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Research Article

Understanding the Needs of Patients' Families in the Intensive Care Unit: A Comprehensive Literature Review

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Abstract

Aims: Families of patients in intensive care units (ICUs) face significant psychological and emotional challenges, with diverse needs spanning assurance, information, proximity, support, and comfort. Understanding and addressing these needs is crucial for enhancing family well-being and satisfaction with ICU care.

Objective: This study aims to synthesize existing evidence on the needs of ICU patients' families, identify priority domains, and explore factors influencing these needs.

Methods: A systematic literature review was conducted following PRISMA guidelines. Searches across PubMed, Scopus, CINAHL, Web of Science, and PsycINFO identified studies published between January 2015 and December 2024. Inclusion criteria focused on peer-reviewed articles addressing the emotional, informational, or practical needs of ICU patients' families. Data extraction and quality assessment were performed using the Joanna Briggs Institute Critical Appraisal Tools. Thematic synthesis was applied for qualitative data, while quantitative findings were analyzed descriptively.

Results: From 11 studies, assurance emerged as the most critical need across diverse populations, followed by information, proximity, support, and comfort. Sociodemographic factors such as age, education level, and gender, as well as contextual factors like cultural norms and length of ICU stay, significantly influenced family needs. Assurance and information were universally prioritized, while proximity and support varied based on regional and cultural contexts.

Conclusion: ICU families' needs are multidimensional and influenced by individual, clinical, and sociocultural factors. Assurance and information consistently rank as top priorities, highlighting the need for family-centered, culturally sensitive care strategies. Tailored interventions, effective communication, and policies facilitating family presence can address these needs and improve family satisfaction. Future research should explore real-time strategies and the role of technology in meeting family needs.

Keywords:

Assurance, comfort, family-centered care, family needs, information, intensive care unit, proximity, support, systematic review







INTRODUCTION

The Intensive Care Unit (ICU) is a specialized area in hospitals designed to provide advanced and continuous care to critically ill patients with life-threatening conditions, such as organ failure and other dysfunctions requiring complex diagnostic and therapeutic interventions (1). The ICU functions in close integration other hospital departments. emphasizing the need for multidisciplinary collaboration to improve patient outcomes (2). Globally, mortality rates in ICUs vary, with the lowest rates reported in Australia and New Zealand (9%) and the highest in Saudi Arabia (20%), contributing approximately 17% of total deaths in critical care units (3).

Admission to the ICU is not only a critical event for the patient but also a significant emotional and physical challenge for their family members. Families often face disrupted sleep patterns, fatigue, and even physical health issues due to the stress associated with their loved one's critical illness (4). Psychological impacts, such as anxiety, depression, and post-traumatic stress disorder (PTSD), are commonly reported among family members of ICU patients (5). Furthermore. families frequently experience feelings helplessness. stress. and confusion. exacerbated by difficulties in expressing their own needs effectively (6).

Family members of ICU patients have distinct needs, primarily focused effective communication and emotional support. However, these needs frequently unmet due to discrepancies between the priorities of healthcare providers and the expectations of families (7). Studies reveal that families value being involved in discussions about the patient's condition and receiving adequate information about the prognosis [8]. Nevertheless, healthcare teams often fail to provide sufficient opportunities for families to express their concerns or access comprehensive information (8).

A review of prior studies highlights the importance of addressing specific domains of family needs. According to Salameh et al. (2020), the assurance domain—which includes the need for information and confidence in the care provided—is the highest priority for 64.10% of family members of ICU patients (9). Similarly, Liew et al. (2018) and Khoshnodi et al. (2017) emphasize the importance of assurance, with higher education levels correlating significantly with a greater need for security and information (10,11). Furthermore, families with patients experiencing reduced consciousness reported higher demands for information, reflecting their heightened anxiety and need for clarity (12).

However, contrasting findings suggest variability in the prioritization of family needs. For instance, Hasandoost et al. (2018)identified support—including emotional and psychological reinforcement—as the most critical need for families, while assurance ranked lower (13). Similarly, Ozbayir et al. (2014) found that families valued reassurance that their loved ones were receiving the best possible care, with the support domain consistently ranking as a top priority (14). These discrepancies highlight the diversity of family needs based on contextual factors such as the patient's condition, length of ICU stay, and cultural differences.

Despite substantial evidence on the needs of families of ICU patients, there remains a lack of consensus regarding the prioritization of these needs across different populations and settings. Variability in findings underscores the need for a comprehensive review to synthesize existing knowledge and identify consistent patterns in family needs. Furthermore, limited research has explored the impact of demographic and cultural factors on family needs, creating a significant gap in understanding the holistic needs of families in diverse healthcare settings. Addressing these gaps is crucial for developing targeted interventions to improve family satisfaction and well-being in the ICU environment.



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This study aims to conduct a literature review to explore and synthesize evidence on the needs of families of ICU patients. By analyzing existing research, the study seeks to provide a clearer understanding of priority needs, identify factors influencing these needs, and offer recommendations for healthcare teams to address family needs effectively in the ICU.

METHODS

Study Design

This study employed a systematic literature review design to synthesize evidence on the needs of patients' families in intensive care units (ICUs). The review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency and replicability.

Search Strategies

A comprehensive search was conducted across the following electronic databases: PubMed, Scopus, CINAHL, Web of Science, and PsycINFO. The search period included articles published from January 2015 to December 2024 to capture recent advancements in understanding family needs. Keywords and Medical Subject Headings (MeSH) terms included "intensive care unit," "patient family needs," "ICU family support," and "family-centered care." Boolean operators (AND, OR) were used to refine searches, and truncation was applied to broaden results. An example search string in PubMed was: ("intensive care unit" OR "ICU") AND ("family needs" OR "family support") AND ("patients' families" OR "relatives").

Inclusion and Exclusion Criteria

Articles were selected based on the following inclusion criteria: Peer-reviewed studies published in English, Focused on family members of ICU patients, addressed

family needs, including emotional, informational, or practical support, and quantitative, qualitative, or mixed-method studies. the exclusion criteria were: studies not in English., conference abstracts, opinion pieces, or editorials, and studies focusing solely on patients or healthcare providers without family involvement.

Data Extraction

Data extraction was performed using a data extraction standardized including the following variables: Author(s), publication year, and country of study. Study design and population characteristics. Types of family needs assessed (e.g., emotional, informational, practical). Key and findings recommendations. Two independent reviewers conducted the extraction to ensure accuracy, discrepancies resolved through discussion or consultation with a third reviewer.

Quality of Study Assessment

The methodological quality of included studies was assessed using the Joanna Briggs Institute (JBI) Critical Appraisal Tools for quantitative, qualitative, and mixed-method studies [1]. Each study was rated on key criteria, such as clarity of objectives, appropriateness of methodology, and validity of findings. Studies were categorized as high, moderate, or low quality based on their overall scores.

Data Analysis

A thematic synthesis approach was employed for qualitative data, identifying recurring themes related to family needs. For quantitative data, descriptive statistics were extracted and presented in tabular form to highlight key findings. Where feasible, a narrative synthesis integrated both qualitative and quantitative results to provide a comprehensive understanding of family needs in ICUs.







RESULTS

The literature search framework in this literature review can be seen in Figure 1.

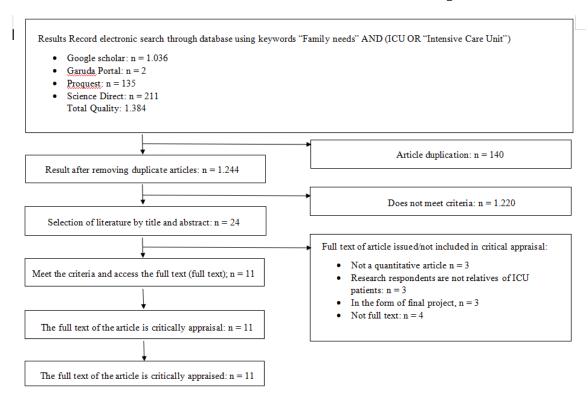
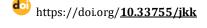


Figure 1: Flow chart and article selection

Table 1 highlights key research studies exploring the priority needs of families with patients in ICU settings. Each study uses the Critical Care Family Needs Inventory (CCFNI) or its modified versions to evaluate these needs, identifying consistent domains such as assurance, information, proximity, comfort, and support as critical priorities. Variations in rankings emphasize cultural and contextual differences across regions.

Table 1. List of Journal Literature Review to Know Priority Needs of ICU Patients' Families

No	Researcher's Name	Research Title	Year	Design Study	Instruments	Results
1	Basma Salim Saleh Salameh, Sami Salim Saleh Basha, Linda Lee Eddy, Hiba Salem Judeh, and Dalia Rahmi Toqaan	Essential Care Needs for Patients' Family Members at the Intensive Care Units in Palestine	20 20	Analytical, Cross sectional studies	CCFNI Arabic version with 45 question items and sociodemographic data collection sheet.	The level of importance of the patient's family needs based on the CCFNI score, are: 1. Guarantee (64.10%) 2. Proximity
						(58.27%)







						 Information (56.07%) Comfort (54.37%) Support (50.09%)
2	T. Kumaravadivel Dharmalingam, Mohammad Rahim Kamaluddin, Shamsul Kamalrujan Hassan, and Rhendra Hardy Mohammad Zaini	The Needs of Malaysian family Members of Critically Ill patients Treated In Intensive Care Unit, Hospital Universiti Sains Malaysia	2016	Cross sectional design	CCFNI-M with 42 question items	The needs of the patient's family based on the CCFNI-M score from the most important are: 1. Guarantee (Mean = 3.69) 2. Information (Mean = 3.59) 3. Proximity (Mean = 3.21) 4. Comfort (Mean = 3.16) 5. Support (Mean = 3.01)
3	Fateme Hasandoost, Maryam Momeni, Leila Daughankar, Nastaran Norouzi Parashkouh, Haydeh Rezaei Looyeh, and Fateme Emamgholian	Family Needs of Patients Admitted to The Intensive Care Units	2018	Cross sectional study	CCFNI with 45 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Support (Mean = 37.82) 2. Information (Mean = 30.90) 3. Proximity (Mean = 23.60) 4. Guarantee (Mean = 21.53) 5. Comfort (Mean = 17.86)







4	Abdalkarem F Alsharari	The Needs of Family Members of Patients Admitted to the Intensive Care Unit	201	Cross sectional study	CCFNI Questionnaire with 45 question items translated into Arabic	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean = 3.62) 2. Information (Mean = 4.47) 3. Proximity (Mean = 3.34) 4. Comfort (Mean = 3.01) 5. Support (Mean = 2.91)
5	Thecla W. Kohi, Marwa W. Obogo, and Lilian T. Mselle	Perceived Needs and level of Satisfaction With Care by Family Members of Critically Ill Patients at Muhimbili National Hospital intensive Care Unit, Tanzania	2016	Cross sectional design	Questionnaire consisting of demographic profile, level of need on a Likert scale (English questionnaire translated into Kiswahili)	The most important needs of the patient's family include: 1. Information (Mean = 3.66) Having someone to contact at the hospital when family members are not around The least important needs of the patient's family include: 1. Support (Mean = 2.26) Talking about the patient's possible death







6	Al Faydhi A, Mohidin S., Nuzhat S, Shalaby, S, Al- Tabsh, L, and Aleidarous, S.	Perceptions of Critical Care Family Needs In the Kingdom of Saudi Arabia	2016	Non experimental comparative descriptive cross sectional study	CCFNI with 46 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean = 4.77) 2. Information (Mean = 4.54) 3. Proximity (Mean = 4.46) 4. Comfort (Mean = 4.35) 5. Support (Mean = 4.29)
7	Zahra Khoshnodi, Shademan Reza Masouleh, Sayedeh Fatemeh Sayed Fazelpour, and Ehsan Kazem Nezhad Leyli	The Importance of Fulfillment of Family Needs at Critical Care Units	2017	Cross sectional and descriptive- analytical design	CCFNI with 45 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean = 3.46) 2. Proximity (Mean = 3.23) 3. Support (Mean = 3.16) 4. Information (Mean = 3.14) 5. Comfort (Mean = 2.54)
8	Liew Sl, Dharmalingam TK, Ganapathy GK, Muniandy RK, Johnny Ngu, and Lily Ng	Need Domains of Family Members of critically-ill patients: A Borneo Perspective	2018	Descriptive cross sectional study	CCFNI-M with 45 question items	The needs of the patient's family based on the CCFNI score from the most important are: 1. Guarantee (Mean =





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						3.53) 2. Information (Mean = 3.51) 3. Comfort (Mean = 3.14) 4. Proximity (Mean = 3.12) 5. SupportN (Mean = 2.92)
9	Mohammad A. Al Barraj, Mirna Fawaz, and Lina Kurdahi Badr	Needs of Family Members of Critically Ill Patients: A Comparison of Nurses and Family Perceptions	2019	Descriptive prospective cross sectional design	CCFNI/ NMI with 30 question items	Family needs based on 5 CCFNI / NMI domains from highest are: 1. Guarantee (Mean = 3.80 / 3.39) 2. Information (Mean = 3.72 / 3.26) 3. Proximity (Mean = 3.58 / 3.21) 4. Reality (Mean = 3.45 / 3.20) 5. Support Mean = 3.22 / 2.90)
10	Atika and Halimuddin	Family Needs of Patients in the Intensive Care Unit	2018	Descriptive exploratory cross sectional study	CCFNI in Indonesian with 43 question items	The average needs of the patient's family from the most important are as follows: 1. Guarantee (Mean = 3.72) 2. Information (Mean = 3.28) 3. Proximity (Mean = 3.10) 4. Comfort (Mean =







								3.06) 5. Support (Mean 2.78)	=
11	Sofee and Shdaifat	Akhlak Emad	Needs Families With Relative i Critical C	a n a	2016	Comparative exploratory descriptive studies	CCFNI-M with 35 question items	Priority f family nee	he ly: =
								5.00,	

Table 2 provides insights into factors associated with family needs in ICU settings. Variables such as age, education level, gender, family relationship, patient condition, and hospitalization length significantly influence the priority and fulfillment of family needs. Sociocultural aspects and demographic characteristics shape specific domains, particularly proximity, support, and information.

Table 2. List of Literature Review Journals to Determine Factors Associated with Family Needs of ICU Patients

No Article	Research result
1	Age
	Age has a significant relation with the family needs of ICU patients, especially in the domain of proximity needs, with p value = 0.02
	Family relationship
	The level of kinship has a significant relation to the family needs of ICU patients ($p =$
	0.004)
	Level of education
	Education level has a significant relation with the needs of ICU patients' families, among others, with the need for support ($p = 0.007$), the need for assurance ($p = 0.007$)
	0.006), and the need for closeness ($p = 0.03$).
	Length of Hospitalization
	Length of stay is related to several domains of family needs of ICU patients, including
	support needs ($p = 0.03$), and comfort needs ($p = 0.02$).
2	Age







There is a relation between age and family needs of ICU patients (p = 0.03)

Level of education

Education level has a significant relation with several family needs of ICU patients, including security needs (p = 0.007), comfort needs (p = 0.02), and information needs (p = 0.04)

3 Length of Hospitalization

Length of stay related to family needs of ICU patients with p value (p = 0.000)

Level of education

The level of education has a significant relation with the family needs of ICU patients at a low level of education with p = 0.01.

4 Level of education

Education level has a significant relation with several domains of family needs of ICU patients, including: Need for assurance: p < 0.001, Need for closeness: p < 0.001, and Information need: p < 0.001

Family relationship

Family relationships or kinship levels have a significant relation with several domains of family needs of ICU patients, including: Comfort needs: p < 0.001, Closeness needs: p < 0.001, Information needs: p < 0.001, and Needs support: p < 0.001

Patient's Condition

There is a relation between the patient's condition or condition with one of the domains of the ICU patient's family needs, namely:

Information needs: p < 0.001

5 Gender

Gender affects the family needs of ICU patients with p value (p < 0.05)

Age

There is a relation between age and the needs of the patient's family in the ICU (p < 0.05)

Level of education

The level of education has an effect on the priority needs of the ICU patient family with a significant value (p < 0.05)

7 Sociocultural

There is a relation between the priority needs of the patient's family in the ICU with the culture of an area (p = 0.0001)

8 Age

Age has a relation with several domains of patient's family needs in the ICU, namely: Comfort needs: p = 0.02, and Support needs: p = 0.04

9 Gender

Women had a significant relation with the need for closeness on the items "informed about the transfer plan" (p = 0.02), "Frequently see the patient" (p = 0.02), and "called home about changes in the patient's condition" (p = 0.02). Then also had a relation with the need for information on the item "helping the patient's physical care" (p = 0.02) and the need for support on the item "talking about feelings" (p = 0.04).

Men had a significant relation with the need for information on the item "know what has been done for the patient" (p = 0.02), and the need for support on the item "talking about the possibility of the patient's death" (p = 0.04).

Age

Age has a significant relation with several domains of family needs of ICU patients, age > 40 years has priority need for assurance, namely on the item "assured that the best care is provided to the patient (p = 0.04), and the item "gets an understandable explanation" (p = 0.04). = 0.02). In addition, information needs: on the item "knowing







the patient's prognosis" (p = 0.03) and the item "assisting with physical care" (p = 0.03) 0.02).

Level of education

The level of education has a significant relation with one domain of the patient's family needs in the ICU, namely the need for information on the item "knowing how the patient is cared for (p = 0.04), the item "knowing why it is done to the patient" (p =0.04), and the item "knowing the patient's prognosis" (p = 0.00).

Table 3 compares studies on ICU family needs by geographical location, sample size, demographic variables, and primary domains of need. Key findings illustrate differences in educational levels, age groups, predominant gender, and familial relationships. Despite regional differences, the need for assurance and honest communication consistently emerges as a priority across various contexts.

Table 3. List of Journal Literature Review Knowing the Differences in Each Article

No Articl e	Researc h Place	Number of Sample s	Level of education (Majority)	Responden t Age (Average)	Items from Priority Requiremen t Domain	Most Gender	Family relationship (Majority)
1	Palestine	240 families of ICU patients	Bachelor n = 79 (29.58%)	23.3 years	"Confident that the best care is provided to patients"	Male (57.92%)	Patient's child (29.17%)
2	Malaysia	family member s of ICU patients	Undergraduat e (45.0%) High school graduate (38.3%)	35.57 years old	"Confident that the best care is provided to patients"	Female (65%)	Patient's child (51.7%)
3	Qazvin, Iran	235 families of ICU patients	Higher education n = 81 (38.6%)	47.85 years old	"Need to improve support system"	Man (59.8%)	Patient's child (36%)
4	Saudi Arabia	233 families of ICU patients	Middle education n = 94 (40.3%)	28 years	"Confident that the best care is provided to patients"	Man (65.2%)	Patient's child (36.4%)
5	Tanzania	family member s of ICU patients	Elementary school education or lower (60%)	49.6 years	"Having someone to call at the hospital when family members are not around"	Woman (53.6%)	Brother/siste r (46.4%)
6	Saudi Arabia	Total 132 samples Family n= 53 Health	Higher Education (38.6%)		"Questions answered honestly"		







		workers n= 79					
7	Rasht, Iran	167 family member s of ICU patients	Bachelor (37.4%)	40 years	"Questions answered honestly"	Man (57.4%)	Parent (38.9%)
8	Malaysia	family member s of ICU patients	High School (56.7%)	38.45 years old	"Confident that the best care is provided to patients"	Woman (56.7%)	Parent (30.8%)
9	United States of America	50 family member s of ICU patients	Bachelor n = 32 (64%)	42.5 years	"Confident that the best care is provided to patients"	Woman (60%)	Patient's child (48%)
10	Banda Aceh, Indonesi a	104 families of ICU patients		37 years old	"Questions answered honestly"	Woman (57.7%)	Parent (35%)
11	Malaysia	Total 110 samples Family n=59 Nurse n=51	Secondary education (68.4%)	29 years	"Confident that the best care is provided to patients"	Woman (53.4%)	

DISCUSSION

The findings of this review align with existing literature, highlighting that the family members of ICU patients have complex and diverse needs, which can be categorized into five main domains: assurance, information, closeness, support, and comfort. Among these, assurance emerged as the most critical need, with nine out of eleven studies emphasizing its importance. This finding is consistent with prior research, which underscores the role of assurance in fostering trust, safety, and reducing uncertainty for families navigating the complexities of ICU care (10,15). Assurance about "patients receiving the best care" was identified as the most vital aspect in six of nine studies, indicating a universal concern among families for optimal care quality (9,10,15). This aligns with research suggesting that emotional stress and uncertainty during critical care situations heighten the need

reassurance, enabling families to manage their anxiety and trust the healthcare system (15).

Information needs ranked as the second most important, with families expressing a strong desire to understand patient care and medical treatments. These findings corroborate the results of Kohi et al. (2016), where information needs such as having accessible communication channels with hospital staff were prioritized (16). Providing complete, accurate, and timely information has been shown to improve family satisfaction, reduce psychological facilitate better stress. and mechanisms [12]. This indicates the pivotal role of effective communication strategies in ICU settings, particularly in reducing anxiety caused by a lack of information (11,17).

Proximity was identified as the third priority need, albeit with some cultural



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variations. Seven studies ranked it lower than assurance and information, but research in specific socio-cultural contexts, such as Palestine and Iran, found proximity to be of higher importance (9,11). This divergence highlights the influence of cultural and contextual factors, such as restrictions on family presence or cultural norms surrounding familial support during critical illness (11,18).**Families** developing countries with strong familial ties may prioritize proximity due to their desire for constant engagement with the patient (11).

Comfort and support needs were consistently ranked as lower priorities. This contrasts studies with Hasandoost et al. (2018), which highlighted support as a primary need in certain contexts (13). The lower prioritization of comfort needs, such as access to waiting room facilities, reflects families' focus on patient well-being rather than personal convenience (15). The lower emphasis on support needs, including emotional and financial support, may stem from cultural beliefs or stigma, as seen in studies conducted in Iran and Tanzania, where discussions about death or financial matters were less common (5).

Sociodemographic factors. including gender, age, education level. relationships with patients, significantly influenced family priorities. For instance, female family members often played a caregiving role, aligning with findings in Tanzania where women took primary responsibility for family health(16). Similarly, older family members prioritized reassurance and information, potentially due to their greater sense of responsibility or need for clarity in complex medical scenarios (5). Educational background also shaped priorities, with highly educated families placing greater emphasis on reassurance, likely due to their ability to independently seek information (15).

The condition and length of ICU stay further influenced family needs. Families with

patients in unconscious or semi-conscious states prioritized information, as they relied on healthcare providers for updates (19). Additionally, families with longer ICU stays gradually adapted, with a decreasing emphasis on assurance and increasing support needs over time (9,19). These findings suggest that family needs are dynamic and influenced by both clinical and contextual factors.

The results of this review emphasize the need for healthcare professionals to adopt a family-centered approach in ICU care. Assurance and information should be prioritized through transparent communication, empathetic interactions, and consistent updates about the patient's condition. Tailored interventions, such as family meetings, structured communication protocols, and educational resources, can these needs address effectively. Furthermore, cultural competency training for ICU staff can help address the diverse needs of families from varying sociocultural backgrounds. Ensuring proximity through policies that facilitate family presence and enhancing communication via telephone or video conferencing for families unable to be present can also promote family well-being(20).

This review has several limitations. First, the studies included were conducted in diverse socio-cultural contexts, which may limit the generalizability of findings. variations methodologies, Second. in including different instruments used to family needs, may introduce assess heterogeneity. Third, the focus on published articles may have excluded relevant insights from unpublished or qualitative studies. Lastly, the review primarily captures family needs as reported in literature, potentially overlooking real-time. context-specific challenges experienced by families (21).

CONCLUSION

This review identifies five primary domains of needs for families of ICU patients: assurance, information, closeness, support,



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and comfort. Assurance and information emerged as the top priorities across most studies, reflecting universal concerns for patient and optimal care clear Sociocultural communication. and sociodemographic factors, along with the patient's condition and length of ICU stay, significantly influenced family needs. These findings underscore the importance of adopting a family-centered, culturally sensitive approach to ICU care to address these needs effectively. Future research should explore real-time strategies to better meet family needs and investigate the role of innovative technologies in enhancing family-centered care.

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Conflict of Interest

The authors have no conflict of interest to declare.

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