

The needs of the families whose relatives are being treated in intensive care units and the perspective of health personnel

Gulseren Elay¹, Mustafa Tanriverdi², Mustafa Kadioglu³, Ilhan Bahar⁴, Oktay Demirkiran⁵

¹Gaziantep University, Department of Medical Intensive Care Unit, Gaziantep, Turkey

²Dr Ersin Arslan Training And Research Hospital, Department of General Intensive Care Unit, Gaziantep, Turkey

³Istanbul University, Faculty of Medicine, Department of General Intensive Care Unit, Istanbul, Turkey

⁴Katip Celebi Training And Research Hospital, Clinic of Intensive Care Unit, Izmir, Turkey

⁵Istanbul University, Faculty of Medicine, Department of General Intensive Care Unit, Istanbul, Turkey

Copyright © 2020 by authors and Annals of Medical Research Publishing Inc.

Abstract

Aim: Meeting the family needs is one of the indicators of the quality of service provided in hospitals. The overlap between the needs and the perspective of the health workers will enable the needs to be met more quickly.

Material and Methods: This study was conducted between 01.03.2019 and 01.06.2019 by using face-to-face interviews with the families whose relatives were being treated in the adult general intensive care unit (ICU) providing 26 beds in Ersin Arslan Training and Research Hospital and also with the doctors and nurses working in the same ICU. In the study, the family needs inventory, whose Turkish validity and reliability was approved, was used. The Turkish form of inventory consists of three subscales: "support and comfort need," "proximity and safety need" and "information need".

Results: 311 family member and 68 health personnel participated in the study. The two of the first five most important family needs, is in the information need subscale, while the others are in the safety and proximity subscale class. All of the first five needs that health workers consider important are included in the safety and proximity subscale.

Conclusion: The family needs and the identification of the needs by health care workers are largely overlapped. Awareness of the information subscale needs, should be raised.

Keywords: Patient's relative need inventory; intensive care unit; healthcare workers

INTRODUCTION

The most important study was carried out by Molter to determine the needs of the family members whose relatives are hospitalized in the ICU (1). The need list created by Molter was modified by Leske and the need inventory of the patients' relatives in the intensive care unit was prepared (2). The Turkish reliability and validity of the Critical Care Family Need Inventory (CCFNI) was conducted by Sibel Büyükçoban et al. in 2015. In its new form adapted to Turkish, some questions of the original scale have been changed, some questions have been removed and the whole inventory has been transformed into a 40-item structure consisting of three subscales. The subscales are "support and comfort need," "proximity and safety need" and "information need" (3).

Since most patients in ICUs cannot decide for their own medical treatment, family members have to undertake this task instead of the patient (4). Most ICU patients suddenly enter the intensive care unit process, and family members are often not emotionally prepared for it (1,2). Families who struggle with the stress of having a loved one in the ICU can often think that they are left alone and that no one will help him/her. Fear that the relative will die or be permanently disabled, lack of clarity of their status and prognosis, financial difficulties, change of family roles, not being used to the ICU environment, the feeling of shock especially in the first 72 hours of hospitalization triggers anger, guilt, denial, grief and depression (5,6). Identifying and eliminating the needs of the family members will not only reduce the negative emotions experienced by the relatives of the patients, but

Received: 03.11.2019 **Accepted:** 10.12.2019 **Available online:** 10.03.2020

Corresponding Author: Gulseren Elay, Gaziantep University, Faculty of Medicine, Department of Medical Intensive Care Unit, Gaziantep, Turkey, **E-mail:** gulserenelay56@gmail.com

will also improve the quality of service provided by the hospital. In order to meet the needs, it is important that the perspective of the patients' relatives and health workers overlap. This study was organized for this purpose.

MATERIAL and METHODS

The study was carried out in the tertiary general ICU providing 26 beds in Dr. Ersin Arslan Training and Research Hospital. Before starting the research, the purpose of the study was explained and written permission was obtained from the hospital management and verbal permission was obtained from the patients' relatives. In the study, CCFNI form, whose Turkish validity and reliability was approved, was used.

Data collection

The inventory was filled between 01.03.2019 and 01.06.2019 by using face-to-face interviews with the patients' relatives. For this purpose, monthly meetings were held with the relatives of the patients in the education unit, and two physicians, four nurses and six trainees were interviewed for each meeting during the study. People to be interviewed face to face were selected among the nurses and trainees working in the education unit and not working in the ICU. The two physicians conducting the interviews for three months did not fill the questionnaire that was done to the health workers. In the first part of the questionnaire, sociodemographic characteristics including age, gender, marital status, educational status, and patient kinship of the participants were asked as well as a few short questions about the patient. The same questionnaire was applied to the physicians and nurses working in that month in the ICUs where the study was conducted.

Criteria for inclusion in the study

Patients' relatives

- Participants who agree to participate in the study
- Participants whose patients have been in the ICU for 48 hours
- Participants who are Turkish citizens
- Participants who are 18 years and older
- Participants who are literate
- Participants without hearing, vision perception problems

Health care workers

- Physicians who regulated the patient's treatment in the same ICU during the study period
- Nurses engaged in patient care during the study period

Criteria for exclusion in the study

Patients' relatives

- Participants who are not Turkish citizens
- Participants who are too confused to express their feelings and thoughts or constantly crying
- Participants who have absence of perception
- Participants who have hearing, speaking or understanding problems
- Participants who are under 18 years old

Health care workers

- Physicians who examine patients in the ICU for consultation

- Physicians who use leave for any reason during the period of the study and who are assigned to another hospital with temporary duty
- Physicians who are in rotation in another ICU in the period of the study, even if they normally work in the ICU where the study was conducted
- Infection, quality and education nurses who do not provide primary care for patients
- Physicians conducting interviews with patients' relatives in the study

Statistical Analysis

Statistical analysis was performed using the Statistical Package for Social Sciences (SPSS) for Windows version 24.0 (IBM Corp., Armonk, NY, USA). We used parametric methods for conducting all the analyses. The normality of distribution of continuous variables was tested using the Shapiro-Wilk test. Spearman's rank correlation coefficient was used to investigate the relationships between 2 numerical variables, while the chi-squared test was used to assess the relationship between categorical variables. Separately, multivariable logistic regression analysis was performed. P-value < 0.05 was considered to be significant. In the study, Cronbach's α value, which shows internal consistency, was determined as 0.908 in the whole scale.

Ethical approval

Ethics committee approval was obtained from Katip Celebi University/Turkey (2019/364).

RESULTS

Of 311 patients' relatives; 170 (54.66%) were male, 141 (45.34%) were female, 259 (83.27%) were married, 48 (15.43%) were not educated and 194 (62.38%) were primary school graduates and 15 (4.82%) were university graduates. 168 (54%) of the participants were the children of the patients, 96 (30.9%) were the spouses of the patients and 19 (6.1%) were the parents of the patients. When the patient characteristics were examined, 118 (62.05%) patients were hospitalized between 2-7 days and 155 (37.95%) patients were hospitalized for more than one week in the ICU and 290 patients (93.25%) were followed for medical reasons, while 21 patients (6.75%) were followed for surgery (Table 1).

Of health workers participated in the study, 54 (79.41%) were nurses, 14 (20.59%) were doctors and 48 (70.59%) were under 35 years of age and 50 (73.53%) had not completed their 10 years in the profession. In the question that whose duty was to determine the need of the patients' relatives, 50 (73.53%) of the health workers said it was the duty of the nurse and 18 (26.47%) said it was the duty of the doctor (Table 2). The five most important needs of the patients' relatives, in order of importance, were the feeling of hope for the patient, knowing the kind of medical treatment applied to the patient, receiving information about the patient at least once a day, making sure that the patient was given the best possible treatment and receiving answers for the questions in a realistic manner. Among these five needs, the second need was in the

information subscale group while the other needs were in the safety and proximity scale group. Among the first five needs, there was no need in the support and comfort subscale group. Five needs determined by the patients' relatives did not change with the age, sex, marital status of the patients' relatives and the duration of the patient's hospitalization ($p > 0.05$). It was observed that the need of "feeling hope for the patient," "being informed by the treatment applied to the patient," "receiving information about the patient at least once a day," "receiving answers for the questions in a realistic manner" needs were lower in university graduates ($P < 0.05$). We found relation between degree of the relativity and the need for "receiving answers for the questions in a realistic manner" was higher in the parents than the other family members ($P < 0.05$), it was higher in the inpatients' relatives for medical reasons compared to the inpatients for surgical reasons ($P < 0.05$). According to the health workers, the five most important needs were respectively to make sure that the patient was given the best possible treatment, not to leave the eye behind when he left the hospital, to receive information about his patient at least once a day, to know the developments about his patient's condition, and to receive answers for the questions in a realistic manner.

Table 1. Demographic characteristics of a patient's relative

Variables	n(%)
Sex	
Female	141(45.34)
Male	170(54.66)
Marital status	
Married	259(83.28)
Single	52(16.72)
Education	
None	48(15.43)
Primary School	194(62.38)
High School	54(17.36)
University	15(4.82)
Kinship	
Spouse	96(30.9)
Child	168(54.0)
Parents	19(6.1)
Sibling	28(9.0)
Hospitalization period	
2-7 days	188(62.05)
More than 1 week	155(37.95)
Diagnosis	
Medical	290(93.25)
Surgical	21(6.75)

All of the first five needs that health workers considered important were included in the safety and proximity subscale. When the first five needs of the patients' relatives and the perspective of the health workers were compared, while the needs of "receiving information about the patient at least once a day" and "receiving answers for the questions in a realistic manner" were the third and fifth items in both groups, first and fourth needs were different items, but they were in the same subscale class. In health caregivers, as in the patients' relatives, they did not see a need included in support comfort subscale as important. There was no difference between the nurses compared to the doctors in terms of these five needs ($P > 0.05$).

Table 2. Demographic characteristics of health workers

Variables	n(%)
Profession	
Nurse	54(79.41)
Doctor	14(20.59)
Age	
Over 35	20(29.41)
35 and under	48(70.59)
Years of experience in the profession	
≤10	50(73.53)
>10	18(26.47)
Years spent in the ICU	
≤10	61(89.71)
>10	7(10.29)
Whose task is it to determine the need of a patient's relative?	
Nurse	50(73.53)
Doctor	18(26.47)

DISCUSSION

In our study, the most important need was that "the patient's relative feels hope for his/her patient." However, health workers did not see this need as one of the five important needs. The results of a study conducted in Jordan were identical with the results of our study (7). The common feature of these two countries is that they are Muslims. According to the faith of fate in Islam everything is in the hands of Allah. Because of this belief in Muslim societies in any case, there is always hope from Allah. For this reason, the patients' relatives in difficult situations want to feel this hope (8). This first need was included in the trust subscale. Because trust, due to reducing uncertainty and stress, was found to be the most important need in many studies that were conducted (9 -12). Trust-related

needs may vary depending on the patient's reason for hospitalization and the level of kinship of family members. For example, in our study, the fifth need from the trust subgroup which is "receiving answers for the questions in a realistic manner" was determined as a higher need in patients with internal problems than those with surgical problems ($P < 0.05$). This may be due to the fact that internal patients appear more complex to their relatives. Again, the ones who feel the most the need of receiving answers for the questions of the patients' relatives in a realistic manner were parents ($P < 0.05$).

In our study, the second important need of the patients' relatives was that they knew what kind of medical treatment was applied to the patient and it was included in the information subscale. Providing family members with a clear explanation of the patient's medical condition, treatment plan, and possible outcomes increases the hope of the patient's relative and the sense of trust in the health worker (13). Davidson et al. stated that the need for information is the main need for families with ICU inpatients (14). According to Auerbach et al., the most dominant family relative need in the ICU is to provide clear and honest information about the patient's condition (15). In the ICU study in Thailand, nurses and families stated that obtaining information about the patient was an important need at the same level (16). Maxwell et al. conducted studies with 20 family members and 30 ICU nurses, and both families and nurses considered obtaining trust and information as the most important need (4). In our study, the need of the information subgroup that is considered important by the patients' relatives in the second place is not among the first five important needs of health professionals. The reason for this may be that obtaining information and visiting hours are kept short by law in Turkey and health professionals do not realize the importance of obtaining information. Admission of the patients' relatives to the ICU within a limited period of time may weaken the communication between the patient's relative and the health worker. In a study, it has been shown that half of the families' relatives can not communicate sufficiently with the doctor about the diagnosis, treatment and the chance of recovery of the patient hospitalized in the ICU (17). In our study, the fact that this need is the second important need may be related to the fact that most of the patients are inpatients for internal reasons. In a study, it was found that the patients' relatives in the medical ICU needed to get more information than the patients' relatives in the surgical ICU (18). It is important that the information given is not only reliable but also understandable. Preparing informative brochures, conducting education programs for the patients' relatives ensure that information is efficient (19). The educational level of the patients' relatives who participated in our study was quite low. As the level of education increased, the needs decreased. Among the first five needs of the patients' relatives which are "feeling hope for the patient, knowing what kind of medical treatment was applied to his patient, receiving information about his

patient at least once a day, and receiving answers for his questions in a realistic manner" was lower in university graduates. Similarly, as the education level increased, the needs decreased in the patient's relative need study conducted in the emergency departments in Turkey. In our study, both patients' relatives and health workers did not include the comfort subscale in the first five important needs. The family struggling with high emotional stress may not care about their comfort or be unaware of their own needs because they focus on the patient (21). In the study conducted in Jordan, 60% of family members stated that having good food in the hospital is not important, although eating is the basic need for people (7). It is very important for the health workers to be aware of the needs of patients' relatives to meet their needs. Abazari compared the attitudes of nurses and patients' relatives to the needs; although both groups indicated that the need of the patients' relatives is important in the ICU, the order of priority was different (22). Since medical care of the patient is a priority in medical and nursing education, the need of a patient's relative may be neglected (23). Bijttebier et al. found that most health workers do not have sufficient awareness of needs. In a study, most of the health workers stated that meeting the needs of family members would not change the patient's course (24). In the complex nature of ICUs, families' needs may be seen as a low priority. In our study, to the question of whose duty was to meet the needs of a patient's relative, 73% of the health workers answered that it was the duty of nurses. The education of nurses about the needs and increasing the contact with patients' relatives may lead to the faster elimination of the needs. Meeting the need of the patient's relative will reduce the stress of both the family and the health worker (6,25). It is important to meet the needs in order to increase the quality of the service provided.

LIMITATION

- This is a single-center study, which led us to evaluate only the patient and patient's relative population belonging to that hospital.
- Even if the ICU in which the study was conducted was the general ICU, we see that the majority of inpatients during the study period were inpatients for medical reasons, which would affect the order of necessity. The study can be repeated in the ICU where the surgical patients are the majority or in the general ICU.
- As the province where the study was conducted is a province in Southeastern Anatolia and which receives a lot of migration, it is seen that due to the location of the hospital, patients' relatives are composed of a population with low education level living in the suburbs. In the study to be conducted in hospitals with higher education level, the priority of the needs of the patients' relatives may change.
- In the study, only the needs assessment was made and it was not questioned how many of the needs were met by the hospital. Multicentred studies on this subject will

provide more accurate information.

KEY MESSAGES

- The most important first need of the families is staying in the ICU which is in the trust subscale, on the other hand, the second is in the information subscale. The first five needs that the health workers identify as important are included in the trust subscale.

- The needs of the health workers and patients' relatives are partially overlapped. However, awareness of the health workers about the information needs of the family should be raised.

- As the education level increases, the needs of the family decrease. Since ICUs have limited visiting hours, information needs can be provided with the brochures.

CONCLUSION

The need of the patients' relatives and the identification of health workers partially overlap. Further studies are needed on this subject. Health workers should be aware of the need for information subscale, especially for families with low education level, information brochures should be prepared and education hours should be arranged.

Competing interests: The authors declare that they have no competing interest.

Financial Disclosure: There are no financial supports.

Ethical approval: Ethical approval was taken from Katip Celebi university, approval no:364, date:28.08.2019.

Gulseren Elay ORCID: 0000-0003-2166-0545

Mustafa Tanriverdi ORCID: 0000-0003-3923-6021

Mustafa Kadioglu ORCID: 0000-0003-4149-0133

Ilhan Bahar ORCID: 0000-0003-3928-7486

Oktay Demirkiran ORCID: 0000-0003-1319-9381

REFERENCES

- Molter N. Needs of Relatives of Critically Ill Patients: A Descriptive Study. *Heart and Lung* 1979;8:332-9
- Leske J. S. Internal psychometric properties of the Critical Care Family Needs Inventory. *Heart and Lung* 1991;20:236-44
- Sibel Büyükçoban, Meltem Çiçeklioğlu, Nilüfer Demiral Yılmaz, et al. Adaptation of the Critical Care Family Need Inventory to the Turkish population and its psychometric properties. *Peer J* 2015.
- Maxwell KE, Stuenkel D, Saylor C. Needs of family members of critically ill patients: A comparison of nurse and family perceptions. *Heart Lung* 2007;36:367-76
- Azoulay E, Pochard F, Kentish-Barnes N, et al. Risk of post-traumatic stress symptoms in family members of intensive care unit patients. *Am J Respir Crit Care Med* 2005;171:987-94.
- Sheafer H. The met and unmet needs of families of patients in the ICU and implications for social work Pennsylvania: University of Pennsylvania; 2010;107.
- Suhair H. Al Ghabeesh, Hana Abu-Snieneh, et al. Exploring the Self-Perceived Needs for Family Members Having Adult Critically Ill Loved Person: Descriptive Study, *Health* 2014;6:3005-12.
- Al-Shahri, M. Z. Culturally sensitive caring for Saudi patients. *J Transcultural Nurs* 2002;13: 133-8.
- Omari F.H. Perceived and Unmet Needs of Adult Jordanian Family Members of Patients in ICUs. *J Nursing Scholarship* 2009 ;41:28-34.
- Hweidi IM, Al-Shannag MF. The Needs of Families in Critical Care Settings Are Existing Findings Replicated in a Muslim Population: A Survey of Nurses' Perception. *European J Scientific Research* 2014;116:518-28
- Chatzaki M, Klimathianaki M, Anastasaki M, et al. Defining the Needs of ICU Patient Families in Suburban /Rural Greek Population. *J Clin Nurs* 2012; 21: 1651-8.
- Obringer K, Hilgenberg C, Booker K. Needs of adult family members of intensive care unit patients. *J Clin Nurs* 2012;21:1651-8.
- Hashim F, Hussin R. Family needs of patient admitted to intensive care unit in a public hospital. *Procedia – Soc Behav Sci* 2012;36:103-11.
- Davidson JE. Family-centered care: Meeting the needs of patients' families and helping families adapt to critical illness. *Crit Care Nurse* 2009;29:28-34.
- Auerbach SM, Kiesler DJ, Wartella J, et al. Optimism, satisfaction with needs met, interpersonal perceptions of the health care team, and emotional distress in patients' family members during critical care hospitalization. *Am J Crit Care* 2005;14:202-10.
- Reynold J, Prakinkit S. Needs of family members of critically ill patients in cardiac care unit: A comparison of nurses and family perceptions in Thailand. *J Health Education* 2008;31:53-66.
- Askari H, Forozi M, Navidian A, et al. Psychological reactions of family members of patients in critical care units in Zahedan. *J Res Health* 2013;3:317-24.
- Wong, F. The Needs of Families of Critically Ill Patients in a Chinese Community. *Hong Kong Nur* 1995;69: 25-9.
- Sayed Afshin Shorofi. Journal of the Nigeria Medical Association. Psychosocial needs of families of intensive care patients: Perceptions of nurses and families. *Niger Med J* 2016;57:10-8.
- Umut Ocak, Levent Avsarogullari. Expectations and needs of relatives of critically ill patients in the emergency department. *Hong Kong J Emergency Med* 2018.
- Naderi M, Rajati F, Yusefi H, et al. Health literacy among adults of Isfahan, Iran. *J Health Syst Res* 2013;9:473-83.
- Abazari F, Abbaszadeh A. Comparison of the attitudes of nurses and relatives of ICU and CCU patients towards the psychosocial needs of patients relatives. *J Qazvin Univ Med Sci* 2001;19:58-63.
- Chien WT, Chiu YL, Lam LW, et al. Effects of a needs-based education programme for family carers with a relative in an intensive care unit. *Int J Nurs Stud* 2006;43:39-50.
- Bijttebier P, Vanoost S, Delva D, et al. Needs of relatives of critical care patients Perceptions of relatives, physicians and nurses. *Intensive Care Med* 2001; 27:160-5.
- Buckley P, Andrews T. Intensive care nurses' knowledge of critical care family needs. *Intensive Crit Care Nurs* 2011;27:263-72.