Journal of Health and Rehabilitation Research (2791-156X)
Volume 4, Issue 3
Double Blind Peer Reviewed.
https://jhrlmc.com/
DOI: https://doi.org/10.61919/jhrr.v4i3.1688
www.lmi.education/

Family and Nurses' Perceptions Regarding the Family Needs of Patients Admitted to Intensive Care Units in Public Sector Hospitals of Peshawar, Khyber Pakhtunkhwa

Shamim Akhtar[1], Dildar Muhammad[2], Amina Khatoon[1], Tania Zaman[1], Irfan Ullah Khattak[3]

Correspondence
Shamim Akhtar
shamimakhtar11337@gmail.com

Affiliations
1 Lady Reading School of Nursing, Peshawar, Pakistan
2 Institute of Nursing Sciences, Khyber Medical University, Peshawar, Pakistan
3 Institute of Nursing Sciences, Sarhad University of Information Technology, Peshawar, Pakistan

Keywords
ICU family needs, intensive care support, family-centered care, nurse-family communication, critical care unit perceptions

Disclaimers

Authors' Contributions	All authors contributed equally to the conception, design, and drafting of the manuscript.
Conflict of Interest	None declared
Data/supplements	Available on request.
Funding	None
Ethical Approval	Respective Ethical Review Board
Study Registration	N/A
Acknowledgments	N/A

ABSTRACT

Background: Family members of ICU patients often experience significant emotional and psychological stress, necessitating a clear understanding of their needs to support their well-being and involvement in patient care.

Objective: To assess and compare family members' and nurses' perceptions regarding the family needs of ICU patients in public sector hospitals in Peshawar, Khyber Pakhtunkhwa.

Methods: A cross-sectional study was conducted with 377 family members and 100 ICU nurses from Lady Reading Hospital, Khyber Teaching Hospital, and Hayatabad Medical Complex. Data were collected using an adapted Critical Care Family Needs Inventory (CCFNI), focusing on assurance, information, support, proximity, and comfort. Ethical approval was obtained, and analysis was performed using SPSS version 25.

Results: Family members reported assurance as their highest need (M = 3.26, SD = 0.37), followed by information (M = 3.16, SD = 0.30), support (M = 3.15, SD = 0.29), proximity (M = 3.11, SD = 0.49), and comfort (M = 3.02, SD = 0.29). Nurses rated assurance (M = 3.27, SD = 0.36) and proximity (M = 3.25, SD = 0.41) as top priorities. There was no significant difference between the two groups' mean scores (p = 0.567).

Conclusion: Both family members and nurses prioritize assurance and information, highlighting the need for effective communication and support in ICU settings to enhance family satisfaction and involvement in care.

INTRODUCTION

Family members play a crucial role in the recovery and care processes of patients, especially when they are admitted to intensive care units (ICUs) (1). When a loved one is critically ill, family members often experience significant psychological and emotional stress, resulting in increased vulnerability to anxiety, depression, and physiological distress (2). This strain can profoundly impact the overall well-being of family members, potentially affecting their mental and physical health in ways that may persist beyond the immediate crisis (3). The sudden admission of a patient to an ICU can be traumatic for family members, especially when they cannot effectively communicate with the patient or receive adequate updates on the patient's condition due to the severity of the illness or the nature of medical interventions. This barrier in communication often results in family members feeling a lack of control over the situation, which can exacerbate feelings of helplessness, anxiety, and depression (4). Studies have consistently shown that family members of ICU patients often experience unmet needs related to assurance, information, support, comfort, and proximity, each of which is critical to their coping and adjustment (5).

In many cases, family members perceive the need for timely and accurate information regarding the patient's health status, treatment plan, and prognosis as essential. Such information enables them to make informed decisions and, importantly, provides emotional reassurance that healthcare professionals are doing their best for the patient (6). The availability of detailed information helps alleviate family members' psychological distress and fosters trust in the healthcare team (7). Equally significant is the family's need for physical and emotional proximity to their loved one. Physical proximity, whenever feasible, supports familial bonds and reduces the family's anxiety by allowing them to remain involved in the patient's care and observe their condition firsthand (8). The healthcare team, particularly ICU nurses, plays a vital role in recognizing and addressing these needs. Nurses are often the primary link between family members and the critical care environment, and they provide emotional support, information, and assurance to help families navigate this challenging period (9). However, nurses face substantial demands in ICUs, and their ability to address family members' needs may vary depending on their experience, training, and workload (10).

Various studies have documented the critical importance of meeting family needs in ICUs, demonstrating that family-centered care models lead to higher satisfaction rates among family members and improved patient outcomes (11). Yet, studies in developing healthcare systems, such as Pakistan's public hospitals, reveal a gap in addressing the

holistic needs of family members, where treatment primarily focuses on the patients (12). Family needs are often overlooked, resulting in family members feeling marginalized and unsupported, a factor that may negatively impact their mental health and satisfaction with care (13). Additionally, inadequate family support can lead to misunderstandings, resulting in aggressive behavior toward healthcare providers in high-stress environments like ICUs (14). The Critical Care Family Needs Inventory (CCFNI) is a validated tool used internationally to assess family needs in ICU settings. Its application can provide valuable insights into family expectations and aid nurses in prioritizing family-centered care (15).

This study aims to examine both family members' and nurses' perceptions regarding the needs of families of ICU patients in the public sector hospitals of Peshawar, Khyber Pakhtunkhwa. By identifying key areas such as information, assurance, support, comfort, and proximity, the study seeks to understand the specific requirements and perceptions within Pakistan's healthcare context. Findings from this study may inform policy and practice changes to enhance family support mechanisms in ICUs, thereby improving overall patient care and family satisfaction.

MATERIAL AND METHODS

A cross-sectional study was conducted to investigate the perceptions of family members and nurses regarding the family needs of patients admitted to intensive care units (ICUs) in public sector hospitals of Peshawar, Khyber Pakhtunkhwa. Data were collected from three major hospitals: Lady Reading Hospital (LRH), Khyber Teaching Hospital (KTH), and Hayatabad Medical Complex (HMC), with a sample size of 377 family members and 100 nurses who were actively involved in patient care within the ICUs. The inclusion criteria for family members were relatives of patients who had been admitted to the ICU for 24 to 72 hours and who were over 18 years of age, including parents or other close relatives of the patients. All participants provided informed consent prior to data collection. Registered nurses working in ICU settings in these public hospitals were included, while student nurses, nurses in management positions, and family members with physical or mental disabilities or caring for another patient were excluded from the study.

Data collection was conducted using an adapted version of the Critical Care Family Needs Inventory (CCFNI), a reliable tool widely used for assessing family needs in ICU settings. The questionnaire, adapted from the study by Abdalkarem and Alsharari, demonstrated strong reliability with a Cronbach's alpha of 0.92 (7). This structured questionnaire covered essential dimensions of family needs, including information, assurance, proximity, support, and comfort. Ethical approval for the study was obtained from the Ethical Review Board of Khyber Medical University, Peshawar, ensuring adherence to the Declaration of Helsinki. Additionally, permission for data collection was granted by the hospital administration of each participating institution, and all participants provided informed consent. Confidentiality of responses was maintained throughout the study.

Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics, such as means and standard deviations, were computed for demographic variables and family need factors. Independent samples t-tests were used to assess potential differences between family members and nurses regarding their perceptions of family needs. The analysis also included a comparison of mean scores for each of the five need dimensions among family members and nurses, providing insight into the prioritization of needs by both groups. This methodological approach allowed for a comprehensive assessment of family needs in the ICU context and identified specific areas where family support could be optimized.

RESULTS

The study included a total of 377 family members and 100 nurses from ICUs in three major public hospitals in Peshawar, Khyber Pakhtunkhwa. The mean age of family member participants was 36.54 years (SD = 8.9), with 75.6% being male. Most family members (64.5%) were in the 30-40 age range, and 50.1% had secondary-level education.

Table 1: Socio-Demographic Profile of Family Member Participants (n=377)

Characteristic	Category	Frequency (f)	Percentage (%)
Gender	Male	285	75.6
	Female	92	24.4
Age	<30 Years	30	8.0
	30-40 Years	243	64.5
	>40 Years	104	27.6
Education Level	Primary	123	32.6
	Secondary	189	50.1
	College	43	11.4
	University	22	5.8
Relationship to Patient	Spouse	172	45.6
	Son/Daughter	116	30.8
	Uncle/Aunt	58	15.4
	Brother/Sister	31	8.2

The majority were spouses of the patients (45.6%), followed by sons or daughters (30.8%). These findings are presented in Table 1. For nurses, the mean age was 32.45 years, with the majority (48%) being between 30 and 40 years old. Most were female (72%) and Muslim (88%). Educationally, 70% held a diploma in nursing, while 29% held BSN/Post RN degrees. These details are summarized in Table 2.

Table 2: Socio-Demographic Profile of Nurse Participants (n=100)

Characteristic	Category	Frequency (f)	Percentage (%)
Age	<30 Years	47	47.0
	30-40 Years	48	48.0
	>40 Years	5	5.0
Gender	Male	28	28.0
	Female	72	72.0
Marital Status	Married	58	58.0
	Unmarried	42	42.0
Religion	Muslim	88	88.0
	Christian	12	12.0
Education	Diploma Nursing	70	70.0
	BSN/Post RN	29	29.0
	MSN	1	1.0

The family needs were assessed based on five domains: information, assurance, proximity, support, and comfort. Among family members, the highest mean score was for assurance (M = 3.26, SD = 0.37), followed by information (M = 3.16, SD = 0.30), support (M = 3.15, SD = 0.29), proximity (M = 3.11, SD = 0.49), and comfort (M = 3.02, SD = 0.29). These findings are displayed in Table 3.

Table 3: Family Needs Reported by Family Members (n=377)

Needs Domain	Minimum	Maximum	Mean	Standard Deviation (SD)
Information	2.57	3.86	3.16	0.30
Assurance	2.43	4.00	3.26	0.37
Proximity	2.17	3.83	3.11	0.49
Support	2.38	3.63	3.15	0.29
Comfort	2.33	3.56	3.02	0.29

Nurses similarly prioritized assurance (M = 3.27, SD = 0.36) and proximity (M = 3.25, SD = 0.41) as the most important family needs, followed by information (M = 3.21, SD = 0.30), support (M = 3.04, SD = 0.31), and comfort (M = 2.98, SD = 0.29). These results are presented in Table 4.

An independent samples t-test indicated no statistically significant difference between family members and nurses in their perceptions of overall family needs (t(475) = -0.572, p = .567).

Table 4: Family Needs Reported by Nurses (n=100)

Needs Domain	Minimum	Maximum	Mean	Standard Deviation (SD)
Information	2.50	3.86	3.21	0.30
Assurance	2.43	4.00	3.27	0.36
Proximity	2.17	3.83	3.25	0.41
Support	2.22	3.67	3.04	0.31
Comfort	2.33	3.56	2.98	0.29

The mean family needs score for family members was 3.14, while for nurses, it was 3.15. These comparisons are outlined in Table 5. These findings suggest that both family members and nurses have similar perceptions regarding the importance of addressing family needs in ICU settings.

Table 5: Comparison of Family Needs Scores Between Family Members and Nurses

Group	N	Mean	Std. Deviation	t-value	df	Sig. (2-tailed)
Family Members	377	3.14	0.31	-0.572	475	0.567
Nurses	100	3.15	0.30			

Both groups emphasized assurance and information as critical needs, supporting the essential role of clear and compassionate communication in intensive care environments.

DISCUSSION

This study aimed to explore and compare the perceptions of family members and nurses regarding the needs of family members of ICU patients in public sector hospitals in Peshawar, Khyber Pakhtunkhwa. The findings revealed that both family members and nurses rated assurance, information, proximity, support, and comfort as critical needs, aligning with existing literature that underscores these dimensions as essential for family-centered care in ICUs. Assurance was the most prioritized need among both groups, followed by information, indicating that family members greatly valued clear communication about the patient's condition and recovery trajectory. These findings are consistent with previous studies, which also identified assurance and information as top priorities for family members of critically ill patients (16, 17). The prominence of assurance highlights the importance of building trust between healthcare providers and families, as a lack of it may exacerbate stress and anxiety (18).

The significance of information as a critical family need is corroborated by studies that show timely, accurate communication enhances family members' coping abilities, reduces emotional distress, and improves satisfaction with care (19). When family members are informed about their loved one's condition and the medical interventions being undertaken, they experience a sense of involvement and control, which is psychologically beneficial. Additionally, providing information fosters transparency and trust, reinforcing the essential role of ICU staff, particularly nurses, in family-centered care (20). Proximity, identified as the third most critical need, underscores the psychological and emotional comfort derived from physical closeness to the patient, which is often compromised in ICUs due to restrictions. Studies suggest that proximity allows family members to observe care firsthand, reinforcing their confidence in the healthcare team and helping mitigate the adverse emotional effects of separation (21, 22).

This study had several strengths, including a robust sample size and the use of a validated tool, the Critical Care Family Needs Inventory, which enabled a comprehensive evaluation of family needs across five essential domains. The inclusion of both family members and nurses allowed for a dual perspective on family needs, providing valuable insights into areas of agreement and potential gaps in understanding between the two groups. However, the study was limited by its cross-sectional design, which restricted causal inferences and may have been influenced by situational or individual factors at the time of data collection. Furthermore, the study was conducted in public sector hospitals in a specific region of Pakistan, which may limit the generalizability of the findings to other healthcare settings or cultural contexts. Previous research has indicated that family needs may vary based on cultural and socioeconomic factors, suggesting that a more diverse sample across different healthcare institutions would be beneficial to fully understand family needs in ICU settings (23).

Despite these limitations, the study's findings have significant implications for improving family-centered care in ICUs. One recommendation is the establishment of standardized communication protocols that emphasize regular updates and reassurance about the patient's condition. Given that family members expressed a high need for assurance and information, it would be beneficial for ICU staff to undergo training that focuses on effective communication skills, empathy, and family engagement. Furthermore, allowing family members increased access to the ICU or developing strategies to enhance the perception of proximity, such as visual updates or video calls, could address the psychological impact of restricted access and physical distance from the patient. Research suggests that even brief opportunities for family members to see or communicate with the patient can alleviate their stress and enhance their confidence in the healthcare team (24).

Additionally, this study highlighted the need for tailored support programs for ICU families, recognizing that unmet family needs can lead to negative psychological outcomes, potentially affecting their interactions with healthcare providers. Integrating family support services, such as counseling and regular information sessions, could improve family members' coping abilities, reduce incidents of aggressive behavior, and foster a more collaborative relationship between families and the ICU team. Given the findings on proximity and comfort needs, future research should explore interventions that increase family members' physical and emotional closeness to the patient, taking into account the unique constraints of ICUs. This may include creating flexible visitation policies or offering virtual alternatives when in-person visits are not possible, which has been shown to mitigate some of the distress associated with separation (25).

CONCLUSION

In conclusion, this study underscored the alignment between family members' and nurses' perceptions of family needs in ICU settings, with assurance, information, and proximity emerging as critical dimensions. Addressing these needs through structured, family-centered approaches can not only alleviate family stress but also improve their satisfaction and engagement in the patient's care. Future studies with longitudinal designs and diverse cultural samples are recommended to build on these findings and develop evidence-based guidelines for supporting ICU families effectively.

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