Original Article

The Importance of Fulfillment of Family Needs at Critical Care Units

Zahra Khoshnodi[1], Shademan Reza Masouleh[2*], Seyedeh Fatemeh Seyed Fazelpour[2], Ehsan Kazem Nezhad Leyli[3]

[1]Nursing (MSc), Al Zahra Educational and Medical Center, Guilan University of Medical Sciences, Rasht, Iran
[2]Social Determinants of Health Research Center (SDHRC), Department of Nursing (Medical-Surgical), Instructor, Guilan University of Medical Sciences, Rasht, Iran
[3]Social Determinants of Health Research Center (SDHRC), Bio-Statistics, Associate Professor, Guilan University of Medical Sciences, Rasht, Iran

*Corresponding author: Shademan Reza Masoleh, School of Nursing and Midwifery, Rasht
E-mail: srezamasouleh@gmail.com

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Abstract

Introduction: Hospitalization of patients in the critical care units greatly affects their families and their balance. Attention to family needs can affect the treatment process. Identifying the needs of patients' families and the extent to which they can be fulfilled can affect the treatment process.
Objectives: The purpose of this study was to determine the importance of family needs of ICU patients and the extent of meeting their needs.
Materials and Methods: This is a cross-sectional and descriptive-analytical study. The research population consisted of the families of patients admitted to the general ICU and neurosurgery department of Rasht Medical Education Center. A standardized tool, Critical Care Family Need's Inventory (CCFNI), was used to assess the needs of ICU patients' families. A total of 167 relatives of patients were included in the study. The collected data was analyzed using descriptive statistics (frequency distribution, mean, and standard deviation). The significance of needs was compared with their satisfaction using the Wilcoxon test.
Results: Among the five areas of family needs of ICU patients, the area of assurance was the most important (3.46±0.30) of the family needs of ICU patients and the level of satisfaction needs in the area of assurance (3.11±0.30) was higher than in other areas. The average score of the need importance and the level of satisfaction in the family of ICU patients shows that 10%, 7%, 15%, 16%, and 15% of the needs in the reassurance, comfort, information, close contact with the patient, and supportive dimensions were not met by the treatment staff to the extent of their importance.
Conclusion: According to the results, the general average satisfaction of family needs in ICU patients is less than the average importance of their needs.
Keywords: **Intensive care units, Inpatients, Family, Need assessment, Personal Satisfaction**

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Introduction

The family is the core of receiving efficient health services. In a family unit, each disorder (illness, injury, separation) affects one or more members of the family as a whole. In fact, the family is an interconnected network, with members interacting together [1]. Due to the dependency of family members, problems of each family member affect the members as a whole. Hospitalization in ICUs is one of such problems and critical conditions that can lead to a high degree of stress for the patient and family, which may result in a crisis and negative family outcomes [2]. Figures show that 8% of beds in hospitals of the United States are occupied by ICU patients, indicating the extent of the problem [3]. The special nature of ICU patients and a high mortality rate there in forces the family and patient into extreme stress and anxiety [3, 4]. Since the family as a centralized core is affected by the patient's emotional and psychological pressures and tries to find effective solutions [5, 6], the occurrence of a life-threatening event and an unexpected disturbance for the patient and the family disrupts the internal balance of the family [7].

Family members of hospitalized ICU patients are stressed, unorganized, and have non-curative status, which may lead to impaired matching mechanism and ultimately anxiety. Such families are engaged in an unpredictable situation with unexpected outcomes in which the decision-maker in the family is often under pressure [8].

Families are an important source of patient care in ICUs. Family attendance allows members to have a more significant interaction with nurses in caring for patients [9]. The goal of family care is to examine family needs and take interventions in order to create positive outcomes for the family and the patient [10]. Meeting the emotional needs of the patients' families in ICUs is also an important aspect of patient-centered and family-based care [11] and assessment of family needs should be a continuous part of the evaluation in ICUs. [12].

In this respect, a research by Khalilia showed that families were generally satisfied with their needs in ICUs and also showed high satisfaction in the area of information and decision-making. The study used a tool similar to that in the current research [2]. Hashim and Hussin reported that family members participated in their research and felt that nurses were the most suitable people who could meet their needs [4]. McAdam et al. also presented evidence that the average score of stress experienced by hospital attendants in ICUs three months after discharge was lesser than that during attendance in the ICUs [13].

Considering that patient-centered care is moving towards family-based care, attention to family needs is one of the aspects of the family-based care approach. Accordingly, the needs of patients' families should be investigated to achieve this goal. The present study, therefore, is aimed at determining the importance of the needs of ICU patients' families and the extent of meeting the needs of ICU patients.

Materials and Methods

This cross-sectional research is a descriptive-analytical study. The research population was the families of patients admitted to ICUs at two educational centers of Guilan University of Medical Sciences in Rasht City. The subjects were families of patients who were over 18 years of age, had close relationships with the patient (spouse, parents, children, sister or brother, etc.) except for the spouses. The participants needed to be able to read, write and speak in Farsi, and had to be

willing to participate in the research. They had to be relatives of patients who had been admitted to the ICU for at least 48 h and the families had to accompany them at least for one shift. For each patient, one person was considered as a sample of the research. The sample size was calculated based on the relationship between satisfying the needs of the family and the satisfaction rate based on the results of Khalilia (r = 0.54) [2], with 95% confidence and 5% error levels. Test strength of 0.90 was found followed by estimation of 167 individuals.

The questionnaire used in this research composed of two parts. The first part was a researcher-made tool examining the individual-underlying factors affecting the fulfillment of ICU patients' family needs. The second part included a standardized questionnaire Critical Care Family Needs Inventory (CCFNI) [1, 14] containing 45 questions for assessing ICU patients' family needs and the extent of meeting their needs. The CCFNI consists of five domains that cover five main areas: Family needs of patients admitted to ICUs, including notifying, close communication with the patient, assuring, comfort, and support, each with 8, 9, 7, 6, and 15 questions, respectively. The CCFNI standard tool was rated by a four-point Likert scale (1= not important, 2= low-importance, 3=important, and 4=very important) to prioritize needs. A high average indicates more priority of a need. The CCFNI also used to assess the needs of family members with answers at another four-point Likert scale (1= never met, 2= sometimes fulfilled, 3= often met, and 4= always fulfilled). A higher average meant that the highest requirement was fulfilled.

Before the start of data collection, a preliminary study was conducted on 10 families of ICU patients with the characteristics of the study's subjects using the study tool. A Cronbach's alpha index of 80% was obtained for the total CCFNI scale indicating a high interval consistency of the tool. An inter-class correlation (ICC) index of 90% was obtained for this tool. Sampling was carried out with the available sampling method based on the inclusion criteria from April to the end of July 2014 (four months) during the hours of meeting in the evening shift.

Data was analyzed by the SPSS 18 software using descriptive and inferential statistics. Descriptive statistics was used to prepare tables, frequency distribution, mean, and standard deviation. The Wilcoxon test was employed to compare the importance of the family needs of ICU patients and meeting their needs. All the subjects participated in the research after signing written consents.

Results

In this study, the majority of subjects (57.4%) were males with ages ranging from 21 to 61 years (40.21 ± 10.57), married (65.9%), with undergraduate education (37.4%), and had free occupations (37.1%). Parental relationship with the patients was seen in the case of 38.9% of the families. The majority (66.5%) lived with their patients 92.8% had visited their patients for more than one shift, and lived outside the city where the hospital was located (50.3%). In the case of ICU hospitalization history, for one of the family members, most samples (57.5%) had no experiences of having an ICU patient. Most of the patients (59.3%) were male within the age of 5–87years (45.11±18.91), who were hospitalized in the ICU without planning (69.5%) with stay duration of over 48 h in the ICU (81.4%). Data on the number of ICU hospitalizations shows that most of the patients (80.8%) were once admitted to the ICU.

Table 1. Comparison of the importance of needs and meeting the requirements of the families of ICU patients

Needs by the areas	Importance	Fulfilment	Sig.*
	Mean± SD (1-4)	Mean± SD (1-4)	
Reassurance	3.46±0.30	3.11±0.30	0.0001
Comfort	2.54±0.35	2.35±0.42	0.0001
Information	3.14±0.27	2.64±0.35	0.0001
Close contact with patient	3.23±0.30	2.70±0.29	0.0001
Support	3.16±0.25	2.67±0.47	0.0001

*Wilcoxon Test

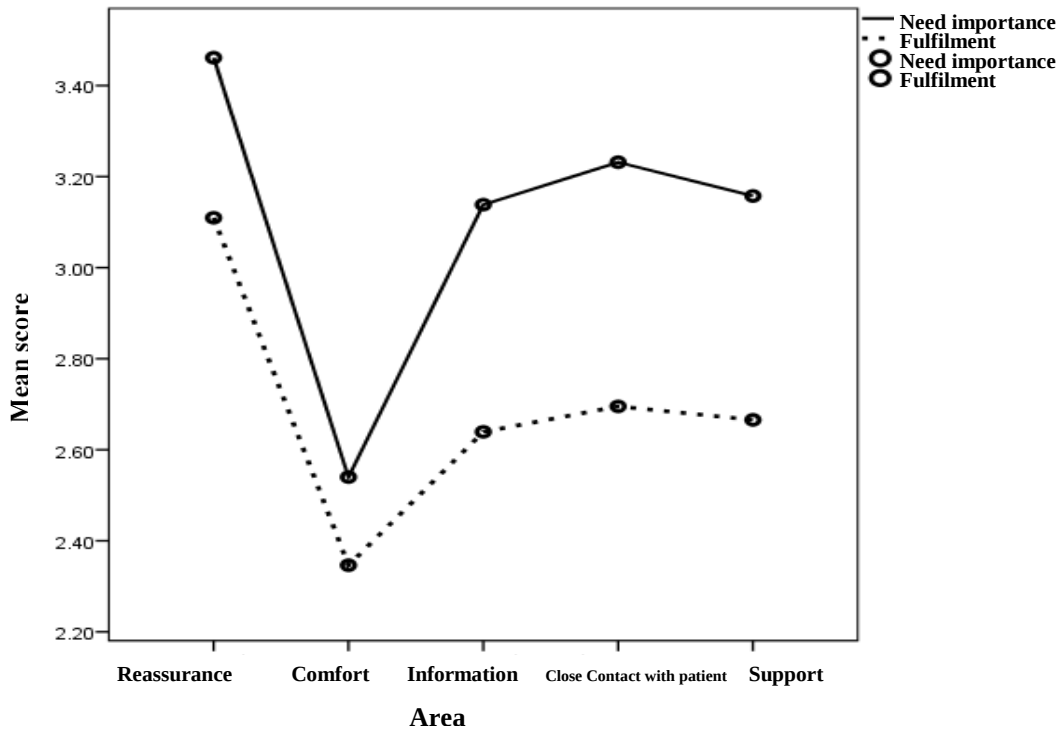

Figure 1. Comparing the average scores of the importance of needs and the level of meeting them in families of ICU patients.

The most important family needs of ICU patients were: "Your questions will be answered honestly (3.74±0.44)", "you can help the patient with physical care (3.63 ± 0.51)", and "you should be notified about the realities of the patient's progress (3.57 ± 0.50)" in respect of the assurance given. The least important family needs of ICU patients were "access to lavatory near the ward waiting room (2.16±0.62)", "availability of furniture in the waiting room (2.25±0.71)", and "access to telephone near the waiting room (2.33±0.6)". The most fulfilled needs of the ICU patients' families included "honestly answering questions (3.50±0.64)", "support by accompanying friends (3.30±0.83)", and "being notified about realities of the patient's progress (3.28 ± 0.57)". The least fulfilled needs of the ICU patients' families were "the possibility to meet a religious advisor (1.01±0.11)", "access to comfortable furniture in the waiting room (1.16±0.42)", and "being notified about religious services (2.04±0.58)".

The Wilcoxon test revealed significant differences between the average importance of the family needs of ICU patients and the level of their satisfaction based on the areas (P= 0.0001). The areas of assurance (3.46±0.30) and comfort (2.54±0.35) were the most and the least important areas of the family needs of ICU patients, respectively. In addition, the areas of assurance (3.11±0.30) and comfort (2.35±0.42) were the highest and lowest fulfilled needs of ICU patients' families, respectively. A satisfaction level of (2.69±0.29) was estimated for the total needs of ICU patients' families (Table 1). Figure 1 also shows that the average satisfaction level of needs is lower than the importance of needs in all areas.

Discussion

The findings of this research showed that the most important area for respondents was reassurance and the most important family needs of the ICU patients were to answer their questions honestly, being able to assist in physical care of the patient, and being informed about realities about the patient's progress. Companions of patients are in fact the next caregiver of patients after discharge. They expect the caregiver staff to get help from them about care and provide them with the facts about their patients. The findings of a study on the needs of families taking care of patients with traumatic headache after discharge confirmed that such individuals face lack of awareness about their primary health needs [15], which has also been emphasized in other studies [16, 17].

Apparently, awareness of the patient's actual condition, involvement in taking care of the patient, and other things that bring the family in close contact with the patient and the state of health create a sense of confidence and hope in the family ultimately leading to their peace of mind.

The least important family needs of the ICU patients were access to lavatory near the waiting room, availability of telephone in the waiting room, and availability of comfortable furniture near the waiting room. In this regard, Omari said the most important need was to ensure that the best possible care is provided to the patient [18]. Al-Hassan and Hweidi also found that more than 80% of the family members of ICU patients classified 16 needs as important or very important, most notable among them were awareness of the patient's condition, a feeling of attention by ICU staff to patients, and providing understandable explanations to the family [19].

Obviously, the companions or family of a patient in ICUs are so much under pressure and concerned about the patient's health that they ignore their own physical comfort and physiological needs, saying that their feeling of comfort was the least priority of the needs.

According to the results of the Wilcoxon test, there is a significant difference between the importance of family needs of ICU patients and the extent of meeting their needs. The area of reassurance was the most important area of the family needs of ICU patients and the comfort area was the most important area of the families. Furthermore, reassurance met the level of needs of the families of ICU patients most and the comfort area attained the lowest satisfaction among the family needs. In this regard, Obringer et al. reported that families classified reassurance and support for family members of ICU patients as the most and least important necessities, respectively [20]. Al-Hassan and Hweidi presented evidence that ICU patients' families ranked the area of reassurance, information, and communication with the patient as the most important areas and comfort and support as the least important need [19]. Omari showed that 10 of the most important needs identified by family members are related to the areas of reassurance and information [18].

In general, provisions of amenities such as rest rooms for companions, and comfortable furniture in the waiting room, etc. we are not available or were at the minimum level in the two hospitals sampled. In developed countries, on the other hand, such facilities are adequately provided for the comfort of the family. In the present study, it may be possible to analyze that reassurance was of paramount importance in view of families as it creates more hope and attention to the individual's mental needs. Additionally, the families of ICU patients are sometimes psychologically so stressed that they forget their own needs.

An interesting finding of this study is that the total average of satisfying needs is lower than the importance of needs in all areas. In this regard, Khalaila noted that the greatest differences of average scores in the importance of needs and their fulfillment were found in the areas of close contact with the patient, information, comfort, and reassurance. Moreover, the total average score of satisfaction was lesser than the importance of needs, with no differences in support area [2]. It was, therefore, concluded that families do not care about the need for their comfort compared to information about patient, having close contact with the patient, and support. Compared to developed countries, family relationships in our country are strong and people are emotional. During an ICU stay by a family member, other family members, especially those closely related to the patient, tend to accompany the patient and be continuously informed about the patient's health. According to the findings of this study, it is necessary to investigate the ways to address the needs of inpatient family care in ICUs. The non-random sampling in this study limits generalization of the results. In addition, the inappropriate psychological conditions of patients' companions could have affected the answers given by them.

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Conflict of interest
No conflict of interest has been declared by the authors.

Author contributions
All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE

(http://www.icmje.org/recommendations/):

-Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;

-Drafting the article or revising it critically for important intellectual content.

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