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RESEARCH ARTICLE

# The requirements of the caregivers of patients hospitalized in intensive care units

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## ABSTRACT

**Background:** Following the hospitalization of a family member in the ICU, new needs are created in the family members, and if these requirements are not met, a lot of stress and anxiety is created in the members and reduces their ability to adapt to the crisis. **Aims and Objectives:** The aim of this study was to determine the needs of caregivers of hospitalized patients in special educational centers of Hamedan University of Medical Sciences. **Materials and Methods:** In this descriptive cross-sectional study, 333 families of patients hospitalized in intensive care units (ICU) of Hamedan's educational-therapeutic centers were selected through convenience sampling. The data collection tool was a questionnaire for demographic information and a 45-item questionnaire on the needs of the patients in the ICU (CCFNI) in five dimensions (support, comfort, information, proximity, and confidence), which was scored by Likert Scale and Total Score of the questionnaire is between 1 and 180. The questionnaires were completed by caregivers (spouse, child, grandchild, parents, brother or sister, bride, or groom). Data were analyzed using SPSS16 software and using descriptive and analytical statistics (Chi-square, *t*-test, ANOVA, and regression). **Results:** The mean score of the questionnaire of health providers' needs was 134.33 ± 16.43 and the caregivers felt the most important need for the patient's family in terms of support (44.5 ± 62.89), and then, the highest scores were, respectively, obtained by the dimensions, information (27.3 ± 64.53), reliability (24.3 ± 33.75), proximity (21.3 ± 18.12), and comfort (17.58 ± 2.83). Furthermore, there was a significant correlation in measuring the dimensions of a questionnaire with the demographic and social characteristics between income status and comfort ($P$ = 0.003), the status of education with the confidence ($P$ = 0.002) and support ($P$ = 0.034), type of illness ($P$ = 0.042), and support ($P$ = 0.05). **Conclusion:** One of the main responsibilities of the health system, along with patient care, is to pay attention and support the family members of the patients, which leads to their satisfaction and the advancement of family-oriented care.

**KEY WORDS:** Need; Caregiver; Intensive Care Unit

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## INTRODUCTION

The family is the most important and fundamental social institution that has a role, culture, and special structure and is the founder of the physical, cultural, spiritual, and social psychosocial interests of its members and has the greatest impact on its members.[1] However, some factors

can suddenly affect the health of the family and change its structure.[2] One of the most important factors is proving the illness and the hospitalization of one of the family members. This process breaks down the family bound, and changes roles and structures, and creates a crisis for its members[3] and the time crisis becomes more severe when the disease is life-threatening and requires the patient to be hospitalized in the intensive care unit (ICU).[4] The ICU is considered as an environment for providing special care to critical patients, and hospitalization in this unit is considered to be a crisis for the patient and his immediate family members.[5] On the other hand, critical illnesses and hospitalization in the ICU often occurs without prediction and warning and happens to the patients and their families in little time, and usually exacerbates the crisis. In fact, admission to ICU is potentially stressful from the patient's point of view and is accompanied with pain, impairment in physiological and emotional functioning, sleep deprivation, limitation of movement, and meeting constraints.[6] On the other hand, during the 1st few days of hospitalization in the unit, immediate needs and psychosocial excitement are created for the patient's family.[7] Furthermore, the patient's fear of death, information ambiguity, unknown prognosis, emotional conflicts, changes in roles, financial needs, failure of the routine of life can include the reactions of fear, anger, shock, despair, anxiety, and depression, especially during the first 72 h of admission from the family members.[8,9] As a result of these events, some families who are unable to adapt to the conditions may suffer from mental illness and emotional crisis.[10] In fact, stressors and family interaction with patients to overcome or adapt to the stressful and critical conditions create new and massive needs that make the family vulnerable.[11] Meantime, on the one hand, the family is the most important support system for individuals, and on the other hand, family members may pass on their anxiety to the patient. Furthermore, unstated anxiety may also be manifested by mistrust of hospital staff; denial of treatment, anger, and even dissatisfaction of cares.[12] Therefore, if the created stress is not reduced, it will have consequences for the patient, his family, and the employees. It is likely that informational support of the family members of patients hospitalized in the ICU may potentially reduce mental stress and their ability to better adapt and support patients.[5] On the other hand, health is based on a patient-centered and family-centered system, and an open meeting policy as an essential requirement for patients and their families is raised in ICUs. Clinical guidelines in many countries recommend open meeting policy in ICU for family-centered care.[13] Therefore, the informational support of the family members of the patient hospitalized in the ICU is potentially effective in reducing mental stress and their ability to better adapt and support patients.[5] Family-centered care is defined as an innovative approach in planning, delivering, and evaluating critical caregivers in health-care systems and collaborative and useful collaboration between patients, families, and care providers. Therefore, patient care and family-centered care can be implemented at all ages and in every health setting.[14] Patient-centered care has been part of the provision of nursing care since the 1970s, and the important role of the family in supporting, assisting, and caring for critical patients has been recognized in recent years as an important issue.[15] However, studies have indicated that nursing knowledge is devoted to patient care in critical situations. Evidence suggests that nurses are accustomed to seeing the world through a professional perspective, which limits their thinking, judgment, and ultimately their performance. For the good performance, the world needs to be seen from the eye of the patient. This is very important in nursing education because training nurses empower them to meet the clients' needs and provide patient-oriented care.[16] Mitchell *et al*. state family-centered care in critical units as the strongest predictor of the first 48 h of crisis.[15] This means that if nursing care is provided comprehensively and with high quality, nurses of ICUs should pay attention not only to the patients themselves but also to the psychosocial needs of their families. In fact, in such a situation, both family members need the nurses' physical and emotional support, and nurses can never consider themselves responsible for protecting family members during the bitter and unforgettable experience of the hospitalization of their relatives or their probable death.[17] The access of family members to patients is one of the other needs which have been emphasized in various studies.[18] In the meantime, the need to recognize and address the psychosocial needs of family members of sick and special patients has increasingly been emphasized as an indisputable priority for nurses working in ICUs. Unfortunately, in most cases, psychosocial needs are not taken into account by nurses and other healthcare workers.[19] Undoubtedly, as the first step in avoiding this type of effective under-appreciation that occurs in many unwanted or unconscious cases, an accurate and scientific assessment of these needs should be taken into consideration by authorities, managers, and service providers. This measurement has always been a challenge and hesitancy for nurses and health-care professionals.[16,17] The aim of this study was to determine the needs of caregivers of patients admitted to the ICUs of Hamadan Medical and Educational Centers with regard to the fact that cultural differences will affect the care of patients.

## MATERIALS AND METHODS

This is a cross-sectional descriptive analytic study that was conducted in 2016. The study population consisted of all caregivers of patients hospitalized in ICUs in Educational Therapeutic centers of Hamedan (Be'sat, Sina, Beheshti and Farshchian Qalb). Based on the paper by Bandari *et al*., and the confidence level of 0.95 and accuracy of 1333 families of patients hospitalized in ICUs were included into the study.[17] After obtaining the necessary permissions from the deputy of the research and nursing and midwifery faculty and presenting them to the relevant units and during the legal procedures, the researcher referred to the four ICUs of Be'sat,

Beheshti, Farshchian Qalb and Sina hospitals of Hamedan. Easy sampling was conducted. The relevant sample was taken from patients attending to hospital in a specific day and using a list of admitted patients, and those who had inclusion criteria were entered into the study. One day in between four hospitals were investigated and the list of newly admitted patients was examined and at the time of visit and asked the carers to complete the questionnaire in the entrance room. To achieve the research goals, the main criterion for entering the study was that the caregiver and the principal companion at the time of the research should be one of the family members of the family, including the spouse, child, grandchild, parents, brother or sister, bride, or groom. Other entrance criteria included age 18 or over, speaking in Persian, and willingness to participate in the study. Exclusion criteria include the prevalence of the person to physical disabilities, such as deafness, blindness, or motorized disabilities, as well as the simultaneous care of other family members due to physical or mental illness at home or at hospital. The data were collected through demographic information questionnaire (age, sex, level of education, occupation, marital status, type of family relationship, patient status, type of disease, number of family members, duration of hospitalization in ICU, experience in hospitalization, and economic adequacy status) and the questionnaire of assessing the needs of the family of patients in the critical care unit (CCFNI) was Leske, which has so far been used by many researchers.[20] This questionnaire has 45 items that are scored according to the Likert scale. The total score of the questionnaire is between 1 and 180 and includes 5 dimensions. Then, the dimensions were as support (15 items), comfort (6 items), information (8 items), proximity (9 items), and confidence (7 items). In the study conducted by Bandari *et al.*, Cronbach's Alpha coefficients for the whole scale of was 0.926, 0.7 in the three dimensions of support, comfort, and proximity and 0.6–0.7 in two dimensions of information and reliability. The findings of the study indicate the formal, structural, differential and internal consistency of the tool, and the use of a questionnaire has been proposed in the research.[17] Finally, the data were analyzed using descriptive and analytical statistics (Chi-square, *t*-test, ANOVA, and regression). The research units were confident that all information was confidential. Written consent was obtained from the studied units, and they were asked to honestly complete the form.

## RESULTS

In this study, 333 patient caregivers who had inclusion criteria were studied. Finally, 286 questionnaires were returned and 47 were excluded due to incomplete completion and lack of study conditions. 58.8% of the main caregivers were male, 55.2% were married, 35.6% were employed, and 24% were the patients' children. 29.6% of the majority of caregivers had bachelors' education, 65.73% had no experience of hospitalization, 34.1% had an income of between 1 and 2 million. 20.6% of the patients were hospitalized in the ICU due to respiratory problems. The average days of hospitalization in the ICU varied from 12 to 24 days. The average age of caregivers is 50.84 ± 23.08 years. The summary of individual and social information is presented in Table 1. The average score of the total questionnaire of caregivers was 134.33 ± 16.43. The most important need of the patient's family was considered to be the support (44.5 ± 62.89), and then, respectively, the highest score was obtained by information (27.3 ± 64.57), confidence (24.3 ± 33.75), proximity (21.3 ± 18.12), and comfort (17.58 ± 2.83). The mean and standard deviation of the dimensions of the questionnaire are summarized in Table 2. Furthermore, in measuring the dimensions of a questionnaire with the demographic and social characteristics there was a significant correlation between income status and comfort ($P = 0.003$), the status of education with confidence ($P = 0.002$), and support ($P = 0.034$), and type of illness and support ($P = 0.042$). The findings indicated a significant and positive relationship between all aspects of care ($P < 0.001$). The highest correlation coefficient was between the dimensions of support and comfort ($r = 0.834$), and the least correlation was between the dimensions of support and confidence ($r = 0.225$). Furthermore, the regression analysis in Table 3 indicated that the needs of the family of patients admitted to the ICU with a significant increase in the number of hospitalization days were 0.523 and this need was reduced ($P < 0.001$).

## DISCUSSION

This study aimed to determine the effect of the needs of caregivers' whose patients are hospitalized in ICUs of Hamedan University of Medical Sciences in 2016. According to the findings of the research, caregivers have felt the most important needs of the patient's family in the support dimension and then, respectively, received the highest score in the information, confidence, proximity, and comfort, respectively. In the study conducted by Bandari *et al*., the support dimension was obtained to be the most important need, and comfort was found to be the least important need of the family of patients. Therefore, the findings of this study are consistent with their study.[17] Furthermore, in a study conducted by Lee and Lau, the support dimension was the most important need,[21] Auerbach *et al*. reported the need for information about the patient's conditions and actions taken for him, as well as information on the equipment used for patients, have been reported as the most important needs raised by the families.[22] Bailey *et al.* also investigated the relationship between information support and family anxiety in inpatient care units and found that information support has increased family satisfaction.[15] The results of Sarhadi *et al*. who examined the needs of the family of patients in ICU and CCU. Indicated the highest priority of family needs of patients in the field of information and confidence,

**Table 1:** Comparison of frequency distribution of demographic characteristics of the units under study

| Variable | Type | Absolute frequency | Relative frequency |
|---|---|---|---|
| Sex | Male | 168 | 0.58 |
| | Female | 118 | 0.41 |
| Type of disease | Multiple trauma | 32 | 0.11 |
| | Respiratory problems | 5 | 0.20 |
| | Internal | 51 | 0.17 |
| | Brain problems | 57 | 0.19 |
| | Coronary heart disease | 48 | 0.15 |
| | Heart failure | 31 | 10 |
| | Burn | 9 | 0.31 |
| Age | | 50.84±23.08 | |
| Period of hospitalization in intensive care unit (day) | | 12.32±13.28 | |

**Table 2:** The statistical mean of the total score of the questionnaire and dimensions of the questionnaire of caregiver's needs in the intensive care unit

| Variable | Mean | SD | Max. | Min. |
|---|---|---|---|---|
| Information | 2764 | 3.57 | 32 | 12 |
| Confidence | 24/33 | 3.57 | 36 | 15 |
| Proximity | 21/18 | 3.12 | 28 | 10 |
| Support | 44/62 | 5.89 | 60 | 28 |
| Comfort | 17/58 | 2.83 | 24 | 10 |
| Total score | 134/33 | 16.43 | | |

and this requirement in patients admitted to the ICU was much higher than the patients' needs in the CCU which can be due to the worsening conditions and complexity of the equipment available in the ICU.[23] Consistent with the findings of the present study, in a descriptive study, Maxwell *et al.* have evaluated the needs of nurses and caregivers of hospitalized patients where the needs related to information has dedicated the second category of needs for the family of patients.[24] This may be due to less visits to the ICU,[25] and due to unfavorable conditions of patients who are unable to take care of themselves, receiving adequate information about the care and treatment process and the treatment of patients will strengthen the caregivers' trust and confidence to the health-care team and reduce their concern. On the other hand, in studies from Obringer,[26] Hashim and Hussin,[18] Prachar *et al*.,[27] and Abazari and Abbaszadeh,[28] the confidence was the most important care need of the family of patients. In the study conducted by Javadi *et a*l.,[7] Sarhadi *et al*.,[29] and Hinkle,[19] the requirements of the trust and information category were of the highest priority. The results of this study indicate that the families of patients hospitalized in ICUs had the highest need for supportive care, which suggests the need for increased support systems for supporting patients requiring special care and their families. Furthermore, caregivers consider receiving adequate information and confidence in caring patient as highly important. In the study conducted by Reynold and Prakinkit, proximity has been reported as the second major dimension of the psychosocial need of the family of patients.[30] Proximity may be important because usually the patient's hospitalization in the ICU is accompanied by a visit restriction for the patient's family.[30] Cullen *et al*. stated that the visit of a family with the patient brings about support, information, proximity, and confidence for the family, and increases family satisfaction.[31] On the other hand, according to the results of this research, the minimum need of families was in the comfort area, which may be said that in the early days of the hospitalization of the patient in the ICU, the family is exposed to high emotional stress and is seeking information about the conditions of their patients,[4] the comfort dimension of the family is of the least importance. In studies conducted by Hashim and Hussin,[18] Hinkle and Fitzpatrick,[19] Shorofi and Fears[25,32] family members reported their least need for comfort. But in a study conducted by Karlsson *et al*.[33] who have dealt with the satisfaction of family members of patients in Swedish healthcare units, families indicated a high level of satisfaction in all needs groups and the greatest needs of family members was in the area comfort and regular acquisition of information that this difference in results could be due to the cultural difference in our country and Sweden because, considering the emotional conditions prevailing in Iranian families, caregivers are more concerned with the patient's condition and healing. The results of this study ındıcated that with increasing the number of hospitalızatıon days, the needs of the families of hospitalized patients decreases. Considering the critical condition on the 1st day of hospıtalızatıon in the ICU, the family members are also in a more stressful way psychologically and physically, and this will increase the needs of the family members, but over time, family will accept ıt. On the other hand, on the 1st day of hospıtalızatıon, the family may be unfamiliar with the hospital, department, patient status, etc., which, based on the information received, and the provided support, they are trying to adapt to the problem. The other reason for the decline in family needs

**Table 3:** Linear regression analysis of factors related to family needs of patients hospitalized in intensive care units

| Related factors | Beta (non-standard coefficient) | Non-standard coefficient | Standard error | *P* value |
|---|---|---|---|---|
| Length of admission to the intensive care unit | −0.523 | 5.136 | 0.05 | 0.000 |
| Educational status | −0.523 | −0.117 | 0.070 | 0.096 |
| marital status | 0.119 | 1.830 | 1.018 | 0.074 |
| Type of disease | 0.110 | 0.857 | 0.518 | 0.099 |
| The economic situation | −0.107 | −1.453 | 0.898 | 0.107 |

over time may be the stabılıty of the patients condıtıon.[34] One of the main constraints of this study was the critical circumstances of the companions and lack of cooperation in some cases, which led to prolongation of the sampling process.

## CONCLUSİON

One of the main responsıbılıtıes of the health-care system is to pay attention and support to the family members of the patients and may be due to the lack of attention to their family's needs. Unfortunately, the relationship between the family and the patient hospitalized in the ICU is relatively interrupted. Although there is no possibility of complete patient attendance in ICUs due to the special circumstances, the support and attention to the need of those who undergo stressful conditions can lead to their satisfaction and sometimes even follow-up and help to the patient and personnel. In the meantime, nurses, as a key member of the treatment team, are in need of assistance and appropriate communication with the adherents of the special department during their transition from critical situations. Furthermore, in the ICU, by providing the necessary facilities and welfare for the companions, they will provide favorable conditions for them and, in fact, for the comfort of the patients.

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## REFERENCES

1. Hassanian ZM, Zali B, Khalili A, Kh O. The viewpoints of patients about observance of patients' rights by treatment staff by health and teaching centers affiliated with hamadan medical university. J Pharm Sci Res 2017;9:2342-5.
2. Jokar S, Motamed N, Kamali F, Azodi F, Khalili A, Jahanpour F. The attitudes and practice of mothers who were referred to the health care centers in Iran for the use of medicinal plants in the treatment of children's diseases. J Pharm Sci Res 2017;9:2349-52.
3. Maruiti MR, Galdeano LE, Farah OG. Anxiety and depressions in relatives of patients admitted in intensive care units.Acta Paul Enferm 2008;21:636-42.
4. Afshari A, Khalili A, Dehghani M, Beiramijam M, Lotf MD, Noodeh FA, Oshvandi K. Comparing the frequency of occupational injuries among medical emergency staff and nurses of intensive care units in Hamadan. Ann Trop Med Public Health 2017;10:646-50.
5. Bijttebier P, Vanoost S, Delva D, Ferdinande P, Frans E. Needs of relatives of critical care patients: Perceptions of relatives, physicians and nurses. Intensive Care Med 2005;27:160-5.
6. Shahriyari M, Khalili A, Shamsizadeh M, Mardani D, Paymard A, Vardenjani MM. Effects of foot reflexology on pain in patients after lower limb amputation. J Mazandaran Univ Med Sci 2016;26:18-26.
7. Javadi M, Hejr H, Zolad M, Khalili A, Paymard A. Comparing the effect of endotracheal tube suction using open method with two different size catheters 12 and 14 on discharge secretion, pain, heart rate, blood pressure, and arterial oxygen saturation of patients in the intensive care unit: A randomized clinical trial. Ann Trop Med Public Health 2017;10:1312-7.
8. Stayt LC. Nurses' experiences of caring for families with relatives in intensive care units. J Adv Nurs 2007;57:623-30.
9. El-Masri MM, Fox-Wasylyshyn SM. Nurses' roles with families: perceptions of ICU nurses. Intensive Crit Care Nurs 2007;23:43-50.
10. Paymard A, Bargrizan S, Ramezani S, Khalili A, Vahdatnejad J. Comparing changes in pain and level of consciousness in open endotracheal suction catheters with two sizes: 12 and 14: A randomized clinical trial. Eur J Anal Chem 2017;12:591-7.
11. Soltani F. Family's Experiences of Patients Admitted in Intensive Care Unit (ICU)(MSc Thesis). Isfahan, Iran: Isfahan University of Medical Science; 2005.
12. Leske JS. Interventions to decrease family anxiety. Crit Care Nurs 2002;22:61-5.
13. Spreen AE, Schuurmans MJ. Visiting policies in the adult intensive care units: A complete survey of dutch ICUs. Intensive Crit Care Nurs 2011;27:27-30.
14. FAQ IfF-CC. Institute of Family-Centered Care; 2005. Available from: http://www.familycenteredcare.org. [Last updated on 2008 Jun 25].
15. Bailey JJ, Sabbagh M, Loiselle CG, Boileau J, McVey L. Supporting families in the ICU: A descriptive correlational study of informational support, anxiety, and satisfaction with

care. Intensive Crit Care Nurs 2010;26:114-22.
16. Cheraghi F, Shamsaei F, Riazi H. Survey of nursing and care needs of patients with mental disorders than of hospital discharge. Sci J Ham Nurs Midwifery Fac 2011;18:15-25.
17. Bandari R, Heravi-Karimooi M, Rejeh N, Zayeri F, Mirmohammadkhani M, Montazeri A. Translation and validation of the critical care family needs inventory. J Iran Inst Health Sci Res 2012;12:89-97.
18. Hashim F, Hussin R. Family needs of patient admitted to intensive care unit in a public hospital. Proc Soc Behav Sci 2012;36:103-11.
19. Hinkle JL, Fitzpatrick E. Needs of American relatives of intensive care patients: Perceptions of relatives, physicians and nurses. Intensive Crit Care Nurs 2011;27:18-25.
20. Naderi M, Rajati F, Yusefi H, Tajmiri M, Mohebi S. Health literacy among adults of Isfahan. J Health Syst Res 2013;9:473-83.
21. Lee LY, Lau YL. Immediate needs of adult family members of adult intensive care patients in hong kong. J Clin Nurs 2003;12:490-500.
22. Auerbach SM, Kiesler DJ, Wartella J, Rausch S, Ward KR, Ivatury R, *et al.* 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;14:202-10.
23. Sarhadi M, Navidian A, Harandy TF, Keykhaei A. Assessment of psycho-social needs of the family members of the patients hospitalized in ICU and CCU. Iran J Crit Care Nurs 2013;6:259-68.
24. 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.
25. Shorofi SA, Jannati Y, Moghaddam HR. The psychosocial needs of the families of the patients admitted to intensive care units: A review of literature. J Clin Excell 2014;3:46-57.
26. Obringer K, Hilgenberg C, Booker K. Needs of adult family members of intensive care unit patients. J Clin Nurs 2012;21:1651-8.
27. Prachar TL, Mahanes D, Arceneaux A, Moss BL, Jones S, Conaway M, *et al*. Recognizing the needs of family members of neuroscience patients in an intensive care setting. J Neurosci Nurs 2010;42:274-9.
28. Abazari F, Abbaszadeh A. Comparision 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.
29. Sarhadi M, Navidiyan A, Harandi TF, Kheykhaee A. Assessment of psychosocial needs of the family members of the patients hospitalized in ICU and CCU. Iran J Crit Care Nurs 2014;6:257-66.
30. Reynold J, Prakink S. Needs of family members of gritically ill patients in cardiac care unit: A comparison of nurses and family perceptions in Thailand. J Health Science Res 2008;2:31-40.
31. Cullen L, Titler M, Drahozal R. Family and pet visitation in the critical care unit. Crit Care Nurs 2003;23:62-7.
32. Fears BS. Needs and nursing support of mothers during their child's hospitalization. Iran J Nurs (IJN) 2011;24:57-66.
33. Karlsson C, Tisell A, Engström Å, Andershed B. Family members' satisfaction with critical care: A pilot study. Nurs Crit Care 2011;16:11-8.
34. Divdar Z. The Relationship betwen Psychosocial Needs and Quality of Life in Pateints Families Hospitalized in Transplant Unit. Tehran, Iran: In Afzalipour Kerman University of Medical Siences: Kerman University of Medical Siences; 2016.

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