional (activity limitation) or socio-professional (driving, job loss, family difficulties) (Harrison et al., 2013). These losses affect patients' quality of life and burden. However, early multidisciplinary rehabilitation supports improving worsening symptoms due to sequelae. In a study, it is emphasised that approximately 75% of patients who follow up with a diagnosis of stroke need rehabilitation, while only 25% are referred to rehabilitation (Cadilhac et al., 2017). If neurological and medical complications after stroke are not anticipated, prevented and managed appropriately, the consequences of stroke become a significant cause of morbidity and mortality. Therefore, the prognosis, recovery goals and rehabilitation needs of stroke patients should be comprehensively evaluated in the early period (Hebert et al., 2016).

Facial paralysis is seen in approximately 45% of patients after stroke (Yew & Cheng, 2015). Facial paralysis affects muscle mobility and facial symmetry in the lower third of the face. This is due to the loss of function of the facial nerve, the terminal branches that provide motor function to the forehead, eyes, cheeks, mouth and jaw muscles (Moncaliano et al., 2023). Facial paralysis causes dysarthria, apraxia, dysphagia, and motor and language changes (Barreto et al., 2021). In addition, facial paralysis may cause psychosocial problems (such as depression and anxiety) in patients due to facial deformity and decreased physical loss (Nellis et al., 2018). In this case report, the contribution of the pacifier applied by the patient's relatives to the healing process of

orofacial paralysis in a patient with partial oro-facial paralysis will be presented.

## 2. Case Presentation

A female patient (80 years old) was hospitalised in the palliative care unit with the diagnosis of Intracranial Hemorrhage and Respiratory Failure. The patient had a history of a herniated disc, cataract, goitre surgery and Chronic Obstructive Pulmonary Disease (COPD). In addition, the patient's relative stated that the patient had lost most of his sensory ability due to a previous trauma to his left ear.

### History of Hospitalization in Palliative Care Unit and Follow-up

The patient collapses during prayer at home and is diagnosed with Intracranial Hemorrhage. The patient is being treated in the Internal Medicine Intensive Care Unit between August 20 and September 23, 2024, due to intracranial haemorrhage. The patient's treatment and care process continues in the Palliative care unit as of September 24. The patient, who is followed up with a monitor in the palliative care unit, has Percutaneous Endoscopic Gastrostomy (PEG) as an invasive intervention and is fed by this route; urine output is provided with a foley catheter and tracheostomy. The patient is aspirated an average of 6 times in 24 hours (the number increases if needed). Between 07:00-24:00, 90 cc of formula (1530 cc in total in 24 hours), 40cc of water (680cc in total in 24 hours) and 2210cc of fluid in total are given to the patient per hour, and 2530cc of urine is discharged from the patient (in 24 hours).

In this case, the patient was followed up for two weeks. At the first follow-up (on 30.10.2024), vital signs; blood pressure: 140/70mmHg, pulse: 100/min, respiration: 16, fever: 36.2°C, on 13.10.2024; vital signs; blood pressure: 110/75mmHg, pulse: 78/min, respiration: 16, fever: 36.2°C.

Laboratory findings of the patient at the first follow-up: WBC: 13.92/uL, Neutrophil: 9.91uL, RBC: 3.28/uL, Hemoglobin: 9.4g/dL, Hematocrit: 28.1%, PLT: 353/uL, Glucose: 121mg/dl, AST:27mg/dl, ALT: 26mg/dl, Albumin: 22g/L, Total protein:51g/L, Na:131mmol/L, K:3.49mmol/L, Ca:8.2mg/dl, CRP:78.1.

The patient had a grade 4 decubitus ulcer in the gluteal region. In the pharmacological treatment of the patient, Keppra 500mg 2x2 (IV), Diazemid 250mg 3x1 (PO), Duphalac 3x1 (PO), Ipraasal nebule 4x1 (Inhalation), Panto 40mg 1x1 (IV), Asist. 300mg 3x1 (IV), Polix 100mg (2x100mg (IV), Tygex 100mg. 2x100mg (IV), Amikosin 1gr 1x1gr (IV), Metpamide 10mg 3x1 (IV), Enox 8000anti-XaIU/8ml 1x1 (SC).

### Scale Assessments Obtained at Patient Follow-up

The total score of the Oral Evaluation Guide at the first follow-up was 13 points, and it was 8 points at the last follow-up. The patient's Glasgow Coma Scale score was 11, ECOG Score was 4, and Itaki Fall Risk Scale score was 10.

### Communication with the patient

In communication with the patient, the patient tried to express their reactions mostly with their eyes. In the patient care process, the patient's in-bed active passive exercises are routinely applied, and supportive air balls are placed on the patient's hands and feet. In addition, the patient's relatives met the patient's spiritual needs by giving a rosary for the patient to fulfil his religious worship. It was observed that there was strong and effective communication between the patient and caregivers during the care process.

### Use of pacifier in a case of orofacial paralysis

The patient had partial orofacial paralysis due to Intracranial Hemorrhage. The patient has not received any speech therapy or therapy related to orofacial paralysis during the palliative care process. The patient's relative applied a controlled pacifier to heal the pressure sore caused by the teeth on the patient's lip due to the patient's jaw condition after the facial paralysis in the patient's mouth and to ensure the patient's sucking function and saliva increase in the mouth. The patient stated that they applied this treatment to another patient under a doctor's recommendation and observed the healing process. Based on this experience, they began applying it to this patient. In this application, the researcher followed the patient for two weeks. During this period, the patient's relative routinely used a pacifier for children in the 0-2 age group. The pacifier was left in the patient's mouth for specific minutes under the control of the patient's relative. The caregiver did not leave the pacifier in a particular area of the mouth but rotated it to touch all anatomical regions of the mouth along the entire lip circumference. The patient's relative said she did this practice 5-6 times daily, mainly during the day. In the statement of the patient's relative, it was stated that the patient did not respond to the pacifier in the first days, but in the following days, the patient's mouth movements increased. In addition, during the two-week follow-up period, it was observed that the patient's sucking power increased, and there was a noticeable improvement in orofacial paralysis and improvement in the pressure sores caused by the teeth on the lips. During the period we monitored the

patient, no pharmacological treatment was administered to increase salivation.

### Ethical Aspects of the Research

The patient's relatives obtained written and verbal consent for this case report.

### 3. Discussion

Although pediatric associations do not approve the use of pacifier in infants, it is defined as a non-nutritive sucking action that has calming, pain-reducing and protective effects against sudden infant death syndrome in infants (Janwadkar et al., 2023). Long-term pacifier use is associated with shortened breastfeeding time, increased risk of middle ear infection, and infant dental malocclusion (Buccini et al., 2017). In this case, the patient was 80 years old, and the patient's relative used the pacifier during the rehabilitation process for orofacial paralysis that developed entirely as a result of stroke. The patient was followed up for two weeks, and a visible improvement in the oral area was observed.

The face is the most critical component of the self-concept. It is considered the most essential part of the body physiologically and psychologically. Therefore, facial paralysis causes physiologic losses and affects patients socially and psychologically (Ho et al., 2012). In Nellis' a study, it was reported that patients with facial paralysis have high depression and low quality of life (Nellis et al., 2017). Techniques such as electrotherapy, manual facial massage, and nerve stimulation are applied in rehabilitation studies to treat facial paralysis (Silva et al., 2022). It is stated that there is a significant increase in patients' quality of life after rehabilitation studies (Lindsay et al., 2014).

In this case, no visible movement was observed in the patient's mouth movements at the beginning of pacifier use, and an increase in mouth movements was observed in the ongoing process. In the literature, it is possible to find studies on using pacifiers, mostly with premature infants, babies, and children. In these studies, it is stated that pacifier use activates the salivary glands in the mouth and causes an increase in mucous and serous secretions (Kaya & Aytekin, 2017). It is also assumed that pacifier use activates nerve, digestive and hormonal enzymes in infants' oral mucosa, thus contributing to weight gain (Hohman et al., 2018). It can be said that pacifier use in this patient contributed to increased secretions in the salivary glands. Considering the literature, pacifier use remains a controversial issue, especially in infancy, due to its harmful effects in addition to all these beneficial effects. Especially in this case, pacifier use did not cover a long-term period, and only the risk of

aspiration was considered in terms of side effects because the patient was an adult. Therefore, pacifier use was practised during the day under the supervision of the patient's relatives. The recovery process of the patient's physiological losses due to orofacial paralysis observed by both family members and health professionals, in this case, may be a preliminary study for new research to be conducted in adult patient groups, especially after a stroke.

**Financial Source:** This case report did not receive any financial support from any organization.

**Conflict of Interest:** There is no conflict of interest among the authors.

**Contribution of the authors:** Conceptualization, methodology, writing (original draft), writing (original draft), writing (review&editing), supervision: YAD, KK

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# Perspectives in Palliative & Home Care

Derleme Makalesi/ Review Article

## Palyatif Bakım Kliniklerinde Ölüm Algısı

### Perception of Death in Palliative Care Clinics

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#### ÖZ

**Giriş/Amaç:** Giriş: Ölümcül hastalıkla yüzleşme hasta ve bakım vericiler tarafından farklı tepkilere yol açan, oldukça zorlayıcı bir durumdur. Ölüm kavramı varoluşsal kaygıları tetikleyen olgusal bir kavramdır. Ölümcül hastalık tanısı almış olan hastada, hastaya bakım verme, hastanın ölüm zamanında yanında olma gibi durumlar ile ölümle yüzleşen aileler ve hemşirelerde üzüntü, çaresizlik, öfke, inkâr, kaygı ve depresyon gibi olumsuz duygular yaşanmaktadır. Derleme palyatif bakım kliniklerinde bulunan hasta, ailesi ve hemşirelerin ölüm algıları üzerine yapılmış olan çalışmaları incelemektedir.

**Gereç ve Yöntem:** Google Akademik, PubMed, Ulusal Tez Merkezi bilimsel veri tabanlarında anahtar kelimeler taranarak konuya ilişkin yapılmış bilimsel araştırma makaleleri ve derlemeler incelendi.

**Bulgular:** Ölümcül hastalık karşısında hasta, hasta yakını ve hemşirelerin üzüntü, öfke, pazarlık ve kabullenme gibi yas sürecinin farklı dönemlerinde olduğu, bu farklı davranış ve tutumların yaş, cinsiyet, kültürel farklılıklar, hastalığın semptomlarının şiddeti gibi birçok faktörden etkilendiğini gösteren çalışmalara rastlanmıştır.

**Sonuç:** Palyatif bakım kliniklerinde hasta ve bakım vericiler açısından ölüm kavramının incelendiği birçok araştırma mevcuttur. Tüm çalışmaların incelenmesi sonucunda palyatif bakım kliniklerinde ölüm kavramı ve algısının hasta yakını ve hemşirelerde üzüntü, çaresizlik, öfke, kaygı, depresyon gibi olumsuz duygulara neden olduğu sonucuna varılmıştır.

**Anahtar Kelime:** Palyatif bakım; ölümcül hastalık; ölüm kaygısı; ölüme ilişkin depresyon; bakım verici; hemşire.

#### ABSTRACT

**Background/Objective:** Background: Facing terminal illness is a very challenging situation that leads to different reactions by patients and caregivers. The concept of death is a phenomenal concept that triggers existential concerns. Negative emotions such as sadness, helplessness, anger, denial, anxiety and depression are experienced by families and nurses who face death with situations such as caring for the patient and the patient diagnosed with a terminal illness and being with the patient at the time of death. This review examines studies on the perceptions of death of patients, families and nurses in palliative care clinics.

**Materials and Methods:** Scientific research articles and reviews on the subject were reviewed by searching keywords in Google Scholar, PubMed, National Thesis Centre scientific databases.

**Results:** Studies have shown that patients, relatives and nurses are in different stages of the mourning process such as sadness, anger, bargaining and acceptance in the face of terminal illness, and that these different behaviours and attitudes are affected by many factors such as age, gender, cultural differences and severity of the symptoms of the disease.

**Conclusion:** There are many studies examining the concept of death in palliative care clinics in terms of patients and caregivers. As a result of the examination of all studies, it was concluded that the concept and perception of death in palliative care clinics cause negative emotions such as sadness, helplessness, anger, anxiety and depression in patients' relatives and nurses.

**Keywords:** Palliative care; terminal illness; death anxiety; depression related to death; caregiver; nurse.

## 1. Giriş

İnsanoğlunu hayvanlardan ayıran en önemli özelliklerden biri de benlik farkındalıklarıdır. Homo sapiens olarak, kendimizi etrafımızdaki canlı ve cansız nesnelerden ayırabilir ve kendimizi birer varlık olarak algılayabiliriz. Bu farkındalıkla gelen zaman algısı ile hayatın sonlu olduğunu sadece insanlar bilir. Böylece insanların bazı varoluşsal kaygılara sahip olmaları kaçınılmaz olur (Nyatanga, 2016; Tekçe, 2022). Yaşamın bir gerçeği ve her canlı için geçerli olan ölüm kavramını kabul etmek ve bu gerçekle yüzleşmek gerekir. Ölümü sağlıklı bir şekilde kabul etmek, bireyin olumlu bir ruh haliyle hayatı bütünsel olarak algılamasını ve zevk alarak yaşamasını sağlayacaktır (Aras, 2022).

Varoluşçulukta ölüm, yaşam açısından değerlendirilir. Heidegger'e göre bireyler, varlıklarının ölene kadar devam edeceğini anlayınca, varlığının anlamını kavramaya çabalarlar. Sınırlı bir zaman hayatta kalma düşüncesi, anlam bulma ve anlamlı bir hayat yaşama isteği uyandırır. İnsanoğlunun yaşamını anlamlı hale getirmek için dünyada iz bırakma isteği tarih boyunca tüm dönemlerde var olmuştur. Çünkü insanlarda anlamsız bir hayat yaşama ihtimali farkındalığı; umutsuzluk ve korku gibi duygulara yol açabilmektedir (Tekçe, 2022).

Dini inanışlarda ölüm, ikinci bir hayat vadeder. İlk toplumlarda mezarlarda ikinci yaşamda kullanılmak üzere yiyecek kapları, giyecek ve değerli eşyalar bulunması, Mısırlıların firavunları mumyalama ile öte hayata hazırlaması, semavi dinlerde cennet cehennem inanışları bir anlamda ölümsüzlüğü işaret eder (Altaş, 2020). Ölümlü bir varlık olduğunun farkında olmasına rağmen bilinçli ya da bilinçsizce ölümsüzlüğü isteyen insanoğlu bunu sosyal kuruluşlar, yapıtlar ve siyasi sistemler oluşturarak, kültürün sabit kalmasını sağlamaya çalışarak yapar. Benzer şekilde biyolojik olarak soyu devam ettirme düşüncesi ölümsüzlük isteğinin farklı bir yansımasıdır (Yılmaz, 2021).

Ölümün hayatın sonu olduğu bilgisine sahip olabiliriz ancak yaşayan varlıklar olarak ölümün bizim için gerçekten ne ifade ettiğini bilmiyor da olabiliriz. Heidegger'e göre ölüm, var olanın kendini gerçekleştirmesidir. Yani, var olan ölmek için doğmaz, ancak yaşamaya başladığı andan itibaren ölüm potansiyeli taşır. Ölüm karşısında hissedilen ilk duygu olarak korku akla gelse de, çoğunlukla olan bizi kaygılı hissettirmesidir. Kaygı Kierkegaard tarafından şu şekilde açıklanmaktadır; korku bir şeye karşı hissedilir ve korkunun bir hedefi vardır, öte yandan kaygı bir şeyden çok bir bilinmeyene karşı hissedilir. Ölüm bir bilinmezliktir. Ölümümüzü hayal ettiğimizdeki

bilinmezlik ve hiçlik bizi kaygılı hissettirir (Nyatanga, 2016; Tekçe, 2022).

## Ölüm Karşısında Yaşanılan Duygular

Heidegger "Herkes kendi ölümünü ölü" söyleminde ölümün gerçekliğine ve herkesin ölüm algısının farklı olduğuna vurgu yapmaktadır (Tekçe, 2022). Ölüm kişiden kişiye ya da toplumdan topluma farklı yorumlanan bir kavramdır. Ölümün yok oluş olduğunu düşünenler olduğu gibi, yepyeni ve sonsuz bir hayata geçiş olarak değerlendirenler de vardır. Bu nedenle bazıları için ölüm stres nedeni olarak görülürken, bazıları için ise stresten kurtulma olarak düşünülmektedir (Çelikdal, 2019). Fromm'a göre ölümlülük bilgisine insan hep sahiptir, lakin hastalık ya da yaşlılıkla beraber farkındalık oluşur (Gürbüz, 2022). Ölümü düşünmenin insan yaşamına etkisi kaçınılmazdır. Fakat aşırı ve patolojik biçimde ortaya çıkan ölüm düşüncesi, insan psikolojisini olumsuz olarak etkileyebilmektedir. İnsanın var olan ruh dengesini koruması için ölüm düşüncesinin sınırlarını belirlemek oldukça önemlidir. Ölüm karşısında sergilenen tavır, denge ve uyum kaybedildiğinde bireyin kaygı düzeyi artmakta, yaşadığı çevreye uyum sağlaması zorlaşabilmektedir (Karakuş vd., 2012). Ölüm karşısında geliştirilen tutumlar; ölümü inkar etme ya da kabullenmeme, ölüme meydan okuma, ölümü isteme, ölümü kabullenme, yas tutmadır. Ölüm karşısında geliştirilen tutumlar uyum halinde olmalıdır, eğer bu uyum hali oluşamazsa bireyin ölüme ilişkin kaygı ve depresyon düzeyi artmaktadır (Ekşi, 2019).

Kaygı, hoş gitmeyen sıkıntı, endişe ve yaşantı; başka bir deyişle bir bireyin yaklaşmakta olan gerçek/hayali, içsel/harici bir tehlike, felaket veya talihsizlik gibi durumlara karşılık vermesidir. Vücut ister gerçek ister gerçek dışı olsun, tehdidi karşılamak için sıklıkla kendini harekete geçirir. Kaslar gerilir, nefes alma hızlanır ve kalp daha hızlı atar. Kaygı semptomları, kimi zaman kötüleşerek patolojik bir durum haline alabilir. Hafif düzeyde kaygı semptomları, bireylerde başarıyı artırırken, ağır kaygı semptomları ise başarıyı olumsuz etkilemektedir. Kaygı, iç veya dış tehdidi bildiren bir uyarıdır ve bundan dolayı yaşamı koruyucu bir özelliğe sahiptir (Babcock, 2016). Korku, şimdi var olan somut tehdit ve tehlike ile ilgiliyken; kaygı, gelecekte olması muhtemel durumlarla ilgilidir (Şahin, 2019). Kaygı ve korku kavramları arasında ayırım yapan Kierkegaard, "kaygının nesnesinin hiçlik olduğunu" söyler (Üstükuş, 2019). Benzer şekilde Freud'da kaygının içgüdülerden gelen tehlikenin algılanması ile ortaya çıktığını savunur. Normal şartlar altında topluma uyumlu savunma mekanizmaları geliştiren egonun, bunu başaramadığı durumlarda ortaya kaygı çıkar (Kafes, 2021).

Ölüm kaygısı ise kişinin doğumuyla başlayarak hayat boyu süren, karakterinin oluşmasında önemli rol oynayan, en temel korkusu olan kendisini ve dünyayı kaybedebileceği, bir hiç olacağı farkındalığı ile beslenen bir duygudur. Ölümüne karşı verilen tepkiler ölüm kaygısının kültürden, eğitimden ve birçok diğer faktörden etkilenerek bireyin davranışlarına yansıma şeklindedir (Kayalı vd., 2015; Pehlivan vd., 2020). Bu bağlamda ölümün farkındalığı ile ortaya çıkan kaygılar ve çatışmalar, insanın hayatı nasıl yaşayacağı ile ilgili bir motivasyon aracıdır denilebilir (Gürbüz, 2022).

Langs ise ölüm kaygısının üç biçimde ortaya çıktığını savunur. Bunların ilki kaçınılmaz son olan ölümüne yönelik hissedilen varoluşsal kaygılardır, daha sonra yaşamı tehdit edici olayların meydana getirdiği kaçınmacı kaygılar ve duygusal ya da fiziksel kötü olayların meydana geldiği zaman yaşanan koruyucu kaygılardır (Çağlayan, 2022).

Evrensel bir gerçek olan ölüm ve ölümüne karşı geliştirilen davranışlar ile ilgili bir başka teorisyen Kübler Ross ölüm kaygısının farklı boyutlarından bahseder; ölüm ve ölüm sonrasının bilinmiyor oluşundan kaynaklanan belirsizlik korkusu, yalnızlık korkusu, yakınlarını kaybetme korkusu, kimlik duygusunu kaybetme korkusu, ölüm sonrası cezalandırılma korkusu, denetimi kaybetme korkusu, acı duyma korkusu, bedeni kaybetme ve yok olma korkusu ve gerileme korkusudur (Tepe Medin, 2018; Çağlayan, 2022).

Ölüm düşüncesi kaygıya neden olurken; bu kaygıyla baş etmek isteyen insanları sanat, ilişkiler ve inançlarla yaşama bağlayan, varoluşunu anlamlandıran bir sebep de olabilmektedir (Karakuş vd., 2012). Ölüm kaygısıyla başa çıkmak için sahip olunan kişisel özellikler ve kullanılan bağlanma stilleri nedeniyle farklı kuramlar ortaya atılmıştır. Bu kuramlara bakıldığında; ölüm kaygısı ile ilgili en bilinen kuramlardan biri "Terör Yönetim Kuramı"dır. Bu kuram ölüm kaygısı ile mücadele etmek için ideolojilere sarılmakla ilgilidir. Başka bir kuram olan John Bowlby'nin "Bağlanma Teorisi" bebeklerin hayatta kalmasını etkileyen doğuştan gelen bir düzenleme aracı olduğu fikrini benimser. "Romantik İlişkiler Çerçevesinde Bağlanma Kuramı" ise iki kişi arasındaki sevgi ve şefkate dayalıdır. Tüm kuramların çıkış noktasında ölüm kaygısı mevcuttur (Kırseven, 2022; Sarsmaz, 2022).

Ölümüne ilişkin kaygı, yaşamla ilgili olumlu tutumları azaltarak yaşam doyumunu düşürür ve depresyona zemin hazırlar. Bu nedenle ölümüne dair düşüncelerin sınırlarının belirlenmesi depresyon yaşanmasında etkili olduğu için önemlidir. Ölümüne ilişkin düşüncelerin yoğunluğu, hayatı devam ettirmek için rutin olarak

yapılması gereken davranışlarda zorluk çekmesine neden olabilir. (Akçay & Magrebi, 2020). Depresif belirtiler genellikle yas, kayıp, terk edilme ve izolasyon gibi durumlarda ortaya çıkabilmektedir. Araştırmalar, travma sonrası stresin de keder ve depresyona neden olduğunu ortaya koymaktadır (Uysal, 2022). Depresyon, ilk kez on yedinci yüzyılda bir ruh halini belirtmek için kullanılan ve kökeni Latince olan "bastırmak" anlamına gelen "deprimere" sözcüğünden gelmektedir (Sadock vd., 2022). Depresyon; bireyin, ruh ve beden olarak çökmesi, kendisini kederli hissetmesi, zaman zaman kaygının da eşlikçi olabildiği derin üzüntü, olağan etkinliklerden keyif alamama, yaşamsal ve işlevsel aktivitelere karşı isteksizliğinin artması, bazen intihar, hatta ölümle sonuçlanabilen duygu durumudur (Ekşi, 2019; Çelikkdal, 2019). Depresyon, birbiriyle ilişkili olarak genetik, biyolojik ve psikososyal faktörler nedeni ile ortaya çıkar (Özdoğan, 2023). Ölüm gibi depresyonun net olarak bir nedeni varsa (sağlığın bozulması, sevilen birinin yitirilmesi ya da iş başarısızlığı gibi belirgin bir stresin ardından ortaya çıkmışsa) bu tür depresyona "reaktif depresyon" denir (Burns, 2016).

Ölüm kaygısı ve ölümüne ilişkin depresyonun neden olduğu tutum ve davranışlar palyatif bakım hastalarında, hasta yakınlarında ve hemşirelerinde benzerlik gösterdiği yönünde çalışmalar mevcuttur (Karabağ & Fidan, 2021; Menekli vd., 2021).

### **Palyatif bakım kliniklerinde ölümüne karşı tutumlar**

Ölüm olgusu, "başkasının ölümü" ve "kendi ölümümüz" olarak iki farklı biçimde karşımıza çıkmaktadır. Ölüm kaygısı ve korkusu "başkasının ölümü" olgusu ile tetiklenerek ortaya çıkar. Bu nedenle ölmek üzere olan hastalar gibi onlara bakım veren yakınları ve hemşireler hastanın yaşamış olduğu ölüm hissi ve ölüm gerçekliği ile karşılaşmalarından dolayı, ölümle ilgili kaygılı olabilirler (Pehlivan vd., 2020).

Palyatif bakım kliniklerinde ölümü bekleyen hastaların farkı dönemlerde farklı tepkiler verdiği aşikardır. Bu durum "yas süreci" teorisi ile açıklanabilir. Kübler Ross "Ölüm ve Ölmek Üzerine" kitabında yas sürecini evrelere ayırmıştır. Ciddi bir hastalık tanısı alındığında farkında olarak ya da olmayarak yasin bu evreleri kendi kendine yaşar (Saraç, 2022). Kübler Ross, herhangi bir nedenle (ölüm, hastalık, sakatlık) meydana gelen yas sürecinde inkâr, öfke, pazarlık, depresyon ve kabullenme evrelerinden bahseder. Bu evreler belli bir sırayı izlemeyeceği gibi takip ya da tamamlanmak zorunda değildir. Birey bu evreleri iç içe yaşayabileceği gibi herhangi bir evrede takılıp kalabilir ve zaman zaman daha önce geçmiş olduğu evreye dönebilir (Biçer Kanat & Yılmaz Özpolat, 2016).



Palyatif bakım kliniklerinde hastalar, yakınları ve hemşireler ile ilgili çalışmalara bakıldığında ölüm kaygısı gibi pek çok ortak duygunun yanı sıra yaşanan fiziksel, psikolojik, sosyal ve ekonomik sıkıntıların farklılık göstermekte olduğu görülür. İlave olarak bazı kavramlar kişilerce farklı tanımlanabilmektedir. Önceki bir çalışmada palyatif bakımda iyi ölüm kavramı sorulduğunda; hastaların çoğunluğunda “ağrı ve stres olmadan hayatın sonlanması” hasta yakınlarının çoğunluğunda “aile bireyleriyle birlikte süreçleri paylaşmak”, hemşirelerin çoğunluğunda ise “acı çekmeden sürecin yaşanması” olarak cevaplanmıştır (Menekli vd., 2021). Hastalar ölüme yolculuklarında çelişkili düşünceler içinde olabilmektedirler. Boström ve arkadaşları (2024) ölümcül hastalıkları olan hastaların; ölümü hızlandırma ve yaşama isteklerinin, altı haftalık bir sürede yer değiştirebildiğini, bu iki zıt isteği bir başa çıkma yolu olarak akıllarında bulundurdıklarını saptamıştır (Boström vd., 2024). Ölüm kaygısında kişisel özellikler oldukça belirleyicidir. Doğumdan ölüme dek geçirilen her gelişimsel dönemde ölüm kavramının farklı algılanması nedeni ile öncelikle yaş faktörü (Gürbüz, 2022; Tekçe, 2022) sonrasında cinsiyet, ekonomik durum, içinde yaşanan sosyokültürel yapı ve dini inanç sistemleri önem taşır (Sarsmaz, 2022). Bu nedenle palyatif bakım kliniklerinde hasta bakımı planlanırken öncelikle hastaların ölümü nasıl algıladıkları ve ölüm kaygıları ile nasıl baş ettikleri saptanmalıdır. Ölüm ile ilgili konuların konuşulabilir olması sağlanarak, hastanın isteği doğrultusunda bakım planlamasında gerekli düzenlemelerin yapılması desteklenmelidir (Demirci vd., 2016). Hemşireler ölümcül hastalar için bakım planı hazırlarken etik değerler çerçevesinde bireyselleştirilmiş ve gelişimsel bir perspektifle yaklaşmalıdır (Dönmez, 2018). Bu bağlamda ölümcül hastalara verilen bakım; kaygının ve acının azaltılması, insan onurunun korunduğu bir ölüm ortamı hazırlanması, hastanın yakınlarına destek olunması, hastanın kültürüne ve etik değerlere en uygun davranışlar sergilenmesini kapsamaktadır (Üstükuş, 2019). Bu bakımın amacı, birey ölürken fiziksel ve manevi çevre düzenlemelerini oluşturmak ve yaşam kalitesini yükseltmek olmalıdır (Şahin, 2016).

Palyatif bakım kliniklerindeki hastalarda olduğu gibi hasta yakınlarında da benzer durumlar söz konusudur. Ullrich ve arkadaşları (2024) palyatif bakım veren 232 hasta yakınının farklı birçok stres kaynağı nedeni ile sıkıntı yaşadığını belirtmiştir. Katılımcılarda psikolojik yüklerle beraber zihinsel bozukluklar, fiziksel ve sosyal karşılanmamış ihtiyaçlar, kaynak ve destek yetersizlikleri, yaşam

kalitesi sorunları olduğu gösterilmiştir (Ullrich vd., 2024).

Ölümcül hastaya bakım verme ve hastanın ölüm zamanında yanında olma, her insan gibi sağlık hizmeti sunanların da epey zorlandıkları bir deneyimdir. Bu zor deneyimin tekrar tekrar yaşanması hasta ile en çok vakit geçiren hemşirelerin kendi ölüm kaygılarının artmasına sebep olabilmektedir (Benli & Yıldırım, 2017). Hemşireler ölümcül hastaya bakım verirken, ölüm olgusunun zorluklarını yakından gözlemekte, kendi ölüm gerçeği ile yüzleşmekte ve ölüm kaygısı duyabilmektedirler. Tüm bunlar yaşam ve ölüm ile ilgili varoluşsal sorunlar yaşamalarına neden olmaktadır (Benli & Yıldırım, 2017; Okçin, 2019; Aras, 2022; Üstükuş, 2019). Bakım verirken hastaları ile duygusal bağ kurabilmekte; bu duygusal bağ nedeniyle kayıp ve yas süreçlerinin duygusal yükünü daha çok hissetmektedirler. Zor bir deneyim olan ölümü hemşirelerin çalışma hayatları boyunca sıklıkla görüyor olmaları, ölüm kaynaklı kaygı ve depresyon duyguları yaşamalarına neden olmaktadır (Aras, 2022). Ayrıca hemşireler, ölümcül hastalara bakım verirken hem şefkatli hem de profesyonel olma ihtiyacından kaynaklanan çelişkili duygulara sahip olabilmektedir (Özçelik vd., 2018). Palyatif bakım kliniklerinde çalışan hemşireler hastalarla uzun süre iletişim halinde kalmaktadır. Hastalarla kurulan iletişimde, empatiyi sempatiye dönüştürdükleri için uygun iletişimi sürdürme ve sınırlarını korumakta ve zor soruları olan hastalarla başa çıkmakta zorlandıklarını ifade etmişlerdir. (Okçin, 2019). Ayrıca çalışmalarda hemşirelerin ölümcül hastalara bakım verirken en çok; hastaya yanlış bir şey söyleyerek onları “alt üst” etmekten endişelendikleri, ölüm konusunda ne konuşulacağını bilemedikleri vurgulanmıştır (Koku & Ateş, 2016). Palyatif bakım hemşireleri yaşadıkları deneyimlerle ilgili olarak kendi hayatlarında ölüm kavramını tekrar gözden geçirdiklerini ve varoluşsal soruları kendileri açısından yeniden değerlendirdiklerini, hastalarla beraber deneyimledikleri ölüme gidiş sürecinin kendi yaşamlarında da bir karşılığı olduğunu fark ettiklerini belirtmektedir (Okçin, 2019). Bu bağlamda ölümle yüzleşmeyi “güneşe bakmaya” benzeten Yalom’ a göre “güneşe uzun süre bakabilen bireyler ölüm kaygısıyla baş edebilirler” ve Yalom “ölümün yıkıcılığı karşısında, ölümle ilgili duygu ve düşüncelerin farkındalığı, bireyleri zenginleştirebilir” der (Dönmez, 2018). Hemşirelerin ölüm karşısında göstermiş olduğu duygu ve davranışların birbirinden farklı olduğu görülmüştür. Önceki bir çalışmada hemşirelerin ölüm hakkındaki kendi düşünceleri; ölüm öncesi sürecin zorluğu, ölüm korkusu, ölümün kurtuluş olduğu düşüncesi, bilinmezlik korkusu, acı çekerek ölme endişesi iken (Üzen & Ateş, 2020) farklı bir

araştırmaya katılan hemşirelerin ölüm karşısında yaşadıkları duygulara bakıldığında ise hemşirelerin büyük çoğunluğunun ölümü doğal karşıladığı, yaşamın bir gerçeği olduğu ve hastanın acılarının sona erdiğini düşündüğü ifade edilmiştir (Koku & Ateş, 2016). Silveira vd (2016)'in çalışmalarında "ölümün acı, üzüntü, ıstırap, korku, güçsüzlük ve başarısızlık gibi duygular yaşattığı" ifade edilmiştir. Bu duyguların nedeni hemşirelerin almış oldukları eğitimlerinde hedefin hastayı iyileştirmek olması ve bu amaca ulaşamayınca başarısızlık, hayal kırıklığı ve suçluluk duygusu hissetmeleri olduğu düşünülmüştür (Silveira vd., 2016). Bundan dolayı hemşirelerin eğitiminde ölümcül hastaya yönelik içeriklerin bulunması; her insanın ölüme tam olarak aynı tepkileri veremeyeceğini ve ölüme karşı verilen tepkilerin neler olabileceğini bilmeleri önemlidir (Şahin, 2016). Hemşireler ölümcül hastalara ve hasta yakınlarına bakım verirken; Kübler Ross (1969)'un tanımlamış olduğu inkar, öfke, pazarlık, depresyon ve kabullenme sürecini ve ölümcül hasta ve yakınlarının geçmiş deneyim, kültür, cinsiyet ve yaş gibi değişkenlere göre etkileneceği düzeyini göz önünde bulundurmalıdır. Örneğin, sürecin inkâr aşamasında olan bir hasta veya hasta yakınına uygulanacak hemşirelik bakım planı ile depresyon aşamasında uygulanacak hemşirelik bakım planı farklı olacaktır. Hemşireler, ölüm sürecinde olan hasta ve hasta yakınlarının bakımına ilişkin "gelişimsel" bir perspektife gereksinim duyarlar (Dönmez, 2018). Ölüm karşısında stres ve kaygı yaşamak beklenen bir durumdur. Ancak hemşireler ölüm karşısında kaygı yaşarken bakım ve tedavi gibi dikkat gerektiren bir iş yapmaktadır. Hafif kaygı durumlarında hemşireler etrafındaki olaylara karşı aşırı dikkatli olurlarken; yüksek kaygı durumunda hemşireler bakım ve tedavide aksaklıklara daha da kötüsü tıbbi hatalara neden olabilirler (Temelli, 2018). Hemşirelerin ölüm kaygı düzeyleri üzerinde çalışan Kayalı vd. (2015) ölüm olayının sık yaşandığı ve sık yaşanmadığı kliniklerde çalışan hemşirelerin ölüm kaygıları arasında anlamlı bir fark olduğunu tespit etmişlerdir (Kayalı vd., 2015). Bu doğrultuda yaşanabilecek tıbbi hataların önüne geçilebilmesi amacı ile ölüm kaygısının fazla yaşandığı kliniklerde çalışan hemşireler için önlem alınmalıdır. Dönmez (2018) 43 onkoloji hemşiresi ile yaptığı çalışmada; ölüm kaygısı, empati ve ölümcül hastaya karşı tutumu üzerinde *Yönlendirilmiş İmgeleme Tekniği*'nin etkili olduğunu göstermiştir. Yoğun bakım hemşirelerine göre ölüm, kayıp, acı veren bir olay, yaşamın sonu olarak tanımlanan ve keder çaresizlik, kaygı ve korku ile özdeşleşen bir terimdir.

Farklı bir açıdan bakıldığında ölüm karşısında geliştirilen tutum ve davranışların yaş, cinsiyet, eğitim durumu, medeni durum ve çalışma alanı gibi birçok

faktörlerden etkilendiği görülmektedir (Özhan, 2019). Özhan (2019) çalışmasında, yoğun bakım ünitesinde çalışan hemşirelerden bir kısmının beyin ölümü gerçekleşen hastalara bakım verirken üzüntü, çaresizlik ve acı hissettiğini, diğer kısmının ise tüm hastalar için hissettiklerinden farklı bir şey hissetmediğini belirtmiştir. (Özhan, 2019). Benzer olarak Baysak vd. (2019)'in çalışmasında, acil ve yoğun bakım çalışanlarının kaygı ve depresyon puanlarının yüksek olduğu görülmüştür. Bunun nedeninin ölümlerle yaşam arasındaki kritik hastalara ve resüsitasyona, ölüm sonrası yapılan işlemlere tekrar tekrar maruz kalmaları olarak görülmüştür (Baysak vd., 2019). Yine kanser hastalarına bakım veren hemşirelerin, değişiklik gösteren derecelerde psikolojik baskıya maruz kaldıkları tespit edilmiştir. Hemşireler arasındaki bu psikolojik sorunların profesyonel memnuniyet ve bakım kalitesi ile ilgili bazı sonuçları olduğu gösterilmiştir (Nwozichi vd., 2020). Hemşirelerin ölümle sık karşılaşmaları; iş doyumunda azalma, tükenmiş ruh hali, iletişimsizlik, kaygı, depresyon, duyarsızlaşma gibi psikolojik sıkıntılar yaşamalarına neden olmaktadır (Kızıltepe & Kurtgöz, 2022). Benzer olarak Karabağ ve Fidan (2021) ise çalışmalarında ölüm kaygısının yaşam doyumunu olumsuz etkilediğini göstermiştir. Karabağ ve Fidan ölüm kaygısı arttıkça, yaşam memnuniyetinin düştüğünü ifade etmektedir (Karabağ & Fidan, 2021). Yalom'a göre, bireyler enerjilerini ölüm korkusunu yenmek için hayatın birçok alanında harcarlar. Bu tür yönelimlerin merkezinde kaygı mevcuttur. Varoluşsal kaygılarla baş edebilen ve anlamlı ilişkiler içinde, anlamlı bir hayat yaşadığını düşünen bireylerde ölüm kaygısı düşmektedir (Tekçe, 2022). Bu bilgiler ışığında sağlık hizmetlerinde kilit bir rol oynayan hemşirelerin, etkili ve güvenli bakım verebilmeleri, kalite ve performansın artırılabilmesi ve verimliliğin düşmemesi için ruh sağlıklarının korunması gerekmektedir (Yayla & Ekinci, 2021).

## 2. Sonuç ve Öneriler

Palyatif bakım kliniklerinde hasta ve bakım vericiler açısından ölüm kavramının incelendiği birçok araştırma mevcuttur. Tüm çalışmaların incelenmesi sonucunda palyatif bakım kliniklerinde ölüm kavramı ve algısının hasta, hasta yakını ve hemşirelerde üzüntü, çaresizlik, öfke, kaygı, depresyon gibi olumsuz duygulara neden olduğu sonucuna varılmıştır. Önceki çalışmaların birçoğunda belirtildiği üzere ölümcül hastalıkla yüzleşmek bireylerin ölüm ve varoluş kavramlarını düşünmelerine neden olmaktadır. Ölüm düşüncesinin sınırlanamaması bireylerdeki ölüm kaygısının geçici üzüntü ve korkudan, ciddi kaygı bozukluğu ve depresyona uzanan tepkilere neden olduğu çalışmalarla gösterilmiştir. Benzer şekilde ölümle fazlaca yüzleşmekte olan hemşirelerde tüm

insanların evrensel olarak taşıdığı ölüm kaygısının genel popülasyona oranla daha fazla olduğu tespit edilmiştir. Bu durum iş verimi, iş doyumu ve yaşam kalitelerinde düşüşlere ve mesleki hatalara sebep olabilmektedir.

Tüm bu bilgilerin ışığında ölümcül hastalıkların hasta, hasta yakını ve hemşireler üzerinde yıkıcı etkileri olduğu ve bu nedenle psikososyal destek verilmesi son derece önemli görülmektedir. Bu amaçla sanat terapileri, grup terapileri, farmakolojik ya da non farmakolojik yöntemler ile rahatlama sağlanması önerilebilir. Unutulmamalıdır ki uygun baş etme yöntemleri ile ölüm farkındalığı çoğu zaman insani yönleri öne çıkararak; insanların kendilerini inşa etmelerine, gelişmelerine ve değişmelerine neden olabilmektedir.

### Finansal Kaynak

Bu çalışma sırasında, yapılan araştırma konusu ile ilgili doğrudan bağlantısı bulunan herhangi bir ilaç firmasından, tıbbi alet, gereç ve malzeme sağlayan ve/veya üreten bir firma veya herhangi bir ticari firmadan, çalışmanın değerlendirme sürecinde, çalışma ile ilgili verilecek kararı olumsuz etkileyebilecek maddi ve/veya manevi herhangi bir destek alınmamıştır.

### Çıkar Çatışması

Bu çalışma ile ilgili olarak yazarların ve/veya aile bireylerinin çıkar çatışması potansiyeli olabilecek bilimsel ve tıbbi komite üyeliği veya üyeleri ile ilişkisi, danışmanlık, bilirkişilik, herhangi bir firmada çalışma durumu, hissedarlık ve benzer durumları yoktur.

### Yazar Katkıları

Fikir/Kavram: Arzu Nurdaş; Tasarım: Arzu Nurdaş; Denetleme/Danışmanlık: Arzu Nurdaş; Veri Toplama ve/veya İşleme: Arzu Nurdaş; Analiz ve/veya Yorum: Arzu Nurdaş; Kaynak Taraması: Arzu Nurdaş; Makalenin Yazımı: Arzu Nurdaş; Eleştirel İnceleme: Arzu Nurdaş.

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