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## Investigation of Opinions of Nurses Working in Surgical Intensive Care Units about the Participation of Family Members in the Care of Patients during the Dying Process: A Cross-sectional Design

### Cerrahi Yoğun Bakım Ünitelerinde Çalışan Hemşirelerin Ölüm Sürecindeki Hastaların Bakımına Aile Üyelerinin Katılmaları Konusunda Görüşlerinin İncelenmesi: Kesitsel Bir Çalışma

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Aynur Koyuncu, Ayla Yava  
Hasan Kalyoncu University Faculty of Health Sciences,  
Department of Nursing, Gaziantep, Turkey

Yasemin Eren,  
Mersin City Training and Research Hospital, Mersin,  
Turkey

Aynur Koyuncu, PhD, RN, (✉),  
Hasan Kalyoncu University Faculty of Health Sciences,  
Department of Nursing, Gaziantep, Turkey

E-mail : aynrkoyuncu@yahoo.com.tr

Phone : +90 539 855 50 92

ORCID ID : orcid.org/0000-0003-3486-458X

**ABSTRACT Objective:** This study was conducted to determine the opinions of nurses working in surgical intensive care units (S-ICU) about the participation of family members (FM) in the care of patients during the dying process.

**Materials and Methods:** Ethical approval was obtained before starting the research. The study was conducted in descriptive type with 81 nurses working in the S-ICU of a training and research hospital between 15 March and 15 April 2022. The data were collected through the descriptive information form and the nurse's opinion determination form created by the researcher. STROBE checklist was used in reporting the research. A  $p<0.05$  value was accepted for statistical significance.

**Results:** The mean age of the nurses participating in the study was  $32.39\pm 5.87$  years, and the duration of working experience in S-ICUs was  $5.69\pm 5.76$  years. The rate of nurses wanting the FM of patients in the dying process to participate in the patient care in the intensive care unit is 26%, the rate of not wanting is 57%, and the rate of undecided is 17%. 72.8% of the nurses think that the participation of FM in care is beneficial for the patients, while 27.2% think that it is harmful. It was determined that nurses with working experience had a higher support rate in cases where FMs participated in the care of patients in the dying process ( $p=0.010$ ) ( $p<0.05$ ).

**Conclusion:** Although nurses working in S-ICUs think that the participation of FM in the care of patients in the dying process will be beneficial for patients, the rate of support is low.

**Keywords:** Patient in the dying process, end of life care, good death, nursing, surgical intensive care

**ÖZ Amaç:** Bu çalışma cerrahi yoğun bakım ünitesinde (C-YBÜ) çalışan hemşirelerin, ölüm sürecindeki hastaların bakımına aile üyelerinin (AÜ) katılması konusundaki görüşlerini belirlemek amacıyla yapıldı.

**Gereç ve Yöntem:** Araştırmaya başlamadan önce etik onay alındı. Araştırma 15 Mart ve 15 Nisan 2022 tarihleri arasında bir eğitim ve araştırma hastanesinin C-YBÜ'de çalışan 81 hemşire ile tanımlayıcı türde yapıldı. Veriler araştırmacı tarafından oluşturulan, tanıtıcı bilgiler formu ve hemşire görüşleri belirleme formu aracılığı ile toplandı. Araştırmanın raporlanmasında STROBE kontrol listesi kullanıldı. İstatistiksel anlamlılık için  $p<0,05$  değeri kabul edildi.

**Bulgular:** Çalışmaya katılan hemşirelerin yaş ortalaması  $32,39\pm 5,87$ , C-YBÜ'lerde çalışma deneyimi  $5,69\pm 5,76$  yıldır. Ölüm sürecindeki hastaların AÜ'lerin yoğun bakımda bakıma katılmasını isteme oranı %26, istememe oranı %57, kararsızların oranı %17'dir. Hemşirelerin %72,8'i AÜ'lerin bakıma katılmasının hastalar için yararlı, %27,2'si ise zararlı olduğu görüşüne sahiptir. Ölüm sürecindeki hastaların bakımına AÜ'lerin katıldığı durumlarda çalışma deneyimine sahip hemşirelerin, destekleme oranı daha yüksek olduğu belirlendi ( $p=0,010$ ) ( $p<0,05$ ).

**Sonuç:** C-YBÜ'lerde çalışan hemşirelerin ölüm sürecindeki hastaların bakımına AÜ'lerin katılımının hastalar için yararlı olacağını düşünmelerine rağmen destekleme oranı düşüktür.

**Anahtar Kelimeler:** Ölüm sürecindeki hasta, yaşam sonu bakımı, iyi ölüm, hemşirelik, cerrahi yoğun bakım



## Introduction

Death is a common phenomenon when providing comprehensive care to critically ill patients in surgical intensive care units (S-ICU) (1). Presence of family at the time of death (PFTD); is to maintain physical and psychosocial support by a representative, determined by the patient's family members (FM), while standing at a point that the patient can see (2,3). This practice takes its source from family-centered care theory. Family-centered care is a concept of care that prioritizes the preferences of patients and FMs. A representative from the family takes over the autonomy of the unconscious patient. The premise of this theory is that FMs are participants rather than spectators (2). However, in a limited number of studies, it has been shown that FMs can be with patients in ICUs, touch and talk to patients, participate in their care after death, and help health professionals (4-6). Despite the increase in the recovery possibilities of patients in S-ICUs, patients in the dying process spend their last days and hours in an isolation and separate from their FM (7,8). Patients often die before having the opportunity to say goodbye to their FMs (9).

Today, while the evidence for the benefits of PFTD application is increasing (10,11), there are also reports of its problems (10-14). In a study, it was determined that FMs want to participate in the PFTD application, but experience significant stress, fear, anxiety and depression during the death decision (10). In another study, it was determined that about half of FMs (48%) did not agree with the health professionals about the withdrawal of life support (11). Various studies have defined some obstacles and limitations about the implementation of PFTD (12-15). These limitations include; unrealistic demanding attitudes of FMs, conflict between FMs, presence of cultural and spiritual needs of FMs that healthcare professionals are unfamiliar with, exclusion of FMs in the decision-making process, racial and religious discrimination, and lack of awareness of health professionals (12,14).

PFTD practice is an unrealized goal for family-centered care, and its routine application is still controversial (3,16). A recent systematic review showed that healthcare professionals do not routinely practice PFTD (3). Most frequently reported causes include the thought that this practice may be distressing, destructive and traumatic for families, performance anxiety, fear of reaction, being sued, fear of exposure to violence of team members and architectural barriers (17).

FMs of patients are not allowed to participate in the patient care during dying process in surgical ICUs except

for 10-15 minutes visits for once a day, and therefore uninterrupted family support cannot be provided. In addition, FMs cannot also participate in care after death. Although nurses' opinions are one of the determinants of PFTD practice, no study was found in the literature that examines the opinion of nurses. It was evaluated that the opinions of the nurses about the PFTD practice could contribute to the identification of the obstacles and to the elimination of the lack of knowledge. In this way, care can be planned in line with the preferences of the patient and their families, and the goal of family-centered care can be achieved. The aim of this study is to determine the opinions of nurses working in S-ICUs about the participation of FM in the care of patients during the dying process.

## Materials and Methods

The research is a prospective, descriptive and cross-sectional study conducted with nurses working in S-ICUs of a training and research hospital between 15 March and 15 April 2022.

### Setting and Sample

The universe of the study consisted of 108 nurses working in the S-ICU of a training and research hospital. The sample size of the study was calculated with the G\*Power 3.1.9.7 program. Cohen's (d) standard effect size 18 was used with the one-way hypothesis. Assuming effect size: 0.3,  $\alpha$  error 0.05,  $\beta$  error 0.20, power: 80%; it was calculated that the minimum number of participants to be included in the sample should be (n=71). Fifteen nurses who did not volunteer to participate in the study, 12 nurses who were on leave at the time of the study, and 7 nurses who filled in the data collection form incompletely were excluded from the study. The research was completed with 81 nurses. In the study, 75% of the universe was reached.

Nurses, who are working in the S-ICUs of a training and research hospital and volunteered to participate in the study were included. The data of nurses who volunteered to participate in the study but wanted to leave at any stage afterward were not included in the study.

### Data Collection Tools and Methods

Data collection forms were created by the researcher (3,7,16-20). in accordance with the purpose of the research as a result of examining the literature. It consists of two parts, the descriptive information form and the nurse opinion determination form. In order to determine the validity of the nurse opinion determination form, expert opinion was

obtained from 1 intensive care specialist, 2 academician nurses, and 2 clinician nurses. Experts were asked to evaluate the clarity of each statement in the data collection form and its suitability with the aims and objectives of the research (1: not appropriate, 2: somewhat appropriate, 3: quite appropriate, 4: very appropriate). The content validity index (CVI) of the data collection forms was calculated as 1 according to the opinions of the experts. Since CVI: 1 was  $>0.80$ , data collection forms were considered suitable for this study (21). A pre-application was made with ten nurses to evaluate the appropriateness of the data collection forms.

In the first part of the data collection form, there are questions about the age, gender, education level, experience in nursing, duration of experience in the S-ICU, status of encountering a patient who has died before, status of losing a relative before, status of conflicting with a patient's family member before, status of being previously sued by a family member of nurses working of nurses working at a S-ICU. The second part of the data collection form consists of 34 structured questions to determine the opinions of nurses working in S-ICUs about the participation of FMs in post-mortem care practices. Eighteen of these questions are about determining the reason for wanting the family member to participate in the care of the patient in the dying process, and 16 of them are questions about the reason for not wanting the family member to participate in the care of the patient during the dying process.

A pilot study was conducted with 10 nurses to test the comprehensibility of the data collection forms before data collection. Since there was no need for correction in the data collection forms, the data obtained as a result of the pilot study were also included in the study. Before data collection, nurses working in S-ICUs were informed about the aims and objectives of the study. If nurses were volunteered to participate in the study, a voluntary information form was signed. Nurses who volunteered to participate in the study were asked to answer the questionnaire. It took 10-15 minutes for the nurses to answer the questions in the first and second parts of the data collection form.

### Statistical Analysis

Statistical analysis of the data was performed in SPSS 20.0 Windows package program. In descriptive statistics, number (n) and percent (%) values were used to represent categorical variables, and mean  $\pm$  standard deviation was used to represent numerical values. The dependent variable

of the study is the opinions of nurses working in S-ICUs about the participation of FMs in post-mortem care. The independent variables are age, gender, education level, professional experience, and experience in the S-ICU. The opinions of nurses working in S-ICUs about the participation of FMs in the post-mortem care were statistically compared with independent variables. Pearson chi-square test was used for comparisons of categorical variables. A  $p<0.05$  value was accepted for statistical significance.

### Ethical and Research Approvals

Before starting the study, approval was Hasan Kalyoncu University Health Sciences Non-Interventional Research Ethics Committee (decision no: 2022/019, decision date: 28.02.2022). After informing the nurses about the study, their written consent was obtained for being volunteer to participate in the study (22). All phases of the study were carried out in accordance with the Declaration of Helsinki of the World Medical Association (23). In the training and research hospital where the study was conducted, FMs are allowed to visit patients once a day in S-ICUs and the visit time is limited to 10-15 minutes. FMs of patients, whose condition is critical and who are in the terminal period, are not allowed to participate in post-mortem care in S-ICUs. S-ICUs have a room to inform FMs routinely and to report death.

## Results

### Participant Characteristics

The mean age of the nurses participating in the study was  $32.39\pm 5.87$ , 56.8% of them were female, and 88.9% of them were undergraduate graduates. The mean professional experience of nurses was  $10.40\pm 6.44$  years and the S-ICU experience was  $5.69\pm 5.76$  years. 51.9% of the nurses work in the anesthesia ICU, and 69.1% of them received training on the care of the patient in the dying process. 27.2% of the nurses witnessed the death of a relative, 55.6% of them wanted to participate in the care of a relative in the dying process. 27.2% of the nurses have working experience in cases where FMs participate in the care of patients in the dying process. It was determined that 23.5% of the nurses had a different opinion with the FMs about the care of the patient. It was determined that 8.6% of the nurses were sued and 4.9% were subjected to violence by the FMs (Table 1).

**Table 1. Distribution of descriptive characteristics of nurses working in surgical intensive care units (n=81)**

Characteristics	n	%
<b>Age (mean ± SD: 32.39±5.87, youngest: 24-oldest: 48)</b>		
≥30	35	43.2
31-40	36	44.4
≤41	10	12.3
<b>Gender</b>		
Female	46	56.8
Male	35	43.2
<b>Educational status</b>		
Health vocational high school	4	4.9
Graduate	72	88.9
Postgraduate	5	6.2
<b>Experience in nursing (years) (mean ± SD: 10.40±6.44, minimum: 1-maximum: 27)</b>		
≥5	13	16.0
6-10	39	48.2
≤11	29	35.8
<b>Surgical intensive care experience (years) (mean ± SD: 5.69±5.76, minimum: 1-maximum: 25)</b>		
≥5	54	66.7
6-10	17	21.0
≤11	10	12.3
Intensive care unit		
Surgical	16	19.8
Cardiovascular surgery	23	28.4
Anesthesia	42	51.9
<b>Status of receiving education about patient care in the dying process</b>		
Yes	56	69.1
No	25	30.9
<b>Witnessing the death of a first-degree relative</b>		
Yes	22	27.2
No	59	72.8
<b>Request to participate in the care of the relatives in the dying process</b>		
Yes	45	55.6
No	36	44.4
<b>Work experience in case of family members participating in the care of the patient in dying process</b>		
Yes	22	27.2
No	59	72.8
<b>The situation of different opinions with family members on the care of the patient in the dying process</b>		
Yes	19	23.5
No	62	76.5
<b>Case of being sued by family members of patients in the dying process</b>		
Yes	7	8.6
No	74	91.4
<b>The situation of violence by family members of patients in the dying process</b>		
Yes	4	4.9
No	77	95.1

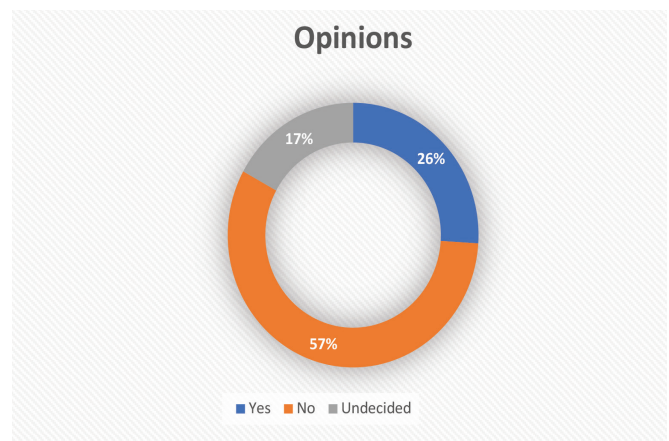
SD: Standard deviation

### Opinions of Nurses

Nurses participating in the study answered the “Should FMs be involved in the care of dying patients in S-ICUs?” question as follows: 57% yes, 26% no, and 17% undecided (Figure 1).

72% of nurses working in S-ICUs included in the study think that PFTD is beneficial for patients. Most frequently reported causes are as follows, FMs will help patients feel safe by reducing their fears (71.6%), FMs will provide psychosocial support to patients (64.2%), FMs will facilitate communication with the patient and enable rapid resolution of problems (49.4%). In addition, 44.4% of the nurses stated that FMs would provide urgently necessary drugs, blood and supplies for the patients, 28.3% of the nurses stated that FMs would provide faster access to information about the patient. It was also determined that 27.2% of the nurses think that the presence of FMs at S-ICU will ensure that patients receive care in line with their cultural, religious preferences and beliefs, and 23.5% are of the opinion that patients have a fundamental right to be with their FMs (Table 2).

24.7% of the nurses working in S-ICUs included in the study think that PFTD is beneficial for FMs. Most frequently reported causes are as follows, FM see that the necessary intervention has been made for the patients (44.4%), FM find the opportunity to say goodbye (write off each other’s debts) with patients (23.5%), and helps FM come to terms with death more quickly (23.5%). In addition, 19.8% of the nurses think that the grieving process will be alleviated by FMs, and 17.3% of nurses think that participation is a fundamental right for FMs (Table 2).



**Figure 1.** Opinions of nurses working in surgical intensive care units about the presence of family members in the intensive care unit of patients during the dying process (n=81)

18.5% of nurses working in S-ICUs included in the study think that PFTD is beneficial for healthcare professionals. 23.5% of the nurses think that it will make it easier to get approval for invasive procedures. It was determined that 17.3% of them were of the opinion that it would facilitate clinical decisions, and 16.0% thought that it would facilitate care and ease the workload of health professionals (Table 2).

33.3% of nurses working in S-ICUs included in the study think that PFTD is harmful for patients. Most frequently reported causes are as follows, the operation of the devices and equipment on the patients may be impaired (54.3%), may cause patients to become infected (54.3%). In addition, 53.1% of the nurses are of the opinion that it causes the patients to feel emotional, their stress and anxiety will increase, 50.6% of the nurses think that the treatment processes of the patients may be disrupted, and 49.4% of the nurses think that the vital signs of the patients may change (tachycardia, hypertension) (Table 3).

42% of nurses working in S-ICUs included in the study think that PFTD is harmful for FMs. 55.6% of the nurses think that this will be a traumatic process for FMs and will

have long-term effects. 54.3% of the nurses think that the psychological health of FM (anxiety, depression, etc.) may deteriorate, and 51.9% of the nurses think that the physical health of FMs (high blood pressure, fainting, etc.) may deteriorate (Table 3).

56.7% of nurses working in S-ICUs included in the study think that PFTD is harmful for health professionals. Most frequently reported causes are as follows, FM may apply violence to nurses (54.3%), FM can complicate the work of nurses (54.3%), FM may react to nurses (54.3%). While 53.1% of nurses think that dealing with FMs will increase the workload of nurses, 51.9% of nurses think that FMs can sue nurses (Table 3).

When the opinions of nurses working in S-ICUs about PFTD were compared in terms of descriptive characteristics such as age, gender, education level, experience in nursing, experience in surgical intensive care, the difference was not statistically significant ( $p>0.05$ ).

When the opinions of nurses working in S-ICUs about PFTD were compared in terms of the S-ICU, the difference was statistically significant ( $p=0.014$ ) ( $p<0.05$ ). On the

**Table 2. Reasons for nurses working in surgical intensive care units to request PFTD (n=81)**

Reasons for requesting PFTD	Yes n (%)	No n (%)	Undecided n (%)
<b>Beneficial for patients</b>	<b>59 (72.8)</b>	<b>2 (2.5)</b>	<b>20 (24.7)</b>
It reduces the fears of patients and makes them feel safe.	58 (71.6)	3 (3.7)	20 (24.7)
Provides physical and psychosocial support to patients.	52 (64.2)	5 (6.2)	24 (29.6)
It enables problems to be solved quickly by facilitating communication with the patient.	40 (49.4)	2 (2.5)	39 (48.1)
Provides the urgently needed medicine, blood, material for the patient.	36 (44.4)	7 (8.6)	38 (46.9)
Provides faster access to previous important information about the patient.	23 (28.4)	3 (3.7)	55 (67.9)
It ensures that patients receive care in line with their cultural, religious preferences and beliefs.	22 (27.2)	3 (3.7)	56 (69.1)
It is a fundamental right for patients.	19 (23.5)	4 (5.0)	58 (71.5)
<b>Beneficial for family members</b>	<b>20 (24.7)</b>	<b>2 (2.5)</b>	<b>59 (72.8)</b>
Family members see that the necessary intervention has been made for the patients.	36 (44.4)	3 (3.7)	42 (51.9)
Family members find the opportunity to say goodbye (write off each other's debts) with patients.	19 (23.5)	2 (2.5)	60 (74.1)
Helps family members come to terms with death more quickly.	19 (23.5)	5 (6.2)	57 (70.4)
Alleviates the grieving process of family members.	16 (19.8)	5 (6.2)	60 (74.1)
It is a fundamental right for family members.	14 (17.3)	7 (8.6)	60 (74.1)
<b>Beneficial for health professionals</b>	<b>15 (18.5)</b>	<b>5 (6.2)</b>	<b>61 (75.3)</b>
Makes it easier for healthcare professionals to obtain consent for invasive procedures.	19 (23.5)	2 (2.5)	60 (74.1)
Facilitates clinical decision making for healthcare professionals.	14 (17.3)	7 (8.6)	60 (74.1)
Relieves the workload of healthcare professionals, facilitates care.	13 (16.0)	8 (9.9)	60(74.1)

PFTD: Presence of family at the time of death



<b>Reasons for not requesting PFTD</b>	<b>Yes n (%)</b>	<b>No n (%)</b>	<b>Undecided n (%)</b>
<b>Harmful for patients</b>	<b>27 (33.3)</b>	<b>19 (23.5)</b>	<b>35 (43.2)</b>
The operation of the devices and equipment on the patients may be impaired.	44 (54.3)	2 (2.5)	35 (43.2)
May cause patients to become infected.	44 (54.3)	2 (2.5)	35 (43.2)
Causes patients to be emotional, increases their stress and anxiety.	43 (53.1)	3 (3.7)	35 (43.2)
It may disrupt the treatment processes of patients.	41 (50.6)	5 (6.2)	35 (43.2)
Patients' vital signs may change (tachycardia, hypertension).	40 (49.4)	6 (7.4)	35 (43.2)
<b>Harmful for family members</b>	<b>34 (42.0)</b>	<b>12 (14.8)</b>	<b>35 (43.2)</b>
It is a traumatic process for family members, has long-term effects.	45 (55.6)	1 (1.2)	35 (43.2)
It can impair the psychological health of family members (anxiety, depression, etc.).	44 (54.3)	2 (2.5)	35 (43.2)
It can impair the physical health of family members (high blood pressure, fainting, etc.).	42 (51.9)	4 (4.9)	35 (43.2)
<b>Harmful for health professionals</b>	<b>46 (56.7)</b>	<b>1 (1.2)</b>	<b>34 (42.1)</b>
Family members may apply violence to nurses.	44 (54.3)	2 (2.5)	35 (43.2)
Family members can complicate the work of nurses.	44 (54.3)	2 (2.5)	35 (43.2)
Family members may react to nurses.	44 (54.3)	2 (2.5)	35 (43.2)
Taking care of family members increases the workload of nurses.	43 (53.1)	3 (3.7)	35 (43.2)
Family members can sue nurses.	42 (51.9)	4 (4.9)	35 (43.2)
PFTD: Presence of family at the time of death			

other hand, when the opinions of nurses working in S-ICUs about PFTD were compared in terms of status of receiving education on patient care during the dying process, witnessing the death of a first-degree relative, willingness to participate in the care of the relative during the dying process, the difference was not statistically significant ( $p>0.05$ ). When the opinions of nurses working in S-ICUs about PFTD were compared in terms of the work experience where FM are involved in the care of a dying patient, the difference was found to be statistically significant ( $p=0.010$ ) ( $p<0.05$ ). When the opinions of nurses working in S-ICUs about PFTD were compared in terms of the situation of having different opinions with FM about the care of the patient in the dying process, the situation of being sued, the situation of being exposed to violence; the difference was not statistically significant ( $p>0.05$ ) (Table 4).

## Discussion

The most important finding of the study, in which the views of nurses working in the S-ICU about the involvement of FMs in the care of patients in the dying process were examined, is the low rate of nurses supporting the

participation of families in care. Only 26% of the nurses approve the PFTD practice. The reason for the very low rate of approval of PFTD by nurses in the study may be the thought of being subjected to verbal and physical violence by FMs of patients. It also suggested that nurses may lack knowledge about patient and family-centered care. Today, while there is a lot of evidence about the benefits of PFTD practice (6,11,24), there are also reports about its problems (10,11,24,25). Numerous studies have identified some barriers and limitations to the application of PFTD (12-15). These limitations include; unrealistic demanding attitudes of FMs, conflict between FMs, presence of cultural and spiritual needs of FMs that healthcare professionals are unfamiliar with, exclusion of FMs in the decision-making process, racial and religious discrimination, and lack of awareness of health professionals (12, 14). In-service training programs should be organized to increase the awareness of nurses and clinical practice guides should be created.

Although the rate of nurses supporting the PFTD application was very low in the study, 72.8% of the nurses think that the participation of FM in care is beneficial for the patients, while 27.2% think that it is harmful. The most important reasons for thinking that PFTD is beneficial are

<b>Table 4. Comparison of nurses working in surgical intensive care units on PFTD by descriptive characteristics (n=81)</b>				
<b>Characteristics</b>	<b>Should participate n (%)</b>	<b>Should not participate n (%)</b>	<b>Undecided n (%)</b>	<b>Test*/p</b>
<b>Age (mean ± SD: 32.39±5.87, youngest: 24-oldest: 48)</b>				
≥30	8 (9.9)	22 (27.2)	5 (6.2)	X <sup>2</sup> =3.304 p=0.508
31-40	12 (14.8)	17 (21.0)	7 (8.6)	
≤41	1 (1.2)	7 (8.6)	2 (2.5)	
<b>Gender</b>				
Female	11 (13.6)	26 (32.1)	9 (11.1)	X <sup>2</sup> =0.488 p=0.783
Male	10 (12.3)	20 (24.7)	5 (6.2)	
<b>Educational status</b>				
Health vocational high school	2 (2.5)	2 (2.5)	0 (0.0)	X <sup>2</sup> =1.765 p=0.779
Graduate	18 (22.2)	41 (50.6)	13 (16.0)	
Postgraduate	1 (1.2)	3 (3.7)	1 (1.2)	
<b>Experience in nursing (years) (mean ± SD: 10.40±6.44, minimum: 1-maximum: 27)</b>				
≥5	3 (3.7)	7 (8.6)	3 (3.7)	X <sup>2</sup> =3.401 p=0.493
6-10	13 (16.0)	19 (23.5)	7 (8.6)	
≤11	5 (6.2)	20 (24.7)	4 (4.9)	
<b>Surgical intensive care experience (years) (mean ± SD: 5.69±5.76, minimum: 1 - maximum: 25)</b>				
≥5	16 (19.8)	29 (35.8)	9 (11.1)	X <sup>2</sup> =1.768 p=0.778
6-10	4 (4.9)	10 (12.3)	3 (3.7)	
≤11	1 (1.2)	7 (8.6)	2 (2.5)	
<b>Intensive care unit</b>				
Surgical	1 (1.2)	8 (9.9)	7 (8.6)	X <sup>2</sup> =12.516 p=0.014
Cardiovascular surgery	9 (11.1)	12 (14.8)	2 (2.5)	
Anesthesia	11 (13.6)	26 (32.1)	5 (6.2)	
<b>Status of receiving education about patient care in the dying process</b>				
Yes	14 (17.3)	33 (40.07)	9 (11.1)	X <sup>2</sup> =0.360 p=0.835
No	7 (8.6)	13 (16.0)	5 (6.2)	
<b>Witnessing the death of a first-degree relative</b>				
Yes	5 (6.2)	12 (14.8)	5 (6.2)	X <sup>2</sup> =0.664 p=0.718
No	16 (19.8)	34 (42.0)	9 (11.1)	
<b>Request to participate in the care of the relatives in the dying process</b>				
Yes	15 (18.5)	23 (28.4)	7 (8.6)	X <sup>2</sup> =2.893 p=0.235
No	6 (7.4)	23 (28.4)	7 (8.6)	
<b>Work experience in case of family members participating in the care of the patient in dying process</b>				
Yes	10 (12.3)	7 (8.6)	2 (2.5)	X <sup>2</sup> =9.224 p=0.010
No	11 (13.6)	39 (48.1)	12 (14.8)	
<b>The situation of different opinions with family members on the care of the patient in the dying process</b>				
Yes	6 (7.4)	13 (16.0)	3 (3.7)	X <sup>2</sup> =0.282 p=0.869
No	15 (18.5)	33 (40.7)	11 (13.6)	
<b>Case of being sued by family members of patients in the dying process</b>				
Yes	3 (3.7)	3 (3.7)	1 (1.2)	X <sup>2</sup> =1.149 p=0.563
No	18 (22.2)	43 (53.1)	13 (16)	
<b>The situation of violence by family members of patients in the dying process</b>				
Yes	0 (0)	4 (4.9)	0 (0)	X <sup>2</sup> =0.664 p=0.718
No	21 (25.9)	42 (51.5)	14 (17.3)	

\*Test: Pearson chi-square, SD: standard deviation

as follows: It reduces the fears of the patients, makes them feel safe (71.6%), provides physical and psychosocial support to the patients (64.2%), facilitates communication with the patient and ensures that the problems are solved quickly (49.4%). In the literature, it has been reported that patients in the dying process experience fear, uneasiness and security anxiety (3,24). In the study of Leske et al. (24), it was emphasized that it is important for patients in the dying process to feel safe and know that they are not surrounded only by people they do not know. In the study, most frequently reported reasons for being harmful are as follows, the operation of the devices and equipment on the patients may be impaired (54.3%), may cause patients to become infected (54.3%). In addition, 53.1% of the nurses are of the opinion that it causes the patients to feel emotional, their stress and anxiety will increase. When the existing literature on this subject is examined, contrary to this view, it is seen that PFTD practice is beneficial for patients. There are reports that patients are relieved by feeling the presence of their FM even if they are unconscious (24,25).

In the study, 24.7% and 42% of the nurses thought that the PFTD application is beneficial, and harmful for FMs, respectively. This finding of the study made us think that nurses put the patient in the center while working to solve various problems of the patient and put the benefits of FMs in the second plan. Nurses should be informed about patient and family-centered care, and the importance of PFTD in terms of FMs should be emphasized. In the study, the most frequently reported reasons by nurses that PFTD is beneficial for FMs are as follows; FMs see that the necessary intervention has been made for the patients (44.4%), FMs find the opportunity to say goodbye to the patients (23.5%), enable FMs to accept death more quickly (23.5%). This finding of the study is similar to the existing literature. Evidence for PFTD practice reports that FMs play crucial roles for relatives and suggest some benefits for families as well (26-28). When FMs are with patients, they can be sure that everything is done for their loved ones and protect their rights (8), they can improve the quality of communication between patients and healthcare professionals (8,28), they can contribute to solving problems so that patients can live as well as possible until death (29). In this way, the comfort of the patients in their last days can be increased and the quality of life can be kept at the highest level (27-29). FMs, who stay with the patient in the last moments, can continue to have memories with the patient, find the opportunity to

say goodbye, and accept the information about the death of their loved ones faster (8). One study described how FMs tell a child they love him/her and let him/her die (5,8). This situation can prevent the pathological grief that threatens the health of FMs and alleviate the grieving process (8). In the study, the most frequently reported reasons by nurses that PFTD is harmful for FMs are as follows: It is a traumatic process for FMs and has long-term effects (55.6%), it can impair their psychological health (anxiety, depression) (54.3%), and it can impair their physical health (blood pressure, fainting) (51.9%). While the majority of FMs who are next to their relatives during the death process adapt well to the loss of their relative, 6-8% of them experience an intense and pathological mourning period with high psychological complications (9). The preferences of the patients and FMs should be kept in mind when making the PFTD decision. Precautions should also be taken against the possibility that FMs may be affected physically and psychologically.

In the study, 18.5% of the nurses think that PFTD application is beneficial for health professionals, and 56.7% of them think that it is harmful. The most common reasons reported by nurses that PFTD is beneficial for healthcare professionals are as follows: It facilitates the consent of health professionals for invasive procedures (23.5%), facilitates the clinical decision-making of health professionals (17.3%), eases the workload of health professionals and facilitates care (16%). Although a larger proportion of nurses think it is harmful, there is evidence in the literature about the benefits of PFTD. When the current literature about this subject is examined; it has been shown in a limited number of studies that FMs can contact patients, communicate with patients, participate in post-mortem care in case of death, and help health professionals (4,5,22). In the literature, it is also revealed that PFTD application has some benefits for health professionals. In a report published by the American Association of Intensive Care Nurses in 2016, it is reported that PFTD application facilitates medical decision making and increases the quality of care (30).

The most common reasons for nurses to think that PFTD practice is harmful to health professionals are as follows: Nurses may be exposed to violence by FMs (54.3%), FMs may complicate the work of nurses (54.3%), FMs may react to nurses (53.1%), FMs may sue nurses (51.9%). When the existing literature on this subject is examined, it has been shown that nurses are exposed to violence in their working



environments and can be sued (22,31-33). In a study of Pol et al. (31), it has been reported that ICU nurses are at risk for work-related violence. In a survey study conducted by Zhang et al. (32) with 4125 nurses in 28 hospitals; it was determined that 25.77%, 63.65% and 2.6% of the nurses were exposed to physical violence, to non-physical (verbal) violence, and to sexual harassment, respectively. It has been reported that 11.72% of the nurses have health problems due to this work-related violence (32). It has been reported in the study of Yavuz et al. (20), that FMs who witness the resuscitation of a relative may misunderstand the procedures, which increases the risks of violence and litigation against healthcare professionals. In a meta-analysis study by Aljohani et al. (33), It has been determined that 52% of violence against health professionals is perpetrated by FMs. Precautions should be taken for the safety of ICU nurses. Before admitting FMs to the ICU, FMs should be informed about the ICU environment, the characteristics of the patient and the rules they must follow.

The low rate of support for PFTD practice among anesthesia ICU workers in the study may be due to the fact that they frequently encountered patients in the dying process and were in dilemma about the benefits of PFTD. In the study, in cases where FMs participate in the care of patients in the dying process, nurses with working experience have a high rate of supporting PFTD. It was evaluated that concerns of nurses about PFTD could be reduced by sharing experience. Written procedures and practice guidelines are needed for the participation of FMs in ICUs.

The limitation of the study is that the study was conducted in a single center with a limited sample size. Therefore, the study findings cannot be generalized to the population. Being the first study on this subject makes the research findings valuable.

## Conclusion

The rate of nurses working in S-ICUs to support the participation of FM in the care of patients in the dying process is low. Working experience increases the support rate of nurses in cases where FM participate in the care of patients in the dying process. It is thought that it would be beneficial to provide in-service training and to identify and remove preventable obstacles to eliminate the lack of knowledge on this subject while examining the opinions of nurses on the practice of family presence in the dying process, since it may contribute to achieving the goal of family-centered care in line with the preferences of the patient and FM.

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## Ethics

**Ethics Committee Approval:** Ethical approval for this study was obtained from the Non-Interventional Research Ethics Committee of Hasan Kalyoncu University Health Sciences (decision no: 2022/019, decision date: 28.02.2022).

**Informed Consent:** After informing the nurses about the study, their written consent was obtained for being volunteer to participate in the study.

## Authorship Contributions

Surgical and Medical Practices: A.K., Y.E., A.Y., Concept: A.K., Y.E., A.Y., Design: A.K., Y.E., A.Y., Data Collection and Process: A.K., Y.E., A.Y., Analysis or Interpretation: A.K., Y.E., A.Y., Literature Search: A.K., Y.E., A.Y., Writing: A.K., Y.E., A.Y.

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## References

1. White DB, Ernecoff N, Billings JA, Arnold R. Is dying in an ICU a sign of poor quality end-of-life care? *Am J Crit Care.* 2013;22:263-6.
2. Goldfarb MJ, Bibas L, Bartlett V, Jones H, Khan N. Outcomes of Patient- and Family-Centered Care Interventions in the ICU: A Systematic Review and Meta-Analysis. *Crit Care Med.* 2017;45:1751-61.
3. Toronto CE, LaRocco SA. Family perception of and experience with family presence during cardiopulmonary resuscitation: An integrative review. *J Clin Nurs.* 2019;28:32-46.
4. Considine J, Eastwood K, Webster H, Smyth M, Nation K, Greif R, et al. Family presence during adult resuscitation from cardiac arrest: A systematic review. *Resuscitation.* 2022;180:11-23.
5. Barreto MDS, Peruzzo HE, Garcia-Vivar C, Marcon SS. Family presence during cardiopulmonary resuscitation and invasive procedures: a meta-synthesis. *Rev Esc Enferm USP.* 2019;53:e03435.
6. Bradley C. Family Presence and Support During Resuscitation. *Crit Care Nurs Clin North Am.* 2021;33:333-42.
7. Meier EA, Gallegos JV, Thomas LP, Depp CA, Irwin SA, Jeste DV. Defining a Good Death (Successful Dying): Literature Review and a Call for Research and Public Dialogue. *Am J Geriatr Psychiatry.* 2016;24:261-71.
8. Tenzek KE, Depner R. Still Searching: A Meta-Synthesis of a Good Death from the Bereaved Family Member Perspective. *Behav Sci (Basel).* 2017;7:25.
9. Krikorian A, Maldonado C, Pastrana T. Patient's Perspectives on the Notion of a Good Death: A Systematic Review of the Literature. *J Pain Symptom Manage.* 2020;59:152-64.
10. Bandini JI. Beyond the hour of death: Family experiences of grief and bereavement following an end-of-life hospitalization in the intensive care unit. *Health (London).* 2022;26:267-83.
11. Breen CM, Abernethy AP, Abbott KH, Tulskey JA. Conflict associated with decisions to limit life-sustaining treatment in intensive care units. *J Gen Intern Med.* 2001;16:283-9.
12. Fang ML, Sixsmith J, Sinclair S, Horst G. A knowledge synthesis of culturally- and spiritually-sensitive end-of-life care: findings from a scoping review. *BMC Geriatr.* 2016;16:107.
13. Erzincanlı S, Kasar KS. Hemşirelerin yaşam sonu bakıma yönelik tutum ve davranışlarının klinik karar vermeye etkisi. *Türk J Intensive Care.* 2021;00710.
14. Kirchoff KT, Beckstrand RL. Critical care nurses' perceptions of obstacles and helpful behaviors in providing end-of-life care to dying patients. *Am J Crit Care.* 2000;9:96-105.
15. Eskigölek Y, KAV S. Palyatif Bakım Hastaları ve Hemşirelerinin Gözünden İtibarlı Bakım. *THDD.* 2020;1:1-18.
16. Park M, Giap TT, Lee M, Jeong H, Jeong M, Go Y. Patient- and family-centered care interventions for improving the quality of health care: A review of systematic reviews. *Int J Nurs Stud.* 2018;87:69-83.
17. Porter JE, Cooper SJ, Sellick K. Family presence during resuscitation (FPDR): Perceived benefits, barriers and enablers to implementation and practice. *Int Emerg Nurs.* 2014;22:69-74.
18. Cohen J. *Statistical Power Analysis for the Behavioral Sciences.* New York: Lawrence Erlbaum Associates; 1988.
19. Breen LJ, Aoun SM, O'Connor M, Howting D, Halkett GKB. Family Caregivers' Preparations for Death: A Qualitative Analysis. *J Pain Symptom Manage.* 2018;55:1473-9.
20. Yavuz M, Totur Dikmen B, Altınbaş Y, Aslan Başlı A. Opinions for Family Presence During Cardiopulmonary Resuscitation in Turkey: A Literature Review. *Journal of Medical and Surgical Intensive Care Medicine.* 2013;:13-7.
21. Davis LL, Grant JS. Guidelines for using psychometric consultants in nursing studies. *Res Nurs Health.* 1993;16:151-5.
22. Emanuel EJ, Wendler D, Killen J, Grady C. What makes clinical research in developing countries ethical? The benchmarks of ethical research. *J Infect Dis.* 2004;189:930-7.
23. World Medical Association. Declaration of Helsinki 2008. Available from: URL: <http://www.wma.net/e/ethicsunit/helsinki.htm>. Accessed December 21, 2022.
24. Leske JS, McAndrew NS, Brasel KJ, Feetham S. Family Presence During Resuscitation After Trauma. *J Trauma Nurs.* 2017;24:85-96.
25. Maxton FJ. Parental presence during resuscitation in the PICU: the parents' experience. Sharing and surviving the resuscitation: a phenomenological study. *J Clin Nurs.* 2008;17:3168-76.
26. Rainsford S, MacLeod RD, Glasgow NJ, Phillips CB, Wiles RB, Wilson DM. Rural end-of-life care from the experiences and perspectives of patients and family caregivers: A systematic literature review. *Palliat Med.* 2017;31:895-912.
27. Stajduhar KI, Funk L, Outcalt L. Family caregiver learning—how family caregivers learn to provide care at the end of life: a qualitative secondary analysis of four datasets. *Palliat Med.* 2013;27:657-64.
28. Chi NC, Demiris G. Family Caregivers' Pain Management in End-of-Life Care: A Systematic Review. *Am J Hosp Palliat Care.* 2017;34:470-85.
29. Olgun Ş, Yavuz Van Giersbergen M. Evidence-based approaches: Nursing care of adults in the last days of life. *Ege Üniversitesi Hemşirelik Fakültesi Dergisi.* 2018;34:179-91.
30. Family presence: visitation in the adult ICU. *Crit Care Nurse.* 2012;32:76-8.
31. Pol A, Carter M, Bouchoucha S. Violence and aggression in the intensive care unit: What is the impact of Australian National Emergency Access Target? *Aust Crit Care.* 2019;32:502-8.
32. Zhang L, Wang A, Xie X, Zhou Y, Li J, Yang L, et al. Workplace violence against nurses: A cross-sectional study. *Int J Nurs Stud.* 2017;72:8-14.
33. Aljohani B, Burkholder J, Tran QK, Chen C, Beisenova K, Pourmand A. Workplace violence in the emergency department: a systematic review and meta-analysis. *Public Health.* 2021;196:186-97.