The European Research Journal 2025;11(1):57-67 Original Article

DOI: https://doi.org/10.18621/eurj.1478912 *Health Care*

Identification of needs of family members of surgical intensive care unit patients: a cross-sectional study

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ABSTRACT

Objectives: It is aimed to determine the needs of family members whose patients are hospitalized in surgical intensive care unit.

Methods: Data were collected from 150 family members hospitalized in the surgical intensive care unit of a large university hospital. Data were collected using the Patient Relative Introduction Form and the Patient Relatives' Needs Scale in Intensive Care Units (CCFNI=Critical Care Family Need Inventory).

Results: Of the participants, 25.3% are female, while 68.7% are married. While 71.3% of the participants stated that they received information from their patients in the days following admission, only 4% of the participants were informed about intensive care; all participants stated that they were not given any pamphlets or brochures about intensive care. Among the healthcare professionals, doctors were identified as the individuals who establish solid and reliable communication, with 53% of the participants.

Conclusions: It has been determined that the needs of patient relatives are very important, with the most crucial need being to know the patient's chances of recovery. Meeting all the physical, mental, and psychosocial needs of patients and their relatives receiving treatment in intensive care units can only be achieved through assessments and taking necessary precautions. This approach aligns with a family-centered care approach and establishes a quality healthcare service infrastructure. This research provides data on patient experiences and the needs of patient relatives.

Keywords: Surgical intensive care, nursing care, family requirements, family members' needs

Intensive Care Units (ICU), where intensive treatment/care practices are provided to critically ill patients and are isolated areas, differ from other care settings in hospitals [1, 2]. Consequently, with the admission of a patient to the intensive care unit, different crises arise for the patient and their family [3]. Factors contributing to the emergence of crises include restricted interaction with the patient and family, the patient's critical condition and risk of mortality, changes in the family's routine life, increased need for information about the patient's health status, rules of the institution or ICU that family members must adhere to, and the family's financial difficulties [4]. Planning and providing care in the intensive care unit may lead to neglecting or overlooking details of the patient's condition, despite aiming to alleviate the physical and psychological stress experienced by the patient [5].

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How to cite this article: Öztaş İ, Yava A, Koyuncu A, Kaptanoğlu S. Identification of needs of family members of surgical intensive care unit patients: a cross-sectional study. Eur Res J. 2025;11(1):57-67. doi: 10.18621/eurj.1478912

Received: May 5, 2024
Accepted: June 23, 2024
Published Online: August 2, 2024

The survival of the patient as a loved one, along with physical changes and adverse effects within the family, is noteworthy. Before the occurrence of family events, only a 1.2% rate of health problems was experienced, but after the patient's illness, this rate increased to 17.9%; common health issues frequently reported among family members include the onset of insomnia, changes in eating and drinking habits, and disturbances in bowel habits [6].

In Molter's study, "hope needs" were identified as universal components of the patient's relatives. In addition, other significant circumstances such as access to adequate and reliable information and the hospital staff's attitude towards patient information are given as consequential outcomes. Despite the provision of alternative resources for meeting family needs, patient families desire these services to be addressed by healthcare providers supported by physicians and nurses [7].

In other studies, the needs of family members during the intensive care period are ranked as information, trust, and closeness [8-10]. Family members express the desire to know that their loved ones are being well cared for and indicate that they want to receive information on this at least once a day [11].

There are studies conducted using different methods to determine the needs of patient families [4, 12-15]. Through identifying these needs, quality counseling and education will be provided to families based on their priority needs, ensuring continuity of nursing care and comprehensive care, assisting in reducing recurrent admissions, and preventing complications. It is believed that early detection will lead to an increase in the quality of life for intensive care patients and their families. However, in our country, especially in surgical intensive care, the number of studies aimed at determining the needs of patient families is limited [6, 13, 16]. The conducted studies mostly focus on general intensive care family needs. In this context, this study aims to determine the needs of family members of patients admitted to surgical intensive care.

METHODS

Population and Sample of the Research

This study is a descriptive and cross-sectional study. In the study, data on patients and family members who met the sampling criteria for Determination of Family Needs of Surgical Intensive Care Unit Patients were collected. Research data were collected after Ethics Committee approval (2021/037), approval of the institution where the research would be conducted, and consent of the volunteer family members.

Interviews were conducted with the relatives of the patients who volunteered to participate in the study by face-to-face interviews inside or outside the hospital.

Data Collection Forms and Explanations

Patient Relative Introduction Form

In the study, a 35-question form prepared by the researchers by reviewing the literature, including demographic characteristics, degree of closeness, duration of stay in surgical intensive care, number of hospitalizations in surgical intensive care, days of hospitalization in surgical intensive care, and questions about surgical intensive care and hospital was used [6, 13, 17].

Patient Relatives' Needs Scale in Intensive Care Units

In order to determine the needs of family members of patients hospitalized in the intensive care unit, the Critical Care Family Need Inventory (CCFNI=Critical Care Family Need Inventory) developed by Molter [7] in 1979 will be used. The scale was developed as a clinical tool to emphasize the importance of the needs of families with patients in intensive care and to measure family needs.

Reliability and validity studies have been conducted in many languages and cultures. A validity-reliability study was conducted by Büyükçoban *et al*. [13] to adapt the scale to the Turkish population. The Cronbach's alpha value of the original scale was found to be 0.93.

The NMMRS consists of 40 questions and is graded from 1 to 4 (1=Unimportant, 2=Slightly important, 3=Important, 4=Very important). There are five need sub-dimensions in the scale: "Trust", "Information", "Proximity", "Support", "Comfort". The questions belonging to the "Information" sub-dimension in the scale; 2-3-9-11-13-14-17-33-34, questions belonging to the "Trust" sub-dimension; 4-12-15-38-39, questions belonging to the "Proximity" sub-dimension; 8-26-32-35-36-37-40, questions belonging to the "Support" sub-dimension; 1-5-7-10-16-21-22-23-24-

Table 1. Information about the participants

	mean±SD	Median (min-max)
Age (year)	40.11±13.04	40 (18-69)
Patient's intensive care stay (days)	10.35±12.83	6 (1-77)
Time spent in hospital per day (hours)	5.52±3.26	5 (1-18)
	n	**%**
Gender		
Female	38	25.3
Male	112	74.7
Marital status		
Married	103	68.7
Single	47	31.3
Social health insurance		
Yes	106	70.7
No	44	29.3
Education status		
Literate	15	10.0
Primary education	23	15.3
High School	54	36.0
Bachelor's degree or higher	58	38.7
Occupation status		
Self-employment	36	24.0
Public employee	64	42.7
Housewife	9	6.0
Retired	12	8.0
Unemployed	29	19.3
Place of residence		
Province center	111	74.0
Village	8	5.3
District	17	11.3
In another province	14	9.3
Income status		
Income more than expenditure	15	10.0
Income equal to expenditure	60	40.0
Income less than expenditure	75	50.0
Relationship with your patient 1st degree relative		
Child	11	7.3
Wife	22	14.7
Mom and dad	65	43.3
Brother	30	20.0
2nd degree relative		
Uncle	7	4.7
Uncle	3	2.0
Still	2	1.3
Auntie	10	6.7
Place of accommodation for family members during the surgical intensive care unit		
Hospital garden	95	63.3
Own house	102	68.0
Hotel	11	7.3
Hospital canteen	10	6.7
Next of kin	30	20.0
Hospital waiting room	92	61.3
Relatives' homes	10	6.7
Where do you meet your basic needs such as eating and drinking? (You can select more than one option)		
Hospital canteen	105	70
Own home or a relative's home	121	80.7
Restaurant inside the hospital	35	23.3
Nearest restaurant	55	36.7

Min=minimum, Max=maximum, SD=standard deviation

27-28-30-31, questions belonging to the "Comfort" sub-dimension; 6-18-19-20-25-29 [13]. The relatives of the patients were asked to rate each item between 1-4 points, and each need expression in the scale was evaluated with "Unimportant" 1 point, "Less Important" 2 points, "Important" 3 points, and "Very Important" 4 points. In the scoring of the data, each need item is collected within the need sub-dimensions to which it belongs.

However, the "Trust, Information, Proximity, Support, Comfort" sub-dimensions of the scale are evaluated separately. Lower scale sub-dimension mean scores indicate that the needs are decreasing, while higher mean scores indicate that the needs are increasing. Permission for the use of the CCFNI was obtained from the author via e-mail.

Statistical Analysis

R vers. 2.15.3 program (R Core Team, 2013) was used. Minimum, maximum, mean, standard deviation, median, first quartile, third quartile, frequency and percentage were used to report the study data. The conformity of quantitative data to normal distribution was evaluated by Shapiro-Wilk test and graphical analysis. Independent groups t test was used in the evaluations of the variables showing normal distribution between two groups. Mann-Whitney U test was used in the evaluations of variables that did not show normal distribution between two groups, Kruskal-Wallis test and Dunn-Bonferroni test were used in the evaluations between more than two groups. Pearson correlation analysis was used to determine the level of relationship between quantitative data. Cronbach's alpha coefficient was used to determine the internal consistency of the scale items. Statistical significance was accepted as $P<0.05$.

RESULTS

The ages of the participants ranged between 18 and 69 years and the duration of the patients' stay in intensive care unit ranged between 1 and 77 days. The daily time spent by the patient's relatives in the hospital varied between 1 and 18 hours. While 25.3% of the participants were female; 68.7% were married. While 10% of the participants were literate, the rest were distributed as primary, high school and higher education; 24% were self-employed, 42.7% were public employees, 6% were housewives, 8% were retired, 19.3% were unemployed and only 10% of them had an income higher than their expenses. 26% of the partici-

Table 2. Table Family members' information and communication status with intensive care unit staff (N=150)

	n	%
Family members' access to information and communication with intensive care unit staff	**6**	**4**
Obtaining information about the patient's condition on the first day of admission		
Yes	**111**	**74**
Receiving information about the patient's condition in the following days		
Yes	**107**	**71.3**
Obtaining information about the intensive care environment on admission of the patient		
Yes	**6**	**4**
Getting information about the intensive care environment and procedures with a booklet/brochure		
Yes	**0**	**0**
Communicate with care and treatment providers		
Yes	**107**	**71.3**
Feeling in a decision-making role as a family member		
Yes	**55**	**36.7**

pants live far away from the hospital and 95 of them live in their own homes. 70% of the participants used the hospital canteen to meet their basic needs (Table 1).

While 71.3% of the participants stated that they received information from their patients in the days following hospitalization, only 4% of the participants were informed about intensive care and all of the participants stated that they were not given booklets or brochures about intensive care. 65.3% of the participants stated that the care of other family members was disrupted due to the needs and care of their relatives in intensive care, 56% stated that their responsibilities at home, 70.7% stated that their family relationships and 91.3% stated that their social life was affected. 57.3% of the participants stated that there was an increase in their current health problems; 71.3% stated that they could communicate with caregivers and treatment providers (Table 2).

When the distribution of healthcare professionals from whom family members received information about the condition of their patients was examined, it was determined that 64.7% and 56% of the healthcare professionals were doctors in the first and the following days after hospitalization, respectively; again, among the healthcare professionals, doctors were the ones with whom the participants established strong and reliable communication with 53% (Table 3).

The number of items, possible score ranges, minimum-maximum, medians, means, standard deviations and internal consistency values of the scale sub-dimensions of the Patient Relatives' Needs Scale in Intensive Care Units, which are comfort, closeness, trust, information and support, are given in Table 4.

There was no statistically significant difference

Table 3. Distribution of healthcare professionals from whom family members received information about the condition of their patients (n=150)

Health worker received information	n	%
Health worker received information on the first day of hospitalization		
Doctor	**97**	**64.7**
Nurse	**2**	**1.3**
Other health personnel	**12**	**8**
None	**39**	**26**
Health worker received information in the following days of hospitalization		
Doctor	**84**	**56**
Nurse	**7**	**4.7**
Other health personnel	**43**	**28.7**
None		
Healthcare worker receiving any information about the hospital and intensive care environment		
Doctor	**1**	**0.7**
Nurse	**1**	**0.7**
Other health personnel	**4**	**2.6**
None	**144**	**96**
Healthcare worker establishing a solid and reliable communication with the persons caring for and treating the patient		
Doctor	**80**	**53.3**
Nurse	**16**	**10.6**
Other health personnel	**4**	**2.7**
None	**50**	**33.4**

(P>0.05) between the total score and sub-dimensional scores of the CCFNI and the duration of daily stay in the hospital and gender of the participants. There was a statistically significant difference (P<0.05) between the total score and sub-dimensions of the CCFNI and the participants' age, length of stay in the intensive care unit, marital status, social security, occupation, proximity to the patient, place where basic needs are met - hospital canteen, presence of other dependent person, affecting home responsibilities, and history of health problems. It was determined that there was a statistically significant correlation only between the total score and sub-dimensions of the CCFNI and the participants' place of residence; support, comfort sub-dimensions and accommodation-hospital canteen; trust, CCFNI total score and restriction of social life; trust, closeness, CCFNI total score and affecting responsibilities at home; knowledge, trust, comfort, CCFNI total score (P<0.05) (Table 5).

It was found that there was a statistically significant positive correlation between the participants' CCFNI Knowledge scores and Trust (r=0.913, P<0.001), Proximity (r=0.827, P<0.001), Support (r=0.851, P<0.001), Comfort (r=0.812, P<0.001) sub-dimension and total (r=0.949, P<0.001) scores. It was found that there was a statistically significant positive relationship between the participants' CCFNI Trust scores and closeness (r=0.849, P<0.001), support (r=0.733, P<0.001), comfort (r=0.772, P<0.001) sub-dimension and total (r=0.886, P<0.001) scores. It was found that there was a statistically significant positive correlation between the participants' CCFNI Intimacy scores and Support (r=0.810, P<0.001), Comfort (r=0.812, P<0.001) sub-dimension and total (r=0.910, P<0.001) scores. It was found that there was a statistically significant positive relationship between the participants' CCFNI Support scores and Comfort (r=0.822, P<0.001) sub-dimension and total (r=0.950, P<0.001) scores. It was found that there was a statistically significant positive correlation between the participants' CCFNI Comfort scores and total (r=0.902, P<0.001) scores (Table 6).

DISCUSSION

Since the hospitalization of the patient in the intensive care unit is usually the result of an acute situation, a stressful and difficult process begins for the family members, for which they are not prepared and will face unknown things [18, 19]. They feel hopeless and helpless if there is no one to give them information and meet their needs. Therefore, it is necessary to know what family members need in order to successfully complete this process [20]. In recent years, many studies have been conducted to determine the concerns and needs of family members with patients in intensive care, and interventions to increase the well-being of both patients and family members have come to the agenda. In this context, it is generally recommended to improve communication, support systems and provide a relaxing/appropriate physical environment [20].

In a study conducted in our country to determine the needs of 201 relatives of patients with patients in the intensive care unit, it was found that seven of the 10 needs perceived as the most important by family

Table 4. Mean scores of the sub-dimension of the patient relatives' needs scale in intensive care units

Scale sub-dimensions	Number of items	Possible score range	Min-Max (Median)	Mean±SD	Internal consistency
Comfort	**6**	**6-24**	**12-24 (22)**	**21.05±2.88**	**0.900**
Closeness	7	7-28	18-28 (26)	25.13±2.97	0.861
Confidence	**5**	5-20	14-20 (19)	18.26±1.93	0.865
Information	**9**	9-36	21-36 (33)	31.22±4.59	0.919
Support	**13**	13-52	27-52 (41)	43.27±7.30	0.948
Total	**40**	40-160	97-160 (138.5)	138.93±18.30	0.977

Min=minimum, Max=maximum, SD=standard deviation

Table 5. Comparison of the participants' scores on the CCFNI according to their descriptive characteristics

Features		Information	Confidence	Closeness	Support	Comfort	CCFNI total score
Age	**r**	0.412	0.403	0.423	0.440	0.378	0.449
	P value	**<0.001***	**<0.001***	**<0.001***	**<0.001***	**<0.001***	**<0.001***
Patient's length of stay in intensive care	**r**	0.212	0.163	0.179	0.149	0.057	0.168
	P value	**0.009***	**0.046***	**0.028***	**0.070**	**0.491**	**0.040***
Daily time spent in hospital	**r**	0.106	0.084	-0.002	-0.133	0.022	-0.014
	P value	**0.196**	**0.307**	**0.981**	**0.105**	**0.792**	**0.861**
Gender							
Female	38	31.58±4.82	18.21±2.12	25.18±3.16	44.32±6.49	20.92±3.06	140.21±18.31
Male	112	31.1±4.52	18.28±1.87	25.11±2.92	42.92±7.55	21.09±2.82	138.49±18.36
[a]Test value (t)		**0.557**	**-0.182**	**0.138**	**1.019**	**-0.311**	**0.499**
P value		**0.578**	**0.856**	**0.891**	**0.310**	**0.757**	**0.618**
Marital status							
Single	47	28.49±4.5	17.06±1.9	23.47±2.84	38.89±6.21	19.47±2.89	127.38±16.47
Married	103	32.47±4.07	18.81±1.69	25.88±2.73	45.27±6.9	21.77±2.58	144.19±16.66
[a]Test value (t)		**-5.366**	**-5.632**	**-4.965**	**-5.631**	**-4.875**	**-5.753**
P value		**<0.001***	**<0.001***	**<0.001***	**<0.001***	**<0.001***	**<0.001***
Social security							
There is	106	31.89±4.46	18.56±1.82	25.58±2.88	44.44±7.12	21.58±2.76	142.05±17.78
No	44	29.61±4.54	17.55±2.02	24.05±2.96	40.45±7.02	19.75±2.75	131.41±17.52
[a]Test value (t)		**2.828**	**2.999**	**2.941**	**3.136**	**3.706**	**3.351**
P value		**0.005***	**0.003***	**0.004***	**0.002***	**<0.001***	**0.001***
Profession							
Self-employment	36	29 (26, 35)	18 (16.5, 20)	24.5 (22, 28)	39.5 (36, 46)	20 (18, 24)	130 (119, 150)
Public employee	64	33 (27, 36)	19.5 (17, 20)	26 (24, 28)	42 (39, 52)	22 (18, 24)	140 (127, 160)
Housewife	9	36 (29, 36)	20 (16, 20)	28 (21, 28)	50 (39, 52)	24 (18, 24)	158 (122, 160)
Retired	12	36 (36, 36)	20 (20, 20)	28 (28, 28)	52 (51, 52)	24 (24, 24)	160 (159, 160)
Unemployed	29	29 (28, 34)	18 (16, 20)	24 (22, 26)	39 (36, 47)	19 (18, 23)	129 (119, 149)
[b]Test value (χ2)		**13.416**	**9.556**	**11.103**	**17.156**	**14.357**	**16.471**
P value		**0.009***	**0.049***	**0.025***	**0.002***	**0.006***	**0.002***
Place of residence							
Province center	111	33 (27, 36)	19 (17, 20)	26 (22, 28)	43 (38, 52)	22 (18, 24)	139 (123, 160)
Village	8	28 (26, 31.5)	18 (17.5, 19)	23 (22, 25.5)	34 (31, 41)	18 (17, 19.5)	119 (115, 133.5)
District	17	35 (28, 36)	19 (17, 20)	27 (24, 28)	41 (39, 52)	24 (19, 24)	148 (118, 160)
In another province	14	31.5 (28, 36)	19.5 (17, 20)	25.5 (23, 28)	40 (38, 51)	22 (18, 24)	134.5 (123, 158)
[b]Test value (χ2)		**3.677**	**0.346**	**3.592**	**9.375**	**11.988**	**7.206**
P value		**0.299**	**0.951**	**0.309**	**0.025***	**0.007***	**0.066**
Proximity							
First degree	128	33.5 (28, 36)	20 (17, 20)	26 (23, 28)	43.5 (39, 52)	22 (18, 24)	142 (124, 160)
Second degree	22	27 (25, 35)	16.5 (15, 19)	23 (21, 27)	38 (35, 51)	18.5 (18, 24)	120.5 (116, 156)
[c]Test value (z)		**-3.090**	**-3.372**	**-2.719**	**-2.373**	**-2.075**	**-2.805**
P value		**0.002***	**0.001***	**0.007***	**0.018***	**0.038***	**0.005***
Accommodation - Hospital canteen							
No.	140	33 (27, 36)	19 (17, 20)	26 (23, 28)	42 (38, 52)	22 (18, 24)	140.5 (123, 160)
Yes	10	28.5 (28, 29)	17 (15, 18)	22 (21, 24)	39 (34, 40)	18.5 (18, 24)	120 (119, 129)
[c]Test value (z)		**-0.809**	**-2.073**	**-1.963**	**-1.950**	**-1.370**	**-2.084**

Table 5 Contunied. Comparison of the participants' scores on the CCFNI according to their descriptive characteristics

P value		**0.419**	**0.038***	**0.051**	**0.051**	**0.171**	**0.037***
Where basic needs are met - Hospital canteen							
No	45	33.33±3.62	19.04±1.64	25.98±2.9	46.22±6.22	21.87±2.57	146.44±15.75
Yes	105	30.31±4.67	17.92±1.95	24.76±2.94	42.01±7.39	20.7±2.94	135.7±18.44
[a]Test value (t)		**4.275**	**3.618**	**2.328**	**3.348**	**2.319**	**3.630**
P value		**<0.001***	**<0.001***	**0.021***	**0.001***	**0.022***	**<0.001***
Presence of other dependent person							
Yes	103	32.2±4.21	18.77±1.65	26.08±2.35	44.55±7.33	21.66±2.72	143.26±16.9
No.		29.06±4.67	17.15±2.05	23.04±3.16	40.47±6.47	19.7±2.78	129.43±17.81
[a]Test value (t)	47	**4.090**	**4.750**	**5.883**	**3.437**	**4.064**	**4.573**
P value		**<0.001***	**<0.001***	**<0.001***	**0.001***	**<0.001***	**<0.001***
Influencing responsibilities at home							
Yes	84	34 (29, 36)	20 (17, 20)	27 (24, 28)	45 (39, 52)	22 (18, 24)	147.5 (124, 160)
No	12	27 (25.5, 31)	16 (15, 18.5)	21.5 (21, 23)	38 (36.5, 39)	18 (18, 19)	120.5 (116, 129.5)
Partially	54	29 (27, 36)	18 (17, 20)	25.5 (23, 28)	40 (38, 52)	22 (18, 24)	134.5 (123, 160)
[b]Test value (χ2)		**8.272**	**8.404**	**10.716**	**4.851**	**7.231**	**6.976**
P value		**0.016***	**0.015***	**0.005***	**0.088**	**0.027***	**0.031***
Social life constraints							
Yes	137	33 (28, 36)	20 (17, 20)	26 (23, 28)	41 (38, 52)	22 (18, 24)	140 (123, 160)
No.		27 (26, 35)	16 (15, 19)	21 (21, 27)	38 (36, 51)	18 (18, 24)	120 (116, 156)
[c]Test value (z)	13	**-1.881**	**-2.728**	**-2.742**	**-1.424**	**-2.010**	**-2.189**
P value		**0.060**	**0.006***	**0.006***	**0.154**	**0.044***	**0.029***
History of health problems							
Yes	89	31.88±4.54	18.55±1.8	25.75±2.75	44.92±6.97	21.6±2.78	142.7±17.73
No.	61	30.26±4.52	17.84±2.05	24.21±3.08	40.87±7.16	20.25±2.85	133.43±17.85
[a]Test value (t)		**2.143**	**2.258**	**3.209**	**3.460**	**2.892**	**3.137**
P value		**0.034***	**0.025***	**0.002***	**0.001***	**0.004***	**0.002***
Feeling decision-making about the patient							
Yes	55	32.6±4.28	18.75±1.82	26.09±2.58	44.45±8.15	21.89±2.86	143.78±18.4
No.	95	30.42±4.59	17.98±1.95	24.57±3.06	42.59±6.71	20.56±2.79	136.12±17.74
[a]Test value (t)		**2.872**	**2.381**	**3.107**	**1.438**	**2.797**	**2.516**
P value		**0.005***	**0.019***	**0.002***	**0.154**	**0.006***	**0.013***

r=Pearson correlation analysis

[a]Independent samples t test, results are presented as mean ± standard deviation.

[b]Cruskal-Wallis test, results are presented as median (first quartile, third quartile).

[c]Mann-Whitney U test, results are presented as median (first quartile, third quartile).

*P<0.05

Table 6. Levels of correlation between the scores of the CCFNI

		Information	Trust	Proximity	Support	Comfort	Total
Information	**r**	1.000					
	P value	-					
Trust	**r**	0.913	1.000				
	P value	**<0.001***	-				
Proximity	**r**	0.827	0.849	1.000			
	P value	**<0.001***	**<0.001***	-			
Support	**r**	0.851	0.733	0.810	1.000		
	P value	**<0.001***	**<0.001***	**<0.001***	-		
Comfort	**r**	0.812	0.772	0.812	0.822	1.000	
	P value	**<0.001***	**<0.001***	**<0.001***	**<0.001***	-	
Total	**r**	0.949	0.886	0.910	0.950	0.902	1.000
	P value	**<0.001***	**<0.001***	**<0.001***	**<0.001***	**<0.001***	-

r=Pearson correlation analysis
*P<0.05

members were related to information, and the top three were the need to be informed about the patient's condition once a day, to make explanations in an understandable language and to inform the patient's home about changes in the patient's condition by telephone, followed by the need to "make sure that the patient is given the best care" and "to answer questions honestly" [20]. Similarly, in the study conducted by Sucu *et al*. [21] with 353 relatives of patients in order to determine the needs defined by family members with critically ill patients in the emergency department and the status of meeting these needs; it was found that nine of the ten most important needs were related to information; eight of the needs stated as important by the relatives of the patients were met by health professionals, although not one hundred percent, and these needs were mostly met by physicians.

Eroğlu *et al*. [22] conducted a study to determine the satisfaction levels of 152 patients and their relatives hospitalized in the intensive care unit of a university hospital and found that the relationship between nurses, patients and their relatives directly affected the patient's degree of well-being and satisfaction with the service provided. In addition to saving life and maintaining vital activities, supporting the patient and his/her family is among the main duties of the intensive care team [23, 24].

In the study conducted by Öztürk and Cerit [25], the average age of the patients' relatives was between 18 and 80, while in our study, the ages of the participants ranged between 18 and 69. In the same study, it was determined that 60% of the patients' relatives were female and 48% were primary and secondary school graduates; in the study conducted by Aykin [26], the ages of the patients' relatives ranged between 18 and 35 years and above, 54% of them were female and 28% were primary school graduates; in our study, 10% of the participants were literate, while the rest were distributed as primary, high school and higher education. In the study conducted by Boyraz [27], it was seen that the total scores of the needs were higher in those who graduated from primary school than those who graduated from higher education.

Accordingly, when the arithmetic score values of the sub-dimensions of the met needs inventory of the patients' relatives are analyzed, it is seen that the highest score is obtained from meeting the need for trust (2.55±0.54) and the lowest score is obtained from the sub-dimension of meeting the need for comfort (1.60±0.37) [25]. In our study, when the arithmetic score values of the sub-dimensions of the met needs inventory of the patient's relatives were examined, it was seen that they received the highest score from the sub-dimension of meeting the support needs (43.27±7.30) and the lowest score from the sub-dimension of meeting the trust needs (18.26±1.93).

In the study conducted by Öztürk and Cerit [25], 46% spent the night in hospital gardens, on benches, 54% spent the night in their homes because they wanted to be with the patient at all times, 91% wanted to have a place where they could spend the night nearby, while in our study, 26% of the participants lived far from the hospital and 95 of them stayed in their own homes.

In the study conducted by Aykin [26], it was observed that 65% of the patients' relatives stated that staying with the patient in the hospital affected their responsibilities at home, while 35% stated that it did not. 65.3% of the participants indicated that the care and needs of their relatives in the intensive care unit disrupted the care of other family members, and 56% stated that their household responsibilities; 70.7% mentioned their family relationships, and 91.3% mentioned their social life were affected. In a study by Öner *et al*. [28], 20% of the participants stated that being a companion next to the patient affected their work life, 4.6% mentioned their school life, 45.3% mentioned their family life, and 50% reported experiencing various health problems. In our study, 57.3% of the participants stated an increase in existing health problems.

CONCLUSION

It was found that the needs of patients' relatives are very important and the most important need is to know the patient's chance of recovery. Meeting all physical, psychological and psychosocial needs of patients and their relatives treated in intensive care units can only be achieved by making evaluations and taking necessary measures. This approach overlaps with the family-centered service approach and creates the infrastructure for quality health care. This study provides data on patient experiences and the needs of patient relatives. We recommend that similar studies be conducted as indicators of improvement and that institutional or individual efforts be made to address these problems identified in clinical settings.

Authors' Contribution

Study Conception: İÖ, AY, AK; Study Design: İÖ, AY, AK; Supervision: İÖ, AY, SK; Funding: İÖ, AY, SK, AK; Materials: İÖ, AY, SK; Data Collection and/or Processing: İÖ, AY, AK, SK; Statistical Analysis and/or Data Interpretation: İÖ, AY, AK; Literature Review: İÖ, AY, AK, SK; Manuscript Preparation: İÖ, AY, AK, SK and Critical Review: İÖ, AY, AK, SK.

Conflict of interest

The authors disclosed no conflict of interest during the preparation or publication of this manuscript.

Financing

The authors disclosed that they did not receive any grant during conduction or writing of this study.

REFERENCES

1. Maxwell KE, Stuenkel D, Saylor C. Needs of family members of critically ill patients: a comparison of nurse and family perceptions. Heart Lung. 2007;36(5):367-376. doi: 10.1016/j.hrtlng.2007.02.005.
2. Torun S, Kadıoğlu S, Öztunç G. [Right of getting visited of conscious patients in intensive care]. Cumhuriyet Med J. 2012;34(1):33-40. doi: 10.7197/1305-0028.923. [Article in Turkish]
3. Davidson JE. Family-centered care: meeting the needs of patients' families and helping families adapt to critical illness. Crit Care Nurse. 2009;29(3):28-34; quiz 35. doi: 10.4037/ccn2009611.
4. Gibaut Mde A, Hori LM, Freitas KS, Mussi FC. [Comfort of the patient's family in an Intensive Care Unit related to welcoming]. Rev Esc Enferm USP. 2013;47(5):1117-1124. doi: 10.1590/S0080-623420130000500015. [Article in Portuguese]
5. Leung KK, Chien WT, Mackenzie AE. Needs of Chinese families of critically ill patients. West J Nurs Res. 2000;22(7):826-840. doi: 10.1177/01939450022044782.
6. Karagözoğlu S, Özden D, Tok Yıldız F. [The Needs of Intensive Care Unit Patients Relatives]. Turkiye Klinikleri-J Nurs Sci. 2014;6(2):102-111. [Article in Turkish]
7. Molter NC. Needs of relatives of critically ill patients: a descriptive study. Heart Lung. 1979;8(2):332-339.
8. Chatzaki M, Klimathianaki M, Anastasaki M, Chatzakis G, Apostolakou E, Georgopoulos D. Defining the needs of ICU patient families in a suburban/rural Greek population: a prospective cohort study. J Clin Nurs. 2012;21(13-14):1831-1839. doi: 10.1111/j.1365-2702.2011.04022.x.
9. Van Horn E, Tesh A. The effect of critical care hospitalization on family members: stress and responses. Dimens Crit Care Nurs. 2000;19(4):40-49. doi: 10.1097/00003465-200019040-00014.
10. Jacob M, Horton C, Rance-Ashley S, et al. Needs of Patients' Family Members in an Intensive Care Unit With Continuous Visitation. Am J Crit Care. 2016;25(2):118-125. doi: 10.4037/ajcc2016258.
11. Yang S. A mixed methods study on the needs of Korean families in the intensive care unit. Aust J Adv Nurs. 2008;25(4):79-86.
12. Buckley P, Andrews T. Intensive care nurses' knowledge of critical care family needs. Intensive Crit Care Nurs.

2011;27(5):263-272. doi: 10.1016/j.iccn.2011.07.001.
13. Büyükçoban S, Çiçeklioğlu M, Demiral Yılmaz N, Civaner MM. Adaptation of the Critical Care Family Need Inventory to the Turkish population and its psychometric properties. PeerJ. 2015;3:e1208. doi: 10.7717/peerj.1208.
14. Simpson T. Information and support needs of adult family members of patients in intensive care units: an Iranian perspective. J Res Nurs. 2015;20(5):423-424. doi: 10.1177/1744987115592085.
15. Kohi TW, Obogo MW, Mselle LT. Perceived needs and level of satisfaction with care by family members of critically ill patients at Muhimbili National hospital intensive care units, Tanzania. BMC Nurs. 2016;15:18. doi: 10.1186/s12912-016-0139-5.
16. Uzun Ö, Özer N, Çevik Akyıl R. [Needs of Patients' Families in Some Surgical Clinics and Surgical Intensive Care Units]. Eurasian J Med. 2002;34(2):39-45. [Article in Turkish]
17. Coşkun H. [Detrmine needs and expectations of family members who have inpatients at intensive care unit]. Akdeniz Üniversitesi Sağlık Bilimleri Enstitüsü Hemşirelik Anabilim Dalı Master's Thesis. Antalya, 2017. [Article in Turkish]
18. Freitas KS, Kimura M, Ferreira KA. Family members' needs at intensive care units: comparative analysis between a public and a private hospital. Rev Lat Am Enfermagem. 2007;15(1):84-92. doi: 10.1590/s0104-11692007000100013.
19. Hughes F, Robbins I, Bryan K. An analysis of information available to relatives in intensive care. Intensive Crit Care Nurs. 2004 Aug;20(4):200-5. doi: 10.1016/j.iccn.2004.04.005.
20. Ünver V. [An Evaluation of the Needs of Families of Intensive Care Unit Patients]. Yoğun Bakım Hemşireliği Derg. 2003;7(2):75-81. [Article in Turkish]
21. Sucu G, Cebeci F, Karazeybek E. [The needs of the critical patients' relatives in the emergency department and how they are met]. Ulus Travma Acil Cerrahi Derg. 2009;15(5):473-481. [Article in Turkish]
22. Eroğlu F, Özmen S, Noyaner A, Aydın C. [Can We Improve Patient Health Care Quality in Intensive Care Unit?]. SDÜ Tıp Fak Derg. 2001;8(3):9-11. [Article in Turkish]
23. Taşdemir N, Özşaker E. [Visiting practice in the intensive care unit: effects of the visit on the patient, the patient's family and the nurse]. C.Ü. Hemşirelik Yüksekokulu Derg. 2007;11(1):27-31. [Article in Turkish]
24. Auerbach SM, Kiesler DJ, Wartella J, Rausch S, Ward KR, Ivatury R. Optimism, satisfaction with needs met, interpersonal perceptions of the healthcare team, and emotional distress in patients' family members during critical care hospitalization. Am J Crit Care. 2005;14(3):202-210.
25. Öztürk E, Cerit B. [The Relationship between Meeting the Needs of Family Members of Patients in the Intensive Care and Their Satisfaction Levels]. İnönü Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulu Dergisi. 2021;9(1):55-70. doi: 10.33715/inonusaglik.815585. [Article in Turkish]
26. Aykin Ç. [Requirements of Families in the Intensive Care Unit Patients. Master's Thesis]. İstanbul- 2013. [Article in Turkish]
27. Boyraz Ş. [Needs of the Families of Critically Patients Arriving at the Emergency Department and Meeting the Situation of the Healthcare Team]. Marmara Üniversitesi Sağlık Bilimleri Enstitüsü Master's Thesis, İstanbul 2011. [Article in Turkish]
28. Öner B, Güldal D, Şemin S. [Why Do Caregivers Stay in Hospitals?] Türkiye Aile Hekimliği Dergisi. 2007;5(1-4):18-21. [Article in Turkish]