

Assessing the Link between Family Perceptions of Their Needs and Satisfaction with Emergency Department

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Received: 17.08.2024

Revised: 18.09.2024

Accepted: 22.10.2024

ABSTRACT

Background: Assessing the link between family perceptions of their needs and satisfaction with the Emergency Department (ED) in the Kingdom of Saudi Arabia (KSA) requires consideration of both universal factors affecting healthcare satisfaction and the unique cultural, social, and healthcare context in Saudi Arabia. Family dynamics and healthcare practices in KSA may influence how families perceive their needs and how satisfied they are with the care their loved ones receive in the ED.

The aim of the study: To explore the association between family's needs perception and satisfaction in relation to used emergency department.

Design: A correlation descriptive research design was utilized. Sampling: A convenience sample of 100 family members was selected. Setting: This study was conducted at the emergency department of Al Noor Hospital, Makkah.

Instruments: Two instruments of data collection were used. Assessment of emergency ill patients' family needs using CCFNI, and family satisfaction questionnaire were involved.

Results: A strong negative correlation between total family satisfaction score and emergency care family needs for support ($p=0.002$), assurance ($p=0.001$), proximity ($p=0.001$), and information ($p<0.001$). While a moderate negative was found, the need for comfort ($p=0.05$). The total CCFNI score had a strong negative correlation with family satisfaction score ($p=0.002$).

Conclusion: Understanding the link between family perceptions of their needs and their satisfaction with ED care in KSA is crucial for improving the quality of emergency care. By taking into account cultural, social and healthcare system factors, hospitals can implement targeted strategies to enhance both family satisfaction and the overall ED experience. More than half of studied family had poor family satisfaction. Also, the proximity need was the higher importance need ranked followed by information, assurance, support, and finally comfort need. General characteristics of family may play a subordinate role.

Recommendations: Addressing the unique needs of families in the ED setting in KSA, particularly around communication, emotional support, and involvement in care, can improve patient outcomes and foster a more patient- and family-centered approach to care.

Keywords: Family needs perception, Family satisfaction, and Emergency department.

INTRODUCTION

Emergency Departments (EDs) are high-pressure environments where patients often require urgent medical attention⁽¹⁾. In Saudi Arabia (KSA), families play a crucial role in healthcare decision-making, often being highly involved in the care process; families typically accompany patients to the ED, and their role is crucial in both

providing emotional support and assisting in decision-making⁽²⁾. This reliance on family members highlights the importance of addressing their needs during their visits. Family satisfaction is often seen as a reflection of the overall quality of care provided, as family members contribute significantly to the care process⁽³⁾.

In KSA, where family structures are strong and healthcare is predominantly delivered through public and private hospital systems, understanding the link between family needs and satisfaction in EDs is vital for improving patient and family experiences. Despite this, there is limited research specifically exploring how family perceptions of their needs in the ED influence their satisfaction with care in KSA⁽⁴⁾. A recent study revealed a discrepancy between the needs that family members who visit emergency ill patients perceive as satisfied or unmet and the requirements that the patients themselves have stated. Unmet requirements have the potential to negatively impact family members' health and result in the development of PICS-F⁽⁵⁾. Family members also experience different psychological issues and may increase by fear of losing their loved ones, distraction of family members, and fear from future, and patient present in highly stressful emergency environments equipped with high technology⁽⁶⁾.

It is challenging for medical professionals to care for the relatives of emergency patients⁽⁷⁾. Several factors may increase risk for post-emergency care syndrome in families such as care giver gender, age, severity of patients' illness, and present of social support^(8, 9). Besides, performing caregiving and decision maker roles, family members may face a several challenge such as increase financial demand with increase need for medical services, changing work shift to be compatible with visiting hours, and increase excuse from work⁽¹⁰⁾. A critically ill patient's admission to the emergency department is considered a crisis not just for the patient but also for the patient's family⁽⁶⁾.

Family members' desires are significant because of their support of the patients as well as their own needs⁽⁵⁾. The shift in culture toward patient- and family- centered care has prompted an exploration on the advantages of having family members present in the emergency department⁽¹¹⁾. Flexible emergency hours may be stressful for health professionals' staff, but decrease psychological stress for patients and their family, increase family satisfaction and patient wellbeing⁽¹¹⁾.

Family needs require early attention to decrease psychological distress. It is highly valuable to explore the relationship between family needs perception and satisfaction with emergency care in order to improve patient-centered care, resolve ethical issues, guide policy decisions, support family well-being, and maybe even improve patient outcomes. By making a significant contribution to this field of inquiry, our work opens the door to better emergency experiences for patients and their families. Therefore, the aim of this study is to explore the association between family needs perception and satisfaction in relation to used emergency department.

Research questions

1. What is the level of perception of patient's family needs?
2. What is level of satisfaction of patient's family in relation to the used emergency department?
3. What is association between family needs perception and satisfaction in relation to used emergency department?

METHOD

A correlation descriptive research design was utilized. This study was conducted at the emergency department of Al Noor Hospital, Makkah. A convenience sample of caregiver family members was included in the study. About 100 family members were included after calculating sample size from total number of patients admitted to previous emergency department. An electronic soft program used to calculate the sample size. Total sample size was 100, total number of patients was 134 admitted within three previous months, margin of error was 5%, and confidence level was 95%. Family members who refused to participate in this study were excluded from the study.

Two Instruments of data collection were used in this study after reviewing the related literature⁽¹²⁻¹⁴⁾. The first instruments: emergency patients' family needs. It contained three parts. Part one: Characteristics of patients: and family members; Patients age, previous hospitalization and In addition, family member demographic data included family member age, marital status, which one involved in patient care, level of education, and degree closer to patient. Part two: level of consciousness using Glasgow coma scale which developed by Teasdale & Jennett (1974)⁽¹⁵⁾, Scoring system: 13-15 indicated consciousness, 14-9 indicated semiconscious patient, 8-3 indicated unconscious patient were assessed using part one of tool one.

Part three: It was used to assess critically ill patients' family needs using critical Care Family Needs Inventory questionnaire (CCFNI). It was developed by Molter (Molter & JS, 1995)⁽¹⁶⁾. The 45 needs statements total, The 45 CCFNI requirements statements were divided into five subscales: 6 needs statements for assess comfort, 14 needs statements for assess support, 9 needs statements for assess information, 6 needs statements for assess comfort, closeness, and proximity in addition 7 needs statements for assess assurance. The 45 CCFNI requirements statements were divided into five subscales: 6 needs statements for assess comfort, 14 needs statements for assess support, 9 needs statements for assess information, 6 needs statements for assess comfort, closeness, and

proximity in addition7 needs statements for assess assurance. Scoring system: a Likert value was assigned between 1 and 4 indicating how important they were. 1 denotes not important, 2 somewhat important, 3 important, and 4 extremely important A score of 45 was the lowest, while 180 was the maximum.

The second instrument used to measure family satisfaction using FS-ICU 24 questionnaire. This original scale developed by Heyland & Tranmer (2001)⁽¹⁷⁾. This tool consists of two parts. Fourteen questions involved in Part I, "Satisfaction with Care," and sixteen questions included in Part II, "Family Satisfaction with Decision-Making around Care of Ill Patients." Each question will be answer in form of Likert scale graded 1 to 5. Grade 1 indicated very dissatisfied and grade 5 indicated completely Satisfied⁽¹²⁾. The total score was computed, and classified into (0-24) represents poor, (25-49) represents fair, (50-74) represents good, (75-94) represents very good, and >95 represents excellent⁽⁵⁾.

Validity and Reliability

CCFNI Part two, an instrument one has good psychometric properties, validity and reliability was measured using Cronbach's alpha coefficient was 0.90⁽¹⁸⁾. In addition, instrument two, FS-ICU 24 has been high reliability with Cronbach's alpha was 0.90⁽¹⁹⁾. In the pilot research, ten family members (10% of the sample) were included to assess the usefulness of the instruments. The necessary modifications were made.

Ethical approval from the Hospital director was obtained after explaining the objectives and methods of data collection. Written informed consent was obtained from family members to participate in the study. The data collection starts from March to May 2024. The Arabic version of the questionnaire was translated, and professional back translation was completed. The researcher invites family members to complete the questionnaire. The researcher informed the family members about their right to refuse to participate or withdrawal from the study, Data privacy, autonomy, and secrecy were guaranteed.

Using SPSS v28.0, statistical analysis was performed (IBM Inc., Chicago, IL, USA). To assess if the data distribution was normally distributed, the Shapiro-Wilks test was employed. The mean and standard deviation were used to display quantitative parametric data (SD). The interquartile range and median were used to display quantitative non-parametric data (IQR). When applicable, the Chi-square or Fisher's exact tests were used to examine the frequency and percentage (%) of the qualitative variables. The Pearson moment correlation equation for linear relations of properly distributed variables was used to conduct correlations between different variables. A statistically significant result was defined as a two-tailed P value less than 0.05.

RESULT

Table (1) illustrates general characteristics of the studied family. The mean value of patients' age (\pm SD) was 48.06 (\pm 15.3) years and about 29% of them were aged from 31-40 years. Family age had a mean value (\pm SD) of 41.2 (\pm 10.35) years, and 39% of families aged from 31-40 years. Regarding marital status, 64 % of family caregivers were married, 6 % of them were divorced. Regarding level of education, 58 % of family caregivers were educated and 42% of them were not educated. Regarding a patient's level of consciousness, about 60 % of patients were unconscious. Nearly 62 % of the studied patients had previous hospitalization. Relationship to patient was first degree in 90 % patients and second degree in 10 % patients.

Table 1: General characteristics of the studied critically care family and their patients.

| General characteristics | (n=100) | |
|-------------------------|-------------|---------|
| Patientage | 5.3 | |
| | 21-30 years | 13(13%) |
| | 31-40 years | 29(29%) |
| | 41-50 years | 20(20%) |
| | 51-60 years | 14(14%) |
| Familyage | 10.35 | |
| | 21-30 years | 18(18%) |
| | 31-40 years | 39(39%) |
| | 41-50 years | 20(20%) |
| | 51-60 years | 23(23%) |
| Maritalstatus | Married | 64(64%) |
| | Divorced | 6 (6%) |
| | Single | 12(12%) |
| | Widow | 18(18%) |
| Previoushospitalization | Yes | 62(62%) |
| | No | 38(38%) |
| Levelofeducation | Educated | 58(58%) |

| | | |
|--------------------------------|--------------------------|---------|
| Relationship to patient | Not educated | 42(42%) |
| | First degree | 90(90%) |
| | Second degree | 10(10%) |
| Patient level of consciousness | Conscious (GCS 13-15) | 10(10%) |
| | Semiconscious (GCS 14-9) | 30(30%) |
| | Unconscious (GCS 8-3) | 60(60%) |

Data are presented as mean \pm S.D. or frequency (%).

Table (2) shows that Frequency distribution of the studied family in relation to family satisfaction score. The median (IQR) of satisfaction with care was 1.33(3.36 - 3.64). Satisfaction with decision-making was with a median (IQR) of 9.22(3.23 - 3.69). The total score was with a median (IQR) of 1.39 (3.36 - 3.56). About more than half 53% had poor family satisfaction and less than one quarter experienced fair family satisfaction.

Table 2: Frequency distribution of the studied family according to their level of family Satisfaction score.

| FS-ICU24 questionnaire | | (n=100) |
|--|--|-----------------|
| Family satisfaction with care | | 1.33(3.36-3.64) |
| Family satisfaction with decision-making | | 9.22(3.23-3.69) |
| Total family satisfaction score | | 1.39(3.36-3.56) |
| Category of family satisfaction score | Poor family satisfaction (0-24) | 53(53%) |
| | Fair family satisfaction (25-49) | 25(25%) |
| | Good family satisfaction (50-74) | 15(15%) |
| | Very good family satisfaction(75-94) | 7 (7%) |
| | Excellent family satisfaction(>95-100) | 0 (0%) |

Table (3) illustrates the relationship between CCFNI score and general characteristics of the studied family. The total CCFNI score was with a mean value (\pm SD) of 106.16 (\pm 37.51). The mean value (\pm SD) for CCFNI subscale was support was 3 (\pm 0.18), followed by comfort was 3.2 (\pm 0.35), assurance was 3.51 (\pm 0.22), information was 3.6 (\pm 0.25), and proximity was 3.9 (\pm 0.28). There was a statistically significance relation between CCFNI subscales as following support (P= 0.035), assurance (P= 0.024), proximity (P= 0.030), information (P= 0.021) and comfort (P= 0.036) and patient age group.

There was a statistically significance relation between CCFNI subscales assurance (P= 0.001) and information (p=0.017) with marital status. Family who had previous hospitalization history had a statistically significance relation with CCFNI subscales (information p=0.003) than who didn't. Non-educated family caregivers had higher need for assurance and information with significance difference (p=0.031, <0.001 respectively). First degree family caregivers had expressed more need with a statistically significant than second degree for proximity to their patients (p= 0.029) and need more information about patient's condition (p=0.021). Also, family whose patients are unconsciousness expressed more needed for being closer to their patients with statistically significance difference (p=0.003).

Table 3: Relation between CCFNI score and general characteristics of the studied family:

| General characteristics | | Support | Assurance | Proximity | Information | Comfort |
|---------------------------------------|-------------|-------------------------------------|----------------|----------------|----------------|----------------|
| Family perception need Subscale Score | | 3.2 \pm 0.35 | 3.5 \pm 0.22 | 3.9 \pm 0.28 | 3.6 \pm 0.25 | 3 \pm 0.18 |
| Ranked | | 4(69.00%) | 3(69.59%) | 1(86.25%) | 2(78.58%) | 5(64.13%) |
| Total CCFNI score | | 106.2 \pm 37.51 | | | | |
| Patient age | 21-30 years | 3.2 \pm 0.11 | 3.8 \pm 0.22 | 3.6 \pm 0.37 | 3.7 \pm 0.22 | 2.9 \pm 0.3 |
| | 31-40 years | 3.1 \pm 0.16 | 3.7 \pm 0.22 | 3.5 \pm 0.34 | 3.6 \pm 0.22 | 3.3 \pm 0.34 |
| | 41-50 years | 3 \pm 0.19 | 3.1 \pm 0.21 | 3.3 \pm 0.3 | 3.5 \pm 0.21 | 3.2 \pm 0.31 |
| | 51-60 years | 3 \pm 0.2 | 3.5 \pm 0.29 | 3.2 \pm 0.28 | 3.4 \pm 0.28 | 3.2 \pm 0.33 |
| | >60 years | 2.9 \pm 0.14 | 3.5 \pm 0.25 | 3.3 \pm 0.25 | 3.6 \pm 0.3 | 3.2 \pm 0.45 |
| P value | | 0.035* | 0.024* | 0.030* | 0.021* | 0.036* |
| Marital status | Married | 2.9 \pm 0.18 | 3.2 \pm 0.2 | 3.2 \pm 0.35 | 3.5 \pm 0.26 | 3 \pm 0.4 |
| | Divorced | 3 \pm 0.22 | 3.6 \pm 0.21 | 3.3 \pm 0.25 | 3.7 \pm 0.15 | 3.1 \pm 0.09 |
| | Single | 3 \pm 0.18 | 3.4 \pm 0.23 | 3.5 \pm 0.06 | 3.7 \pm 0.17 | 3.2 \pm 0.36 |
| | Widow | 2.9 \pm 0.11 | 3.4 \pm 0.16 | 3.3 \pm 0.35 | 3.7 \pm 0.26 | 3.3 \pm 0.31 |
| P value | | 0.057* | 0.001* | 0.275 | 0.017* | 0.142 |
| Previous hospitalization | Yes | 3 \pm 0.2 | 3.5 \pm 0.21 | 3.3 \pm 0.3 | 3.5 \pm 0.24 | 3.2 \pm 0.35 |
| | No | 3 \pm 0.13 | 3.5 \pm 0.25 | 3.3 \pm 0.24 | 3.6 \pm 0.27 | 3.2 \pm 0.35 |
| P value | | 0.786 | 0.384 | 0.542 | 0.003* | 0.772 |

| | | | | | | |
|--------------------------------|----------------|-----------|---------------|---------------|-------------------|-----------|
| Level of education | Educated | 3 ± 0.19 | 3.5 ±0.23 | 3.2 ±0.26 | 3.5 ±0.26 | 3.1 ±0.34 |
| | Not educated | 3.5 ±0.16 | 3.8 ±0.22 | 3.3 ±0.3 | 3.8 ±0.25 | 3.2 ±0.37 |
| P value | | 0.444 | 0.031* | 0.138 | <0.001* | 0.488 |
| Relationship to patient | First degree | 3 ± 0.18 | 3.5 ±0.23 | 3.3 ±0.28 | 3.6 ±0.25 | 3.2 ±0.36 |
| | Second degree | 3 ± 0.08 | 3.5 ±0.22 | 3.1 ±0.17 | 3.4 ±0.31 | 3.2 ±0.18 |
| P value | | 0.443 | 0.091 | 0.029* | 0.021* | 0.612 |
| Patient level of consciousness | Conscious | 2.9 ±0.28 | 3.6 ±0.21 | 3.4 ±0.2 | 3.7 ±0.16 | 3 ± 0.49 |
| | Semi-conscious | 3 ± 0.15 | 3.5 ±0.2 | 3.1 ±0.31 | 3.6 ±0.23 | 3.2 ±0.4 |
| | Unconscious | 3 ± 0.16 | 3.5 ±0.24 | 3.9 ±0.3 | 3.5 ±0.27 | 3.2 ±0.29 |
| Pvalue | | 0.155 | 0.184 | 0.003* | 0.211 | 0.203 |

*:significant as P value ≤0.05, Data are presented as mean ±SD. Chi-square or Fisher's exact test

Table (4) presented the relationship between family satisfaction and their general characteristics. It was found that there was a statistical significance difference between general characteristics and family satisfaction mean score. Younger family caregivers had lower family Satisfaction mean score than older family caregivers with statistically significant (p=0.005). Also, younger family caregivers had lower family satisfaction with decision-making mean score than older family caregivers with statistically significant (p=0.029). In addition, married family caregivers had higher family satisfaction mean score than other with statistically significant (p=0.005). Also, family caregivers with previous hospitalizations experience had higher mean score than no previous hospitalizations with statistically significant (P=0.012). First degree family caregivers had lower mean scores than second degree caregivers with statistically significant (p=0.001). Also, family caregivers whose patients are unconscious had lower mean family satisfaction scores than others family caregivers whose patients are conscious and semi-conscious with statistically significant (p<0.001).

Table 4: Relation between family satisfaction and their general characteristics

| General characteristics | | Family Satisfaction with care | Family Satisfaction with decision-making | Total Family Satisfaction score |
|--------------------------------|----------------|-------------------------------|--|---------------------------------|
| Family age (years) | 21-30 y | 3.4 ±0.22 | 3.4 ±0.27 | 3.1 ±0.20 |
| | 31-40 y | 3.6 ±0.23 | 3.3 ±0.27 | 3.2 ±0.37 |
| | 41-50 y | 3.4 ±0.16 | 3.4 ±0.27 | 3.2 ±0.37 |
| | 51-60 y | 3.5 ±0.19 | 3.5 ±0.2 | 3.3 ±0.10 |
| | >60 y | 3.5 ±0.21 | 3.5 ±0.32 | 3.5 ±0.22 |
| P value | | 0.124 | 0.029* | 0.005* |
| Marital status | Married | 3.5 ±0.22 | 3.5 ±0.29 | 3.6 ±0.32 |
| | Divorced | 3.2 ±0.2 | 3.2 ±0.33 | 3.2 ±0.37 |
| | Single | 3.2 ±0.18 | 3.2 ±0.23 | 3.2 ±0.18 |
| | Widow | 3.2 ±0.22 | 3.2 ±0.27 | 3.2 ±0.22 |
| P value | | 0.235 | 0.618 | 0.005* |
| Previous hospitalization | Yes | 3.3 ±0.21 | 3.5 ±0.18 | 3.5 ±0.18 |
| | No | 3.5 ±0.23 | 3.1 ±0.28 | 3.1 ±0.28 |
| P value | | <0.001* | 0.002* | 0.012* |
| Level of education | Educated | 3.5 ±0.21 | 3.4 ±0.27 | 3.4 ±0.27 |
| | Not educated | 3.4 ±0.22 | 3.1 ±0.3 | 3.1 ±0.3 |
| P value | | 0.021* | 0.002* | 0.001* |
| Relationship to patient | First degree | 3.2 ±0.21 | 3.1 ±0.10 | 3.1 ±0.20 |
| | Second degree | 3.6 ±0.06 | 3.4 ±0.29 | 3.4 ±0.19 |
| P value | | 0.010* | 0.003* | 0.001* |
| Patient level of consciousness | Conscious | 3.5 ±0.14 | 3.6 ±0.3 | 3.6 ±0.3 |
| | Semi-conscious | 3.6 ±0.19 | 3.4 ±0.32 | 3.3 ±0.32 |
| | Unconscious | 3.4 ±0.19 | 3.4 ±0.24 | 3.1 ±0.24 |
| P value | | <0.001* | 0.029* | <0.001* |

*significant as P value ≤0.05 .Data are presented as mean ±SD.

Table (5) shows correlation between CCFNI score and the studied family satisfaction. It was found that family caregivers who expressed more needs for support, assurance, proximity, information, and comfort had lower satisfaction with care ($p= 0.004, 0.012, 0.001, <0.001, 0.05$ respectively). Also, a negative strong statistically significance association between increase the studied family caregivers need for support, assurance and information and their satisfaction with decision-making with ($p= 0.001, 0.002, \text{ and } <0.001$ correspondingly). A strong negative correlation between total family satisfaction score and critical care family needs for support ($p=0.002$), assurance ($p=0.001$), proximity ($p=0.001$), and information ($p<0.001$). While a moderate negative was found, the need for comfort ($p=0.05$). The total CCFNI score had a strong negative correlation with family satisfaction score ($p=0.002$).

Table 5: Correlation between CCFNI score and satisfaction of the studied family

| Family satisfaction tool | | Critical Care Family Needs Inventory (CCFNI) | | | | | |
|--|---------|--|-----------|-----------|-------------|---------|-------------------|
| | | Support | Assurance | Proximity | Information | Comfort | CCFNI total score |
| Family Satisfaction with care | r | -0.691 | -0.551 | -0.625 | -0.912 | -.890 | -0.851 |
| | P value | 0.004* | 0.012* | 0.001* | <0.001* | 0.05* | 0.005* |
| Family Satisfaction with decision-making | r | 0.811 | -0.641 | 0.97 | -0.991 | -.025 | -0.625 |
| | P value | 0.001 | 0.002* | 0.003* | <0.001* | .806 | 0.003* |
| Total score of family satisfaction | r | -0.837 | -0.912 | -0.924 | -0.885 | 0.527 | -0.752 |
| | P value | 0.002* | 0.001* | 0.001* | <0.001* | 0.05* | 0.002* |

*:significant as $p \text{ value} \leq 0.05$. r: Pearson Correlation coefficient.

DISCUSSION

This study reveals a strong link between family perceptions of their needs and their satisfaction with ED care in KSA. Families' most significant unmet needs in the ED relate to communication, emotional support, and involvement in care decisions. Additionally, family satisfaction is heavily influenced by factors such as wait times, staff communication, and the physical environment of the ED. Cultural considerations play a significant role in shaping these perceptions. In KSA, where family members often assume central roles in patient care, the expectation for timely information and emotional support is high. The study also highlights the importance of training healthcare staff to communicate effectively with families, especially in stressful situations.

Family satisfaction is a critical metric for assessing the quality of medical care since it tells us whether or not medical staff has effectively taken into account the patient's values and expectations⁽⁵⁾. Taking care of patients' and their families' needs is one of the main duties of nurses in emergency department⁽⁷⁾. Therefore, the aim of the current study was to investigate association between family needs perception and satisfaction in relation to used emergency department.

Regarding family needs perception, the studied families showed high priority for and proximity and information needs following assurance, support, and comfort. This was supported by Alsharari (2019)⁽⁷⁾ who reported that, the investigated patients' relatives in the northern part of Saudi Arabia had higher levels of demands in the areas of assurance, proximity, and information that should be met. However, their needs in the area of comfort are lower. Büyükçoban et al (2021)⁽²⁰⁾ reported that need for assurance and proximity followed by information was the most important need dimension experienced by family, on the other hand support and comfort were the least important dimension.

Saleh Salameh et al., (2020)⁽²¹⁾ reported that in Palestine family assurance domain was the most important. Family members' demands pertaining to assurance and proximity must be given top priority. Mohamed (2016)⁽²²⁾ reported that the highest importance needs for the studied families were assurance and information needs followed by proximity, support, and finally comfort need. Also, Cuenca et al (2022)⁽²³⁾ stated that the family members also thought that information was provided in a more favorable way. While, Eltaybani & Ahmed, (2021)⁽²⁴⁾ reported that the studied family dissatisfied dimension of comfort. This may be due to limited resources for having comfortable waiting room in their studied setting.

Regarding family satisfaction, more than half of the studied families had poor satisfaction and less than one quartile had fair satisfaction using FS- ICU 24 questionnaire. This may be interpreted due to a strict family visiting hours and the lack of information and assurance provided by the family about their patient's condition. The current finding supported by Ponnappa Reddy et al.(2023)⁽²⁵⁾ who reported that the overall family satisfaction mean was low due to lack of information provided by doctors, increase patients severity of illness, and experience of dying patients in this units, limited visiting hours and feeling separated from their loving one. A need for proximity and information were the most important ranked needs reported by the studied family.

On the other hands, the current finding in contrast with Haave R et al. (2021)⁽⁵⁾ who reported that family satisfaction was extremely good, according to the members' overall satisfaction score. But families were less satisfied with the information they received and the decision-making processes than with the nursing and care performed. In addition to, Jensen et al (2017)⁽²⁶⁾ reported that although there was space for improvement, the majority of family members expressed moderate to high levels of satisfaction with patient care, family care, information, and decision-making. This can be interpreted due to the presence of a welcome family policy within their units. Additionally, this may be the result of variations in the development of technology, the accessibility of qualified medical personnel, and the standard of care provided to patients and their families.

The level of family satisfaction may be affected by age and degree of closeness to their patients. In our study first degree and younger family caregivers had lower family satisfaction mean score than other who older age. Also, being married, caring for consciousness patients and previous hospitalization may increase family satisfaction. This can be due to having social support, also family caregiver feeling less tension when communicating with their conscious patients, and previous hospitalization experience may decrease their anxiety and tension as reported by Moss et al (2019)⁽²⁷⁾.

CONCLUSION AND RECOMMENDATION

The current study found that family satisfaction was low due to the increased needs of emergency ill patients in the chosen setting. Additionally, the demand for proximity was ranked highest, followed by the needs for information, assurance, support, and comfort. The general traits of a family could be less important. Higher education and marital status are linked to greater satisfaction, whereas younger families and caregivers with a history of hospitalization are linked to lower satisfaction. Family satisfaction rises when patients become more cognizant. Their degree of pleasure was found to be negatively correlated with the five dimensions of the key family needs inventory. This study suggests that a more stringent hospital policy could improve the satisfaction of emergency care families. A more thorough examination of how interdisciplinary family meetings affect patients and healthcare providers.

REFERENCES

1. Rowe A, Knox M. The Impact of the Healthcare Environment on Patient Experience in the Emergency Department: A Systematic Review to Understand the Implications for Patient-Centered Design. *HERD*. 2023 Apr;16(2):310-329. doi: 10.1177/19375867221137097. Epub 2022 Dec 21. PMID: 36541114; PMCID: PMC10133779.
2. Al-Amoudi SM. Health empowerment and health rights in Saudi Arabia. *Saudi Med J*. 2017 Aug;38(8):785-787. doi: 10.15537/smj.2017.8.19832. PMID: 28762428; PMCID: PMC5556292.
3. Botes ML, Langley G. The needs of families accompanying injured patients into the emergency department in a tertiary hospital in Gauteng. *Curation is*. 2016 Jun 24;39(1):1567. doi: 10.4102/curationis.v39i1.1567. PMID: 27381721; PMCID: PMC6092700.
4. Liyew TM, Mersha AT, Admassie BM, Arefayne NR. Family Satisfaction with Care Provided in Intensive Care Unit; a Multi-Center, Cross-Sectional Study. *Patient Relat Outcome Meas*. 2024 Apr 22;15:105-119. doi: 10.2147/PROM.S453246. PMID: 38680729; PMCID: PMC11048314.
5. Haave R, Bakke H, & Schröder A. Family satisfaction in the intensive care unit, a cross-sectional study from Norway. *BMC Emergency Medicine* [revista en Internet] 2021, 1–12. <https://bmccemergmed.biomedcentral.com/track/pdf/10.1186/s12873-021-00412-8.pdf>
6. Scott, P., Thomson, P., & Shepherd, A. Families of patients in ICU: A Scoping review of their needs and satisfaction with care. *Nursing Open*, 2019; 6(3), 698–712. <https://doi.org/10.1002/nop2.287>
7. Alsharari, A. F. (2019). The needs of family members of patients admitted to the intensive care unit. *Patient Preference and Adherence*, 2019; 13, 465–473. <https://doi.org/10.2147/PPA.S197769>
8. Beesley, S. J., Hopkins, R. O., Holt-Lunstad, J., Wilson, E. L., Butler, J., Kuttler, K. G., Orme, J., Brown, S. M., & Hirshberg, E. L. Acute physiologic stress and subsequent anxiety among family members of ICU patients. *Critical Care Medicine*, 2018; 46(2), 229–235. <https://doi.org/10.1097/CCM.0000000000002835>
9. Charmaz, K., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative Research in Psychology*, 2021; 18(3), 305–327. <https://doi.org/10.1080/14780887.2020.1780357>
10. Stayt, L. C., & Venes, T. J. Outcomes and experiences of relatives of patients discharged home after critical illness: a systematic integrative review. *Nursing in Critical Care*, 2019; 24(3), 162–175. <https://doi.org/10.1111/nicc.12403>
11. Dragoi, L., Munshi, L., & Herridge, M. Visitation policies in the ICU and the importance of family presence at the bedside. *Intensive Care Medicine*, 2022; 48(12), 1790–1792. <https://doi.org/10.1007/s00134-022-06848-1>
12. Critical Care Connections Inc. Family Satisfaction with Care in the Intensive Care Unit: FS-ICU 24R © How are we doing? 2019, (pp. 1–8).

13. Delva, D., Vanoost, S., Bijttebier, P., Lauwers, P., & Wilmer, A. Needs and feelings of anxiety of relatives of patients hospitalized in intensive care units: Implications for social work. *Social Work in Health Care*, 2002; 35(4), 21–40. https://doi.org/10.1300/J010v35n04_02
14. Schleyer, A. M., & Curtis, J. R. Family satisfaction in the ICU: Why should ICU clinicians care? In *Intensive Care Medicine* 2013; (Vol. 39, Issue 6, pp. 1143–1145). <https://doi.org/10.1007/s00134-013-2939-3>
15. Teasdale, G., & Jennett, B. (1974). Assessment Of Coma And Impaired Consciousness. *The Lancet*, 304(7872), 81–84. [https://doi.org/10.1016/S0140-6736\(74\)91639-0](https://doi.org/10.1016/S0140-6736(74)91639-0)
16. Molter, N., & JS, L. Critical Care Family Needs Inventory. *Heart and Lung*, 1995 September. <https://doi.org/10.1037/t37619-000>
17. Heyland, D. K., & Tranmer, J. E. Measuring family satisfaction with care in the intensive care unit: The development of a questionnaire and preliminary results. *Journal of Critical Care*, 2001; 16(4), 142–149. <https://linkinghub.elsevier.com/retrieve/pii/S0883944101700123>
18. Khatri Chhetri, I., & Thulung, B. Perception of Nurses on Needs of Family Members of Patient Admitted to Critical Care Units of Teaching Hospital, Chitwan Nepal: A Cross-Sectional Institutional Based Study. *Nursing Research and Practice*, 2018, 1–7. <https://doi.org/10.1155/2018/1369164>
19. Dale, B., & Frivold, G. (2018). Psychometric testing of the Norwegian version of the questionnaire Family Satisfaction in the Intensive Care Unit (FS-ICU-24). *Journal of Multidisciplinary Healthcare*, 2018 Volume 11, 653–659. <https://doi.org/10.2147/JMDH.S184003>
20. Büyükçoban, S., Bal, Z. M., Oner, O., Kilicaslan, N., Gökmen, N., & Çiçeklioğlu, M. Needs of family members of patients admitted to a university hospital critical care unit, Izmir Turkey: Comparison of nurse and family perceptions. *PeerJ*, 2021; 9. <https://doi.org/10.7717/peerj.11125>
21. Saleh Salameh, B., Saleh Basha, S., Eddy, L., Judeh, H., & Toqan, D. Essential Care Needs for Patients' Family Members at the Intensive Care Units in Palestine. *Iranian Journal of Nursing and Midwifery Research*, 2020; 25(2), 154. https://doi.org/10.4103/ijnmr.IJNM_R_9_19
22. Mohamed, Z. Needs of Family Members of Critically Ill Patients in a Critical Care Unit at Universiti Kebangsaan Malaysia Medical Centre. *Medicine & Health*, 2016; 11(1), 11–21. <https://doi.org/10.17845/MH.2016.1101.03>
23. Cuenca, J. A., Manjappachar, N., Nates, J., Mundie, T., Beil, L., Christensen, E., Martin, P., Diaz, N., Layton, L. S., Plexman, K., Nates, J. L., Price, K. J., & Idowu, O. Humanizing the intensive care unit experience in a comprehensive cancer center: A patient- and family-centered improvement study. *Palliative and Supportive Care*, 2022; 20(6), 794–800. <https://doi.org/10.1017/S1478951521001838>
24. Eltaybani, S., & Ahmed, F. R. Family satisfaction in Egyptian adult intensive care units: A mixed-method study. *Intensive and Critical Care Nursing*, 2021; 66, 103060.
25. Ponnappa Reddy, M., Kadam, U., Lee, J. D. Y., Chua, C., Wang, W., McPhail, T., Lee, J., Yarwood, N., Majumdar, M., & Subramaniam, A. (2023). Family satisfaction with intensive care unit communication during the pandemic: a prospective multicenter Australian study. *Family Satisfaction – COVID ICU. Internal Medicine Journal*, 2023; 53(4), 481–91. <https://doi.org/10.1111/imj.15964>
26. Jensen, H. I., Gerritsen, R. T., Koopmans, M., Downey, L., Engelberg, R. A., Curtis, J. R., Spronk, P. E., Zijlstra, J. G., & Ørding, H. (2017). Satisfaction with quality of ICU care for patients and families: the euroQ2 project. *Critical Care*, 21(1), 239. <https://doi.org/10.1186/s13054-017-1826-7>
27. Moss, K. O., Kurzawa, C., Daly, B., & Prince-Paul, M. Identifying and Addressing Family Caregiver Anxiety. *Journal of Hospice & Palliative Nursing*, 2019; 21(1), 14–20. <https://doi.org/10.1097/NJH.0000000000000489>