Perceptions and Satisfaction of the Relatives of Intensive Care Unit Patients Regarding the Role of Nurses

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ABSTRACT

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Purpose: This study was carried out to determine the perceptions and satisfaction of the relatives of intensive care unit patients regarding the role of nurses.
Materials and Methods: The sample of the study consisted of 154 patients' relatives in the intensive care units of a University hospital between July and October 2019. The Family's Perception of the Role of Nurses scale and Intensive Care Unit Satisfaction Scale was used for data collection.
Results: The mean total expectation score of the patients' relatives was 3.76±0.80 and the mean total score of nursing practices was 3.66±0.80. The intensive care satisfaction score of patient relatives was determined as 68,12±20,83. There was a significant positive correlation between nursing practices and care satisfaction, decision-making satisfaction, information satisfaction, and ICU satisfaction.
Conclusions: Patient relatives' behavioral role expectations from nurses and perceived role enactment score were above the average and there was a statistically significant difference between them. The intensive care satisfaction levels of the patient relatives were above average and there was a significant, positive, and high-level relationship between the perception of nursing practices and intensive care satisfaction.
Keywords; Intensive care unit, Nursing care, Satisfaction, Family

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INTRODUCTION

Intensive care units cause anxiety and stress for family members as well as for patients and healthcare professionals. If the increasing physical and psychological needs of the families of the patients cannot be met, it becomes difficult for them to cope with the crisis [1]. Since the technological equipment and functioning of intensive care units are different from other parts of the hospital, being treated in these units can have negative effects on the patient's family or relatives as well as on the patient [2,3]. While giving care to the patient whose condition is critical, nurses have to evaluate the situation of the relatives of the patients who constantly ask for information about the patient's condition, and support them in coping with this situation and adapting [4].

Even if most healthcare professionals accept that waiting in the intensive care phase causes stress for their relatives and that this phase is a crisis situation for the family, in many countries, patients' families are still not adequately informed, patient visits are limited, and relatives are not allowed to participate in patient care [5]. Approximately 87% of patients' relatives who are concerned about the condition of their patients experience trauma-induced stress [6]. In studies, it is stated that relatives of patients are worried about their patients' condition, they experience traumatic stress with helplessness and uncertainty, and serious anxiety and depressive symptoms may occur [3,7,8].

While planning the care and treatment of the patient whose condition is critical, healthcare professionals in intensive care units may ignore or overlook the needs of the patient's relatives, as they prioritize the situations that pose a psychological and physical threat to the patient [6]. It is stated that knowing and meeting the needs of patient relatives has a positive effect on the recovery process of the patient [6,9]. For this reason, it is important to determine the expectations of the relatives of the patients and to include the expectations of the relatives in the nursing care plans. It is important to know what the expectations of the society are in order to achieve the best result when applying nursing practices. To the extent that their expectations are met, the perception of society also changes [9]. The most important responsibility of nurses who adopt a holistic health approach is; promote optimal outcomes for both patient and family, support the family throughout the intensive care process, ensure their participation in patient care, meet their needs and consider their concerns [3,10]. When the needs of patients' relatives are taken into account, it will be easier for them to cope with the crisis they are experiencing and their satisfaction with intensive care will increase [1,11]. The relationship between intensive care workers and their family members is very important. Evaluating the experience of family members and their satisfaction with the care of a loved one is an important quality measure in the intensive care unit [12].

Nurses should be aware of the expectations of family members, In order to implement effective support strategies and maximize family satisfaction [13]. Knowing the needs and expectations of patients' relatives is very important in increasing the quality of the services provided. This study was carried out to determine the perceptions of the relatives of the patients in the intensive care unit about the role of nurses and their satisfaction with the intensive care units.

MATERIALS AND METHODS

Research Question
Within the scope of the research, answers are sought to the following questions:

1. How do the relatives of the patients in the intensive care unit perceive the role of nurses?
2. What is the satisfaction level of the relatives of the patients hospitalized in the intensive care unit?
3. Is there a relationship between the perception of the role of nurses by the relatives of the patients in the intensive care unit and their satisfaction with the intensive care unit?

Type of Research
This research is cross-sectional and descriptive.

Population and Sample of the Research
The population of the study consisted of all patient relatives who had patients in the Intensive Care Units (Anesthesia and Reanimation, Cardiovascular Surgery, Neurosurgery and General Surgery) at a university hospital in Izmir. The sample of the study consisted of 154 relatives of patients who had been hospitalized for at least 48 hours in the intensive care units where the research was conducted between July and October 2019. Individuals over the age of 18 who visited their patients at least twice during their stay and volunteered to participate in the study were included in the study.

At least 48 hours are expected to elapse to ensure adequate exposure to the intensive care unit [14]. In the literature, it is reported that the needs of patient relatives become more important after 48-96 hours [9,15]. For this reason, relatives of patients whose patients were in the intensive care unit for at least 48 hours were included in the study sample.

Data Collection Tools
In data collection, patient relatives descriptive characteristics form, "Family Members' Perception

of the Nurses' Role Scale" and "Family Satisfaction in the Intensive Care Unit (FS-ICU-24)" were used.

Relative Identification Form; Age, gender, marital status, educational status, employment status, occupation, degree of closeness with the patient, living with the patient, duration of care, etc. It is a form consisting of questions covering the individual and hospital process characteristics of patient relatives.

Family Members' Perception of the Nurses' Role Scale; The scale was developed by Fox et al. (2005) and the Cronbach alpha value was found between 0.79 and 0.86. Turkish validity and reliability study by Kaya et al. (2006) and the Cronbach alpha value was found between 0.78 and 0.80. The first part of this scale (12 items) is a 5-stage (1-Never, 5-Always) Likert-type scale to determine the expectations of patient families from nurses, and the second part (12 items) to determine what interventions the nurses actually implement in parallel with the first part. The score given for each item is taken as a basis. A minimum of 24 and a maximum of 120 points can be obtained from the scale. High scores indicate higher expectations and perceptions of nursing practices [15]. In this study, the Cronbach alpha value was found to be between 0.88 and 0.92.

Family Satisfaction in the Intensive Care Unit (FS-ICU-24)

The scale developed by Heyland and Tranmer (2001), validity and reliability studies were performed by Wall et al. (2007) and the Cronbach alpha value was found to be between 0.88 and 0.92.

The Turkish validity and reliability study was carried out by Taştan et al. (2014) and the Cronbach alpha value was found to be between 0.77 and 0.96.

The scale consists of 24 items in three dimensions: satisfaction with care (13 items), satisfaction with decision making (5 items) and satisfaction with information (6 items). Each item asks family members to indicate their satisfaction with a particular aspect of care, information, and decision-making.

Each of the 24 items in the Likert-type scale is graded between 1 and 5 points. Scoring is given as excellent (5), very good (4), good (3), moderate (2), poor (1).

Scales are converted to range from 0-100. Higher scores indicate greater satisfaction [16].

In this study, the Cronbach Alpha value of the scale was calculated as α=0.86, and the Cronbach Alpha values of the sub-dimensions as satisfaction with care, satisfaction with decision making, and information satisfaction as 0.86, 0.88 and 0.87, respectively.

Data Collection Method

Data collection forms were given to 154 relatives of patients who met the research criteria and agreed to participate in the study when they came to visit their patients. All of the distributed forms were returned to the researcher after they were filled out. There was no loss of data. Only one relative of each patient was included in the sample group.

Data analysis

The data obtained from the research was analysed using the software SPSS for Windows. The results were expressed asnumber (percentage), mean, standard deviation (±sd).

Since the data did not show normal distribution, continuous measurements were evaluated with nonparametric tests; Spearman correlation, Mann Whitney U and the Kruskal-Wallis test were used. The value of P<0.05 was considered the statistical significance limit.

Ethical considerations

The study was approved by the Non-Interventional Clinical Research Ethical Committee (Approval date: June 27, 2019 and Approval number: 2019/10-24).

Written permission was obtained from the institution where the study was carried out and informed consent was obtained formally patients before the study.

For the scales used in the study, permission was obtained from the authors who conducted the Turkish validity and reliability study via e-mail.

RESULTS

Sample characteristics

When the demographic characteristics of the relatives of the patients were examined; the mean age was 42±11.28 (min. 19, max. 75), 61% were female, 70.1% were married, 51.9% lived with the patient. When the information about the patient and the hospital process is examined; It was determined that 36.4% of the patients were hospitalized in the general surgery clinic, 79.2% of the patients were conscious and 58.4% were not connected to the ventilator. When the patients' average stay in the intensive care unit was 13.03±25.92 (min 2, max.169) days, the average daily visit time of the relatives of the patients was 7.47±3.67 (min.1, max. 20) minutes (Table 1).

Table 1. Descriptive characteristics of patient relatives (n=154)

Variable	Category	n	%
Gender	Woman	94	61
	Man	60	39
Marital status	Married	108	70,1
	Single	46	29,9
Educational Status	Literate + Primary Education	49	31,8
	High school	56	36,4
	University	49	31,8
Working Status	Working	74	48,1
	Not working	79	51,3
Affinity with the Patient	Partner	37	24
	Child	89	57,8
	Brother	14	9,1
	Other	14	9,1
Living with the patient	Yes	80	51,9
	No	74	48,1
Intensive Care Unit	Anesthesia	43	27,9
	Cardiovascular	24	15,6
	General Surgery	56	36,4
	Brain surgeon	31	20,1
The consciousness of the patient	Open	122	79,2
	Closed	32	20,8
The patient's state of being connected to the ventilator	Yeah	64	41,6
	No	90	58,4
		x±Sd	Min.-Max.
Age		42±11.28	19-75
Length of stay in intensive care (days)		13,03±25,92	2-169
Daily visiting time (minutes)		7,47±3,67	1-20

Behavioral role expectations, perceived role enactment and Saticfaction

When the scale scores were evaluated, the total mean score of expected nursing practices of patient relatives was 3.76±0.80, and the mean total score of perceived nursing practices was 3.66±0.80. Nurses' performance was higher than their expectations in the area of asking me to leave during procedures (P=0.001).

But, nurses' performance was lower than their expectations in the areas of explaining what I expect to see for first time (P=0.001), asking how am I coping with the situation (P=0.001), asking how illness affected the family (P=0.001), making sure I know their names (P=0.047), letting me spend as much time with the patient (P=0.008), making me feel I can phone at any time (P=0.001).

Table 2 demonstrates that the total behavioral role expectation score was statistically different from the total perceived role enactment score (P=.001) (Table 2).

A statistically significant relationship was found between closeness with the patient, the clinic where the patient was hospitalized, the patient's consciousness status and the total behavioral role expectation score of the patient's relatives (p<0.05).

A statistically significant relationship was found between the closeness of the patient and the relatives, the patient's consciousness status and the total perceived role enactment score of the patient's relatives (p<0.05) (Table 3).

The total FS-ICU-24 Survey mean score was 68,12±20,83. The care subscale mean score was 67,41±22,41, decision making subscale mean score was 67,56±16,75, and information subscale mean score was 70,12±23,41(Table 4).

A high positive correlation was found between the Family Members' Perception of the Nurses' Role Scale scores and the Family Satisfaction in the Intensive Care Unit scale scores (p<0.01) (Table 5).

Table 2. Comparisons of nurses' behavioral role expectations and role performance as perceived by family members

	Behavioral role expectation	Perceived role enactment	Test statistic	
Scale items	Mean ±Sd	Mean ±Sd	Z	p
1- Ask me to leave during procedures	4,51±0,62	4,74±0,59	-4.14	**0.001**
2- Talk about the patient's prognosis	4,33±0,81	4,26±0,84	-1.15	0.250
3- Explain the equipment	3,80±1,02	3,70±0,97	-1.80	0.071
4- Explain what I expect to see for the first time	3,55±1,05	3,29±1,25	-4.28	**0.001**
5- Ask how am I coping with the situation	3,61±1,07	3,41±1,24	-3.59	**0.001**
6- Ask how the illness affected the family	3,45±1,18	3,25±1,25	-3.58	**0.001**
7- Make sure I know their names	3,58±1,14	3,46±1,24	-1.98	**0.047**
8- Make me feel that I can ask questions	3,91±1,02	3,88±0,94	-0.75	0.449
9- Let me spend as much time with the patient	3,55±1,16	3,40±1,18	-2.67	**0.008**
10- Let me help take care of the patient	3,66±1,10	3,59±1,12	-1.14	0.252
11- Make me feel I can phone at any time	3,09±1,35	2,87±1,46	-3.38	**0.001**
12- Help me be near and communicate with the patient	4,07±0,84	4,03±0,85	-0.75	0.451
Total score	**3,76±0,80**	**3,66±0,80**	**-4.47**	**0.001**
Sd, standard deviation; Z, Wilcoxon test statistics.				

Table 3. Comparison of the descriptive characteristics of patient relatives and total behavioral role expectation score, and the total perceived role enactment score

Variable		n	Behavioral role expectation		Perceived role enactment	
			Mean ±Sd	Test statistic	Mean ±Sd	Test statistic
Gender	Woman	94	3,70±0,79	Z:-0,97	3,58±0,80	Z:-1,48
	Man	60	3,85±0,82	P:0,33	3,78±0,81	P:0,13
marital status	Married	108	3,78±0,80	Z:-0,61	3,67±0,80	Z:-0,16
	Single	46	3,72±0,81	P:0,54	3,63±0,83	P:0,81
Educational status	Primary education	49	3,88±0,73	KW: 4,25	3,67±0,73	KW:4,510
	High school	56	3,57±0,91	p:0,11	3,48±0,86	p:0,10
	University	49	3,86±0,71		3,84±0,78	
Working status	Working	75	3,71±0,85	Z:-0,71	3,67±0,84	Z:-0,007
	Not working	79	3,81±0,76	p:0,47	3,65±0,78	p:0,99
Relationship with the patient	Spouse	37	4,10±0,67	KW: 15,52 **p:0,001**	3,91±0,71	KW: 10,49 **p: 0,015**
	Child	89	3,56±0,84		3,50±0,86	
	Brother	14	3,73±0,62		3,58±0,51	
	Other	14	4,17±0,63		4,02±0,68	
Living with the patient	Yes	80	3,77±0,80	Z:-0,34	3,64±0,85	Z:-0,34
	No	74	3,75±0,81	P:0,72	3,68±0,76	P:0,73
The clinic where the patient is hospitalized	Anesthesia	43	3,59±0,73	KW:8,53 **P:0.036**	3,66±0,76	KW:6,12 P:0,10
	Cardiovascular	24	4,15±0,71		3,95±0,78	
	General surgery	56	3,68±0,89		3,47±0,88	
	Neurosurgery	31	3,83±0,71		3,77±0,68	
The consciousness of the patient	Open	122	3,87±0,79	Z:-3,389 **P:0,001**	3,73±0,78	Z:-2,456 **P:0,014**
	Closed	32	3,35±0,72		3,36±0,82	

Table 4. FS-ICU-24 Survey and subscale mean score

Subscales	Number of scale items	Mean±SD	Min.-Max.
Care	13	67,41±22,41	0-100
Information	5	70,12±23,41	0-100
Decision-making	6	67,56±16,75	0-85
Total	24	68,12±20,83	0-97
SD, standard deviation			

Table 5. Correlation of the FS-ICU-24 score and Behavioral role expectations score and The perceived role enactment score

Family Members' Perception of the Nurses' Role Scale		FS-ICU-24			
		Care	Information	Decision-making	Total
Behavioral role expectations score	r_s	0,824	0,705	0,753	0,818
	P	**0,001**	**0,001**	**0,001**	**0,001**
perceived role enactment score	r_s	0,759	0,616	0,684	0,745
	P	**0,001**	**0,001**	**0,001**	**0,001**
Total	r_s	0,798	0,666	0,724	0,788
	P	**0,001**	**0,001**	**0,001**	**0,001**
FS-ICU-24, Family Satisfaction in the Intensive Care Unit; ICU, intensive care unit;					

DISCUSSION

It is among the duties of the health personnel to meet the needs of the patient's family and relatives while the treatment of the patient in the intensive care unit is continued. The information, trust and support needs of patient relatives should be met by healthcare professionals [17]. In this study, individuals whose patients had been hospitalized for at least 48 hours and who visited their patients at least twice during their hospitalization were included in the study so that relatives of the patients could observe the nurses adequately. The mean duration of stay in the intensive care unit of the patients was 13.03±25.92 days, which was considered to be quite sufficient time for the relatives of the patients to observe the nurses. In this study, patient relatives' behavioral role expectation score (3.76±0.80) and their perceived role enactment score (3.66±0.80) were above the average and there was a statistically significant difference between them (p<0.05).

It is stated that the equipment, IV lines, drugs and sounds in the intensive care unit often lead to feelings of fear and powerlessness in family members and cause traumatic experiences [18]. In this study, the level of meeting the expectations for the items "Explain what I expect to see for first time", "Ask how am I coping with the situation", "QAsk how illness

affected the family" is low. Similar to the results of this study, in the study conducted by Malliarou et al. (2014), it was determined that the nurses did not meet the expectations of their family members in terms of explaining the equipment used with the patients, preparing the family members for their first visit, and asking how they were coping with the situation [13]. It is seen that the high expectations of the relatives of the patients regarding these issues are not met and that the nurses should pay more attention.

Among the expectations of the relatives of the patients from the nurses, the highest rate was related to removing the visitors from the room before the care procedures. Similar results were obtained in previous studies [6,15]. This result can be interpreted as the relatives of the patients do not want to witness the interventions applied to their patients during the care and treatment procedures.

In this study, there was no significant difference between the age, gender, marital status, educational status, working status, and living with the patient of family members and the total behavioral role expectation score and the total perceived role enactment score of the patient's relatives (p>0.05). The total behavioral role expectation score and the total perceived role enactment score of the relatives of the conscious patients were significantly higher than the relatives of the unconscious patients (p<0.05). It is

stated that when conscious patients in the intensive care unit witness all the chaos of the intensive care unit, they need more moral support and meeting with the family members of the patient will give him the assurance that his social roles are continuing, and can accelerate the recovery process by supporting his independence [19]. If the patient is conscious, it is an expected result that the patient's relative's desire to spend time with their patient increases.

The opinions of patient relatives about nursing care are important in terms of reflecting and structuring the quality of nursing services provided [20]. Increasing family satisfaction with care is critical for preventing negative psychological consequences for both patients and themselves [21]. This study shows that family members are generally satisfied with the care received in the intensive care unit. When the results of the studies in the literature on the subject are examined, it is seen that results similar to our research findings are obtained [11,22,25] there are also studies showing that satisfaction is not at the desired level [26]. The fact that the relatives of the patients cannot observe all the procedures personally during the intensive care treatment process, that intensive and invasive treatments are applied to the patients in short-term visits, and that the patient is connected to some machines, maximizes their fear and anxiety [19,27]. With these feelings, patient relatives need to trust health professionals that their patients receive the best treatment and care. In this study, the care satisfaction of patients' relatives is above the average, reflecting their trust in health professionals and the competence of the intensive care team in making care visible.

Many families experience time spent in the ICU as challenging and full of uncertainties regarding the ICU patient's condition, treatment, and prognosis. They want to participate in patient care and be involved in decision-making processes [28]. In the study conducted by Lam et al. (2015) to evaluate the satisfaction of patients' relatives in intensive care, they stated that they wanted to participate more in the decision-making process and needed more support in this process [25]. In this study, the "decision-making satisfaction" of patients' relatives was above the average. When the results of the studies in the literature on the subject are examined, it is seen that results similar to this study were obtained [11,22,23-25]. Sharing the decision-making process with patient relatives; It is important to increase the knowledge between patient relatives and health personnel, to remove the emotional burden on patients' relatives and to enable patients' relatives to have a say over their patients [29].

In the study, the "information satisfaction" of the relatives of the patients was above the average. When the results of the studies in the literature on the subject are examined, it is seen that results similar to this research findings were obtained [16,22,25]. Providing sufficient, honest, desired time and frequency information is important for patients' relatives to cope with stress and anxiety and to prevent them from experiencing depression in the long term [30].

In this study, a high positive correlation was found between the family members' Perception of the nurses' role scale scores and the family satisfaction in the intensive care unit scale scores (p<0.01) This result reveals that patient relatives' perceptions of nursing care significantly affect care satisfaction. Unlike the result of this study, Liang et al. (2021), in which family satisfaction in the intensive care unit was evaluated, there was no significant relationship between the care relationship and family satisfaction. It has been stated that the reason for this may be due to the little involvement of family members in care activities in intensive care units [21].

LIMITATIONS

This study results cannot be generalized to the whole of intensive care unit patients' relatives population in Turkey, as the study was conducted in only a state hospital.

CONCLUSIONS

Patient relatives' behavioral role expectation from nurses and perceived role enactment score were above the average and there was a statistically significant difference between them. Intensive care satisfaction levels of the patient relatives were above average and there was a significant, positive and high level relationship between perception of nursing practices and intensive care satisfaction. According to the results obtained from the research, it is suggested that more research should be conducted on the organization of nursing practices in a way that responds to expectations and the perception of the roles of nurses by family members.

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Conflicts of Interest
There is no conflict of interest.

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