

Resources Needed to Promote Family-Centered Care Practice in A Critical Care Unit and Nursing Role: An Integrative Review

Mada Tfaf Alzahrani¹, Fayez Dhaifallah Alotaibi², Rihana Ahmed Albudrees³, Asma Manea Asiri⁴, Latifah Kaild Alothman⁵, Mariam Sattam S. Alaenzi⁶, Eman Ali Mohd Samm⁷ Layla Aiman Halawani⁸

1. *Nursing specialist, Yanbu General Hospital, Yanbu, Saudi Arabia*
2. *Nursing Specialist, King Khalid Hospital, Al-Kharj, Saudi Arabia*
3. *Nursing technician, Al-Salihiya Primary Health Care Center, Al ahsa, Saudi Arabia*
4. *Nursing specialist, Isaac Abdulrahim Al-Kooheji Primary Health Care Center (AlKhuzama), Alkhobar, Saudi Arabia*
5. *Nursing Specialist, Abdul Aziz Al-Afaleq Tumor Center, al Hassa, Kingdom of Saudi Arabia*
6. *Nursing Specialist, Buraidah Central Hospital, Al-Qassim, Saudi Arabia*
7. *Nursing Supervisor , King Khalid Hospital, Najran, Saudi Arabia*
8. *Lecturer at Saudi Electronic university, Riyadh, Saudi Arabia*

Conflict of Interest:

All authors declare no conflict of interest

Abstract

Background: Patients and their families encounter tremendous difficulties in critical care settings, making family-centered care (FCC) an essential component of high-quality healthcare delivery. To improve nursing's responsibilities in promoting teamwork, dialogue, and comprehensive care, it is crucial to determine what tools are necessary to implement FCC practices. This integrative review aims to identify and analyze the resources required to effectively implement and sustain family-centered care practices in critical care units, with a specific focus on the role of nursing

Methods: PubMed and CINAHL databases were searched, and research meeting criteria were included. Data were identified from all included articles, and themes were developed based on these data.

Results: The review highlighted the critical resources needed for family-centered care (FCC) in critical settings, including education, infrastructure, and policy support. Nurses play a vital role in advocacy, communication, and family engagement while addressing barriers like staffing shortages and communication challenges is essential to improving patient outcomes and family satisfaction.

Conclusions: This integrative review's results highlight the importance of family-centered care (FCC) in improving critical care patients' outcomes. Significant obstacles, such as a lack of organizational support, cultural hurdles, and sufficient manpower, continue to impede the implementation of FCC, despite its acknowledged relevance.

Keywords

Critical Care Unit, Family-Centered Care, Nursing, Promote, Practice, Resources, Role

1 | Introduction

Participation of family members in a way that enables families, patients, and the healthcare staff to work together is fundamental to family-centered care (FCC). Typical methods for providing family-centered care include having family members present at the bedside, communicating with family members often and in an organized manner, and utilizing the expertise of several disciplines to assist. These help relatives be ready to be caregivers and decision-makers (Hart et al.,2020). As part of the FCC model of care, medical providers and family members work collaboratively to choose the best course of treatment for each patient. When it comes to their babies' health, family

members are involved in every step of the FCC approach. A strategy for organizing, delivering, and evaluating health care based on mutually beneficial collaboration among healthcare professionals, patients, and their families is described by the Institute for Patients and FCC (IPFCC) as FCC (Agwiah and Boateng, 2024). Since its inception, the FCC has expanded its scope to include additional people, such as permitting some family members to be present when a kid receives medical treatment. Through patient and family participation in care activities, information exchange, and education, the FCC promotes family empowerment (Judge and Ceci, 2022).

There are both immediate and long-term effects that families, children, and babies might experience as a result of their hospitalization in intensive care units (ICUs) (Barnawi, 2023). Family members may endure emotional distress, worry, and despair as a result of their loved one's illness. The capacity of families and healthcare providers to collaborate in meeting the needs of children and families is crucial to the quality of care that children get (Grandjean et al., 2021; Barnes et al., 2024). Every year, 869,000 children between the ages of 5 and 14 die or become permanently disabled as a result of a variety of health issues, and 5 million children under the age of 5 die as well (WHO, 2022). Numerous crucial healthcare choices involving seriously ill children are made daily in the highly technological setting of the pediatric intensive care unit (PICU). Critical care units account for 90% of juvenile fatalities in the US (Wool et al., 2021).

The role of nurses in ensuring that family-centered care is effectively implemented is vital. Families would benefit from the shift to family-centered care, according to every nurse. They went on to detail how shifts had brought up fresh difficulties in mentoring and ensuring the safety of both patients and workers in critical care units as a result of nursing care delivery (Oude Maatman et al., 2020). Several beneficial results can be achieved by applying the FCC approach. The list goes on and on: better parent-infant bonding, healthier and happier kids (Kutahyaliloglu and Scafide, 2023), less stress for parents, less time spent in the hospital, and happier parents overall (Albayrak and Büyükgönenç, 2022). The two primary topics were the perceived obstacles to FCC from family members and the perceived obstacles from the institution. According to Abukari and Schmollgruber (2024), some of the obstacles that families face include tension and anxiety within the family, a lack of knowledge and education, and cultural and religious factors. Inadequate space and logistics, heavy workloads, understaffed areas, restricted access, and unfriendly staff members are some of the obstacles that users of the facility report (Glasdam, & Xu, and Stjernswärd, 2024).

2 | Background

Patients and their families encounter tremendous difficulties in critical care settings, making family-centered care (FCC) an essential component of high-quality healthcare delivery. To improve nursing's responsibilities in promoting teamwork, dialogue, and comprehensive care, it is crucial to determine what tools are necessary to implement FCC practices. Gaining a grasp of the tactics and resources needed for FCC implementation will help shed light on how to enhance critical care unit patient outcomes and family satisfaction. The purpose of this research is to help nurses better meet the needs of families, improve the quality of care they provide, and foster an inclusive and supportive healthcare system culture by examining the nursing profession's role in allocating resources and advocating for FCC.

2.1 | The Essential Nursing Role in Resources for Advancing Family-Centered Care in Critical Care Units

Various healthcare settings, including those for adults and the elderly, have been placing a greater focus on patient- and family-centered care (PFCC) since the early 2000s. Many healthcare facilities have adopted PFCC because research shows it helps patients and their families. Many nations are following this worldwide trend by evaluating healthcare with an eye on the quality of care from the patients' and their families' points of view (Ebrahimi et al., 2021). Recognized as a successful paradigm for improving healthcare outcomes, patient-centered care is also prioritized in intensive care units (ICUs). But the intensive care unit is a complicated place, and patients'

severe conditions make it hard for them to communicate and be involved in their treatment (Scheunemann et al., 2020). Healthcare practitioners often enlist patients' loved ones to act as advocates on their behalf in this context. Consequently, it is crucial to learn about their preferences and how they wish to share information in intensive care units and to include not just patients but also their families in these processes (Su, Yuki, and Hirayama, 2020).

One characteristic of high-quality healthcare is patient-centered care (PCC). The healthcare team and patient form an empathic and respectful relationship in this model. The patient and family members communicate back and forth regularly, and they work together to make decisions about their care that take into account their traditions, cultural backgrounds, and personal preferences (Kaslow et al., 2021). Patients in the intensive care unit (ICU) are often in too much pain to speak or take part in shared decision-making, which is essential to person-centered care (PCC). These forces loved ones to step in and make decisions on behalf of the family (Zante, Camenisch, and Schefold, 2020). As a result, the bedside intensive care unit nurses, family and clinical psychologists, and doctors from various specialties (e.g., psychiatry, pulmonary and critical care, and hematology) who make up this interprofessional authorship team agree with other experts that FCC is crucial and an ethical imperative in the ICU (Tramonti, Giorgi, and Fanali, 2021).

Frontline ICU personnel who engage with patients and their families regularly—doctors, advanced practice registered nurses, social workers, respiratory therapists, etc.—will find this focus useful (Merbitz et al., 2022). The unit's social workers and nurses typically take the lead in establishing an FCC culture and doing many of the essential tasks related to FCC (Weber et al., 2022). Psychiatrists, psychologists, and advanced practice providers are mental health experts who commonly interact with intensive care unit patients and who may also be able to assist with the families' needs (Schwartz et al., 2022).

2.2 | Optimizing Resources for Family-Centered Care in Critical Care Units

One growing trend in intensive care medicine is the importance of family participation in patient treatment. There is a significant role for family members in the critical care unit (Misak et al., 2021). Family members may be there for their loved ones in many ways: emotionally and physically, making decisions on their behalf, and even helping with care tasks like feeding, re-orienting after delirium, and mobilization. Professional organizations in the field of critical care have included family involvement methods as part of their care standards due to the significant role that families play in delivering care (Duong et al., 2024).

There is a substantial risk of delirium in intensive care unit (ICU) patients because of the multiple psychological and physiological stresses they experience as a result of their acute critical illness and co-morbidities, as well as the ICU setting and treatment (Care, 2021). Complications, long-term cognitive damage, or even death can result from delirium, and disruption of attention, consciousness, and cognition. Anxiety, despair, and post-traumatic stress disorder (PTSD) are among the long-term and short-term negative psychological effects that may accompany critical illness necessitating intensive care unit admission (Paunekar, and Chakole, 2024). Anxiety, despair, and post-traumatic stress disorder (PTSD) are not limited to patients; they can also strike loved ones of intensive care unit patients (Abdul Halain et al., 2022).

The concept of patient and family-centered care (PFCC) is becoming more well-known in many professional settings as a way to improve treatment and, by extension, the mental health of patients and their loved ones (Allen, Scarinci, and Hickson, 2022). A model based on a win-win collaboration among healthcare practitioners, families, and patients, PFCC is defined by the Institute for Patient and Family-centered Care. Patients and their families should be actively involved in their treatment, information should be shared, cooperation should be prioritized, and dignity and respect should be at the core of all PFCC practices (IPFCC) (Bohart et al., 2022).

2.3 | Nursing Leadership and Advocacy in Family-Centered Critical Care

Healthcare practitioners, patients, and family members all work together in family-centered care (FCC) to plan, implement, and assess treatment (Power et al., 2021). Although the FCC method has many uses in medicine, there are still several obstacles to its full implementation in clinical practice, especially when it comes to treating new coronavirus pneumonia (NCP) (Dai, and Jiang, 2024). When it comes to critical care units, nursing leadership is vital in promoting family-centered care, which puts patients and their families first (McAndrew, Mark, and Butler, 2020).

By easing communication barriers, listening to concerns, and including families in decision-making, nurses play an important role as advocates, connecting families with the healthcare team. Nurse leaders need to foster an atmosphere of collaboration during critical health episodes so that families may feel supported and empowered (Abukari, and Schmollgruber, 2023). Nurse leaders contribute to a culture that emphasizes emotional support and clinical competence by promoting policies that encourage family involvement and mentoring employees on compassionate care practices (Broome, 2024). Providing family members with support, education, and involvement in decision-making and care planning is the goal of family-centered care in the intensive care unit (ICU) (Ho, 2020). The idea of "family presence" is central to intensive care unit (ICU) family-centered care. This means that patients' loved ones should be able to accompany them throughout their hospital stay, from admission to treatments and even at the bedside (Danesh, 2024).

There are several advantages to having family members present for a patient's care, including better communication, higher patient satisfaction, and more favorable results (Schmollgruber, 2024). It has been seen that when families are present, their level of involvement in their infants' care increases, leading to better care overall (Axelin et al., 2020). On the other hand, in Ghana, only a parent can attend the intensive care unit. Their assistance with feeding and supply procurement was made possible by their presence in the intensive care unit (Abukari, 2022). In order to involve family members in decision-making, the intensive care unit (ICU) may invite them to visit severely sick children who may need surgery. They are the features of FCC that emphasize the importance of family participation and presence (Jafarpoor, Vasli, and Manoochehri, 2020).

3 | Aim

This integrative review aims to identify and analyze the resources required to effectively implement and sustain family-centered care practices in critical care units, with a specific focus on the role of nursing. Fostering a supportive environment that includes families as vital participants in care requires a variety of resources, including human, organizational, educational, and structural resources. This study aims to investigate these sorts of resources. The crucial role of nurses in promoting and implementing family-centered care in the ever-changing critical care environment is also intended to be emphasized.

4 | Method

The purpose of this extensive integrative analysis was to identify the nursing role in implementing family-centered care practices in critical care units and to identify the resources that would be required to do so. Thorough inclusion and exclusion criteria were used in the review to guarantee that the studies that were chosen were accurate and reliable (Alqarawi, and Alhalal, 2024). Alqarawi and Alhalal (2024) conducted a comprehensive literature search across several databases utilizing predetermined criteria and keywords to locate articles on resource needs, the role of nurses in critical care settings, and family-centered care. Key themes that emerged from the data synthesis using thematic analysis were the importance of nurses' advocacy, communication, and family participation, the necessity for educational resources, and the need for governmental support in addition to modifications to infrastructure. After carefully reviewing each piece

numerous times, we were able to settle any discrepancies, identify any repeating themes, and include all relevant ideas (Alqarawi, and Alhalal, 2024). This method adds to the expanding body of critical care nursing knowledge by highlighting how nurse advocacy and resource optimization may improve the execution of family-centered care practices.

4.1 | Search strategy

The authors of this integrative review developed a comprehensive set of keywords to identify the resources needed to promote family-centered care practices in critical care units and examine the nursing role in its implementation. These keywords were purposefully broad to capture all relevant studies meeting the review's criteria. A systematic search of several databases was conducted with the assistance of a research librarian. The PubMed database was searched using terms such as "Family-Centered Care," "Critical Care Resources," and "Nursing Role in Family Care." Similarly, the Cumulative Index to Nursing and Allied Health (CINAHL) database was explored using terms like "Family Engagement in Critical Care" and "Nursing Advocacy in Family-Centered Care." The goal of the search was to identify studies addressing resource allocation, family involvement, and nursing practices in critical care settings. The search, conducted in 2024, imposed no restrictions on publication dates to ensure a comprehensive analysis. A total of 15 articles were retrieved from the systematic search, encompassing studies published between 2017 and 2024.

4.2 | Search outcome

A total of 4400 studies underwent screening utilizing full-text approaches. Subsequently, 3623 studies were eliminated for a variety of reasons: A total of 172 studies did not fulfill the intended research objective, 393 studies did not satisfy the criteria for study design, and 197 reviews did not meet the criterion for results. Ultimately, the research incorporated a total of fifteen papers (as seen in Figure 1) that satisfied the criteria for inclusion.

4.3 | Quality appraisal

A quality evaluation approach was used to assess the reliability and rigor of the papers that were included in this Scoping review. Several organizations have produced evaluation tools for use in assessing qualitative, mixed-methods, and quantitative research. Among these are the Joanna Briggs Institute and the Critical Appraisal Skills Program (CASP). In their description of an evaluation strategy, Long, French, and Brooks (2020) made use of such checklists. When evaluating each publication, we took a look at how effectively it answered our research objectives, the reliability of its methodology, the size of its samples, the methods used to collect and analyze data, and the relevance of its results to nursing practice in the areas of healthy aging and fall prevention (Cronin, and George, 2023).

To ensure its reliability and lack of bias, the quality evaluation was overseen by two independent reviewers. Our discussion allowed us to resolve any differences over the ratings. Studies lacking adequate methodology or with inadequately defined subjects were omitted from the final tally (Cronin, and George, 2023). The thorough quality evaluation method used in the review allowed for the synthesis of high-quality data (Cronin and George, 2023). Because of this, we now know more about how nursing theories encourage good aging and lessen the likelihood of falls in the elderly.

4.4 | Data abstraction and synthesis

Planning, data analysis, and topic production were all made easier with the use of matrices in this evaluation (Nikolic et al., 2023). At first, the articles were sorted according to the databases that had provided them. Samples, settings, techniques, and outcomes were all detailed in great depth in the matrices used up to this point. Matrixes were created by Nikolic et al. (2023) after a literature review to compare different components, such as locations, samples, and processes. In the second phase, matrices comprising sources were arranged according to data patterns and similarities (Nikolic et al., 2023). In order to establish themes, Nikolic et al. (2023) state that the

second matrix was utilized. To summarize the articles' commonalities, a final matrix was created. Research paper information that set the topics and review results in context were also included in this matrix. Shared traits and the development of writers' subjects were both helped out by the final table (Nikolic et al., 2023). Lastly, we revised the data format by combining the material's themes (Nikolic et al., 2023).

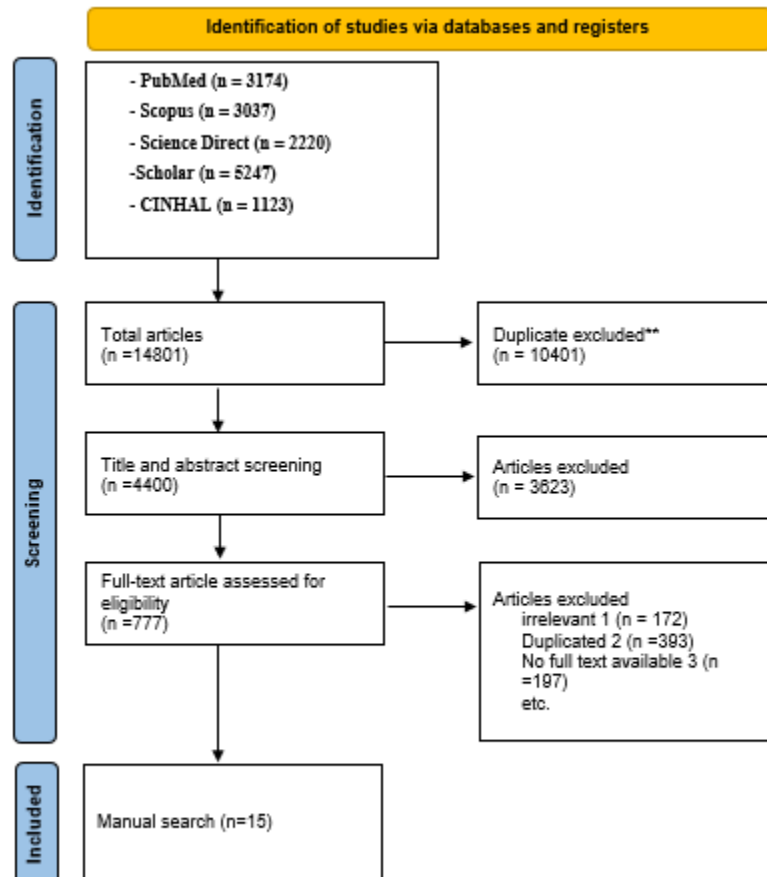


Figure 1 PRISMA Flow Diagram (PRISMA, 2020).

5 | Results

5.1 | Samples, settings and methods

The number of participants in the included studies ranged from 16– 31626. Research in this review included two qualitative studies, ten quantitative studies, and three systematic literature reviews (Tables 1–3 provide specific information on methods and other details of the included studies). The countries associated with the articles in this review were the USA (5), Iraq (1), Iran (1), Canada (1), Saudi Arabia (2), Indonesia (1), Australia (1), Netherlands (1), Switzerland (1), China (1),

5.1.1 | Key findings

Nurses have a crucial role in establishing family-centered care practices in critical care units, and this integrative study sought to evaluate the resources needed to support these practices. The urgent necessity for specialized nursing education and training to improve nurses' advocacy and communication abilities was a major conclusion, as it would pave the way for more meaningful family participation in healthcare decision-making. According to the research, a conducive setting

for family-centered care may be greatly enhanced by establishing suitable infrastructure, such as quiet areas for family talks and accommodating visiting regulations.

The research also found that nurses are responsible for more than just providing care; they are also advocates for patients' families, managers of healthcare resources, and members of multidisciplinary teams. Results for patients, their families, and the quality of treatment as a whole have all improved using this method. Key resources that are essential for the long-term viability of these methods include emotional support networks, staff training, and institutional policies that encourage family engagement.

The evaluation also brought attention to new standards and resources that enable nurses to mediate conversations between patients' families and their healthcare professionals in a way that is both honest and compassionate. The results highlight the power of family-centered care to improve critical care environments and call for more studies to determine the effects of resource allocation on nursing practices, patient-family outcomes, and the future of the field (Abukari, 2022).

Table 1 Quantitative articles

Publication/date/ authors	Aims/purpose	Design/methods	Context/setting/ sample	Findings
Franck et al., 2022	to compile suggestions for family-centered treatment from healthcare workers working in the NICU's front lines.	quasi-experimental study	382 NICU Setting: USA	Medical staff in the neonatal intensive care unit (NICU) came up with a laundry list of problems that prevent family-centered care from being given and presented concrete solutions.
McNally Keehn et al., 2020	to assess caregiver and care coordinator results after implementing a program in a multidisciplinary pediatric neurodevelopmental assessment clinic	A descriptive evaluation study	150 participants Setting: USA	Care coordination improves family–professional partnership and satisfaction, family time and financial burdens, unmet needs, and inappropriate healthcare

				system use, according to emerging research.
Hussein, 2022	The purpose of this study is to assess the quality of family-centered health care services provided by a collaboration amongst health care providers in Baghdad, Iraq.	A descriptive evaluation study	440 clients Setting: Iraq	Rare are the partnerships that bring together family and providers. Effectiveness in a rapidly changing health care system depends on family-provider collaboration in all three areas: care planning, delivery, and evaluation.

Table 2 Systematic Review Articles

Publication/date/authors	Aims/purpose	Design/methods	Context/setting/sample	Findings
Alqarawi, and Alhalal, 2024	A comprehensive analysis of factors that help and hinder nurses from implementing family-centered care (FCC) is presented in the paper.	Systematic review	Twenty-three articles Setting: Saudi Arabia	Improved quality of care for patients and their families is possible with the use of FCC practices with ill children.
Schwartz et al., 2022	In order to improve the chances that care provided in intensive care units makes use of FCC best practices.	Systematic review	N/A Setting: USA	Studies on the adoption, additional advantages, and results in the intensive care unit (ICU) are crucial moving forward for FCC to become the

				sine quo none of excellent care.
Seniwati, Wanda, and Nurhaeni, 2023	to characterize and evaluate the impact on pediatric patient care quality of patient and family-centered care	Systematic review	29.780 articles Setting: Indonesia	Some research shows how pediatric patients might benefit from care that is oriented around them and their families.
Wang, Antel, and Goldfarb, 2023	The purpose of this literature review is to examine the results of randomized family-centered treatments in adult intensive care units (ICUs) that focus on family-centered outcomes.	Systematic review	52 articles Setting: USA	In the adult intensive care unit, family-centered treatments have the potential to benefit both patients and healthcare providers by improving family-centered outcomes.

Table 3 Qualitative Articles

Publication/date/ authors	Aims/purpose	Design/methods	Context/setting/sample	Findings
Vetcho et al., 2023	To determine how NICU parents and multidisciplinary professionals in Thailand see FCC and (2) to outline potential areas for FCC improvement in this setting.	An Exploratory Qualitative Study	17 Participants Setting: Australia	Although the interdisciplinary team agreed that FCC is essential for clinical practice, they also acknowledged that the healthcare delivery system in Thailand presents unique obstacles for the NICU setting.
Cypress et al., 2024	during critical care unit patient and family-centered multidisciplinary	A qualitative exploratory study	52 healthcare Setting: USA	The findings provide important insight into the kind and level of

	rounds, to investigate and characterize the factors that promote and hinder family participation.			family involvement in critical care.
Tu, and Liao, 2021	explored the views and encounters of primary care physicians in China toward patient-centered care for the elderly, utilizing community-based diabetes management programs as a case study.	A qualitative exploratory study	48 community health professionals Setting: China	providing evidence of family-centered care for older persons in community-based healthcare settings in China, which can help in developing a personalized healthcare delivery model that incorporates aging in place
Mirlashari et al., 2020	to learn how doctors and nurses feel about the difficulties of using the FCC in the NICU	A qualitative exploratory study	25 nurses and 15 physicians Setting: Canada	Health care providers, cultural norms, legal constraints, and practical considerations all play a role in shaping the way neonatal intensive care units in Iran use family-centered care.
Jafari, Kermanshahi, and Vanaki, 2023	to examine, from the viewpoints of parents, doctors, nurses, and nursing supervisors, the communication obstacles about staff and parents to execute FCC	A qualitative study	26 Participants Setting: Iran	To break down barriers in communication between parents and healthcare providers, a unified training program that prepares and creates integrated coordination

				among the family and treatment team is necessary.
Oude Maatman et al., 2020	Investigated, from the perspective of healthcare professionals employed by NICUs, the elements impacting the use of FCC.	A descriptive generic qualitative design	Seven neonatal care nurses, one nurse assistant, five neonatologists, and three managers participated. Setting: Netherlands	The manner FCC is implemented and parents' involvement in their infant's care is impacted by healthcare providers' mentality of viewing parents as main caregivers.
Ibrahimalsaleh et al., 2024	investigates how theories grounded in family-centered nursing might significantly improve primary healthcare.	A qualitative study	300 participants Setting: Saudi Arabia	Healthcare quality is improved by the adoption of family-centered nursing theories, which encourage cooperation, empower families, and address structural inequities.
Naef, Massarotto, and Petry, 2020	The purpose of this study is to examine the effects of a nurse-led family support intervention on inpatients and their loved ones.	Qualitative evaluation study.	300 participants Setting: Switzerland	From the viewpoint of both families and critical care professionals, an advanced practice family nursing position in conjunction with a family support route is a model of care delivery that is accepted, valued, and advantageous in the intensive care unit.

5.2 | Synthesis of findings

5.2.1 | Interdisciplinary Collaboration in Family-Centered Care Delivery

Healthcare providers in the neonatal intensive care unit (NICU) have identified many barriers to family-centered care delivery and have offered concrete solutions. From the point of view of frontline workers, more funding for human resources, such as more nurses and access to multidisciplinary knowledge, is necessary to provide family-centered care in the neonatal intensive care unit. In addition, they suggested enhancing family participation in family-centered care by providing more resources, such as multilingual interpretation services and in-person assistance (Franck et al., 2022). Although the interdisciplinary team agreed that FCC is essential for clinical practice, they also acknowledged that the healthcare delivery system in Thailand presents unique obstacles for the NICU setting. It was shown that transdisciplinary professionals frequently saw parental engagement as a barrier to delivering newborn care (Vetcho et al., 2023). Care coordination is effective for many important family and health outcomes in recent studies. These outcomes include better family-professional partnerships and satisfaction, less financial and time strains on families, fewer unmet needs, and less inappropriate use of healthcare resources. Care coordination has many advantages, but it is difficult to measure its success since it is a labor- and skill-intensive process. Families of children diagnosed with neurodevelopmental disorders place a premium on gaining access to and funding necessary interventions, according to the study's findings. However, in the early stages of care coordination, after the initial neurodevelopmental examination, the primary goal should be to educate and support the child's family and care neighborhood. Only then will more tangible advantages be achieved (McNally Keehn et al., 2020).

Further research into the following areas is warranted: the culture of intensive care units (ICUs), healthcare staffing levels, and family caregivers' roles in these settings. The literature shows that organizational traits are the most important in influencing the development of good connections with families. The research findings can provide valuable new information for further investigation into the breadth, depth, and character of family involvement (FE) in the intensive care unit. Insights gained from this will be useful for nurses and organizational leaders as they work to reduce obstacles to FE in the intensive care unit (ICU) through education and training, resource allocation, and policy development and implementation (Cypress et al., 2024). All things considered; the healthcare practitioners surveyed agreed that family participation is crucial when it comes to diabetes treatment for the elderly. Family dynamics and an overburdened task-performance-based healthcare culture were to blame for their low levels of family engagement, but a family-centered practice environment supported by policies and organizations, extensive partnerships with community groups, and technology would make it much easier to integrate family-centered care (Tu, and Liao, 2021).

5.2.2 | Challenges and Barriers to Implementing Family-Centered Care in Critical Settings

Several obstacles significantly impact the implementation of family-centered care in Iran. Obstacles to providing family-centered care arise from a variety of sources, including individual, cultural, organizational, and administrative issues. The Iranian healthcare system lacks a family-centered philosophy of care, making it difficult for nurses and doctors to apply such methods in their daily work. Since the work environment influences the effective application of FCC by nurses and doctors, our results highlight the critical need to change organizational, managerial, and operational methods (Mirlashari et al., 2020). The proper implementation of FCC has been hindered by adverse conditions in the NICU created by communication hurdles between workers and parents. An integrated training program that prepares the treatment team and the family to work together in harmony is recommended as a means of overcoming these obstacles in comparable settings. This will help foster a positive attitude toward parental involvement and the use of family-centered care (FCC). Supervisors also need to back their staff and the ward environment up more (Jafari, Kermanshahi, and Vanaki, 2023).

Improved quality of care for patients and their families is possible with the use of FCC practices with ill children. However, there are a lot of obstacles that prevent many nurses from putting these techniques into reality. The research finds that nurses' FCC practice may be improved by addressing supportive variables at the individual, family, and system levels. If the healthcare system, families, and nurses are serious about improving FCC delivery, they will need to work together. Nurses' skills and experience may be better used through this partnership, which should also lead to improved client-nurse interactions and organizational shifts. Top officials in the healthcare system need to make sure the FCC gets the funding it needs and foster an atmosphere where it can thrive (Alqarawi, and Alhalal, 2024). In adult intensive care units, there are real obstacles to implementing FCC. Healthcare systems and intensive care unit teams would have to make some tough sacrifices if they adopt this approach to care. Several of these concessions may have unintended and harmful results. Therefore, quality improvement initiatives should weigh the pros and cons of a family-centered culture shift in intensive care units (ICUs), direct efforts to lessen the impact of negative outcomes, and provide guidance when choosing FCC procedures or processes might negatively affect patients, families, or units (Schwartz et al., 2022).

Medical staff must view parents as main caretakers. Because of this, FCC and parental involvement in care are shaped in certain ways. One suggestion for clinical practice is to change healthcare providers' opinions by demonstrating the value of FCC. A literature review with scientific data about outcomes for families and infants might do this. To further understand the impact of FCC on newborns, families, and healthcare providers, brief internships in hospitals with experience in FCC should be instituted. Facilities provided by the ward that may assist families should also be included in future studies on ward design (Oude Maatman et al., 2020).

5.2.3 | Role of Family-Centered Care in Enhancing Patient Outcomes

Improving basic healthcare services via the revolutionary power of family-centered nursing philosophies. These ideas promote more inclusive and successful systems by addressing patients' and their families' holistic needs. They help to close gaps in healthcare delivery. Patient happiness, caregiver involvement, and nurse self-assurance all saw considerable increases once organized interventions like training programs and real-time feedback were implemented (Ibrahimsaleh et al., 2024). Improving care quality is a successful outcome of the patient and family-centered care intervention. Parents' happiness, engagement, and participation in their children's healthcare, as well as the quality of life for children, all showed improvements. Additional benefits included shorter hospital stays, fewer dangerous mistakes, and fewer negative psychological responses from parents. The most crucial aspect of the PFCC intervention used in this study was family engagement (Seniwati, Wanda, and Nurhaeni, 2023). In the adult intensive care unit, family-centered treatments have the potential to benefit both patients and healthcare providers by improving family-centered outcomes. From the viewpoint of both families and critical care professionals, an advanced practice family nursing position in conjunction with a family support route is a model of care delivery that is accepted, valued, and advantageous in the intensive care unit. Various communication tactics (such as web-based communication with nurses and meetings with family nurse navigators) and rehabilitation instruction guides as well as family information booklets and movies explaining cardiopulmonary resuscitation were included in this category of engagement initiatives. Family satisfaction with treatment increased, and symptoms of anxiety, sadness, and post-traumatic stress disorder decreased when these measures were used (Wang, Antel, and Goldfarb, 2023; Naef, Massarotto, and Petry, 2020). It is unusual for families and providers to work together. Effectiveness in a rapidly changing healthcare system depends on family-provider collaboration in all three stages of care: planning, delivery, and evaluation. Stakeholders are starting to see that patient-centered treatment that incorporates family perspectives can enhance outcomes and quality of life (Hussein, 2022).

5.3 | Strengths and Limitations

There are several advantages and disadvantages to this comprehensive assessment of the tools used for fostering family-centered care in intensive care units. Its thorough approach is a strong suit; it employs strict inclusion and exclusion criteria and conducts a systematic search across several databases, which increases the credibility of the results. Critical care nurses can benefit from the thematic analysis's identification of important topics, such as the necessity for educational resources and the function of nursing advocacy. However there are some caveats, such as the possibility of publication bias (because relevant studies that weren't in the chosen databases would not have been included) and the fact that the papers were all written in English, which could limit the variety of viewpoints. The review does a good job of laying the groundwork for understanding the resources needed to implement family-centered care in critical care settings, despite these restrictions.

5.4 | Implications for Practice, Education, and Research

This integrative review's results have important consequences for critical care unit family-centered care practice, teaching, and research. Healthcare companies can empower nurses to advocate for families and establish rules that make it easier for families to be involved, such as flexible visiting and confidential consultation areas. To better equip nurses to involve families in patient care, nursing programs should teach family-centered care concepts, effective communication, and cultural competency. Research in the future should look at the effects of family-centered practices on patient outcomes and family happiness, the challenges to implementing these practices, and the best practices in different types of settings.

6 | Conclusion and Recommendations

This integrative review's results highlight the importance of family-centered care (FCC) in improving critical care patients' outcomes. Significant obstacles, such as a lack of organizational support, cultural hurdles, and sufficient manpower, continue to impede the implementation of FCC, despite its acknowledged relevance. Increasing human resources, establishing thorough training programs for healthcare workers, and cultivating a culture that emphasizes family involvement in care procedures are all suggestions for improvement. One further thing that can help with FCC integration is rules that clearly state the responsibilities of family caregivers. Investigating the efficacy of different treatments, determining the influence of FCC on patient and family outcomes, and removing systemic obstacles to its implementation should all be priorities for future studies. Healthcare providers may do their patients and their families a favor by making FCC a top priority. This will lead to happier patients and improved health results.

Conflicts of Interest

The authors declare that they have no conflict of interest associated with this article.

References

- Abdul Halain, A., Tang, L. Y., Chong, M. C., Ibrahim, N. A., & Abdullah, K. L. (2022). Psychological distress among the family members of Intensive Care Unit (ICU) patients: A scoping review. *Journal of clinical nursing*, 31(5-6), 497-507.
- Abukari, A. S. (2022). A model of family-centered care at the paediatric and neonatal intensive care setting in Ghana (Doctoral dissertation, Faculty of Health Sciences, University of the Witwatersrand).
- Abukari, A. S., & Schmollgruber, S. (2023). Concepts of family-centered care at the neonatal and paediatric intensive care unit: a scoping review. *Journal of pediatric nursing*, 71, e1-e10.
- Abukari, A. S., & Schmollgruber, S. (2024). Perceived barriers of family-centred care in neonatal intensive care units: A qualitative study. *Nursing in Critical Care*. <https://doi.org/10.1111/nicc.13031>.

- Agwiah, V. A., & Boateng, K. H. T. (2024). Family Centered Care: The Perspective of Nurses in the Neonatal Intensive Care Unit of Tamale Teaching Hospital, Ghana: A Qualitative Exploration. *Asian Journal of Pediatric Research*, 14(3), 27-36. DOI:10.9734/AJPR/2024/v14i3331.
- Albayrak, S., & Büyükgöncü, L. A. (2022). The impact of family-centered care interventions on neonatal and parental outcomes in a Turkish hospital. *Collegian*, 29(5), 738-747. DOI: 10.1016/j.colegn.2022.05.004.
- Allen, D., Scarinci, N., & Hickson, L. (2022). Effects of patient-and family-centered care for young adults with chronic health conditions and their family members: a systematic review. *Emerging Adulthood*, 10(3), 689-701.
- Alqarawi, N., & Alhalal, E. (2024). Factors affecting family-centered care practice by nurses: A systematic review. *Journal of pediatric nursing*, 78, 158-171.
- Barnawi, A. (2023). Master Coach The Consequences Workplace of the Head Nurse's Adherence to Nursing Professional Educational Ethics and Knowledge of Moral Dilemmas at King Abdulaziz Hospital, Makkah, Saudi Arabia. DOI: 10.53713/nhs.v3i1.218.
- Barnes, S., Macdonald, I., Rahmaty, Z., De Goumoëns, V., Grandjean, C., Jaques, C., & Ramelet, A. S. (2024). Effectiveness and family experiences of interventions promoting partnerships between families and pediatric and neonatal intensive care units: a mixed methods systematic review. *JB1 evidence synthesis*, 22(7), 1208-1261. <https://doi.org/10.11124/JBIES-23-00034>.
- Bohart, S., Möller, A. M., Andreassen, A. S., Waldau, T., Lamprecht, C., & Thomsen, T. (2022). Effect of Patient and Family Centred Care interventions for adult intensive care unit patients and their families: A systematic review and meta-analysis. *Intensive and Critical Care Nursing*, 69, 103156.
- Broome, M. E. (2024). Transformational leadership in nursing: From expert clinician to influential leader. *springer publishing company*.
- Care, C. (2021). Person/Family-Centered Care1. *Quality and Safety in Nursing: A Competency Approach to Improving Outcomes*, 85.
- Cronin, M. A., & George, E. (2023). The why and how of the integrative review. *Organizational Research Methods*, 26(1), 168-192.
- Cypress, B., Gharzeddine, R., Fu, M. R., Ransom, M., Villarente, F., & Pitman, C. (2024). Healthcare professionals perspective of the facilitators and barriers to family engagement during patient-and-family-centered-care interdisciplinary rounds in intensive care unit: A qualitative exploratory study. *Intensive and Critical Care Nursing*, 82, 103636.
- Dai, Y., & Jiang, H. (2024). Family-centered care: addressing challenges and implementing countermeasures in response to novel coronavirus pneumonia prevention and control-a narrative review. *Journal of thoracic disease*, 16(11), 8014-8025. <https://doi.org/10.21037/jtd-24-960>.
- Danesh, V. (2024). Patient and Family Response to the Critical Care Experience. *Sole's Introduction to Critical Care Nursing-E-Book: Sole's Introduction to Critical Care Nursing-E-Book*, 20.
- Duong, J., Wang, G., Lean, G., Slobod, D., & Goldfarb, M. (2024). Family-centered interventions and patient outcomes in the adult intensive care unit: A systematic review of randomized controlled trials. *Journal of Critical Care*, 83, 154829.
- Ebrahimi, Z., Patel, H., Wijk, H., Ekman, I., & Olaya-Contreras, P. (2021). A systematic review on implementation of person-centered care interventions for older people in out-of-hospital settings. *Geriatric Nursing*, 42(1), 213-224.
- Franck, L. S., Bisgaard, R., Cormier, D. M., Hutchison, J., Moore, D., Gay, C., ... & Lare, N. (2022). Improving family-centered care for infants in neonatal intensive care units:

- Recommendations from frontline healthcare professionals. *Advances in neonatal care*, 22(1), 79-86.
- Glasdam, S., Xu, H., & Stjernswärd, S. (2024). Socialisation of children to nurse and nursing images: A Goffman-inspired thematic analysis of children's picture books in a Swedish context. *Nursing inquiry*, 31(2), e12603. <https://doi.org/10.1111/nin.12603>.
- Grandjean, C., Ullmann, P., Marston, M., Maitre, M. C., Perez, M. H., Ramelet, A. S., & OCToPuS Consortium. (2021). Sources of stress, family functioning, and needs of families with a chronic critically ill child: a qualitative study. *frontiers in pediatrics*, 9, 740598. <https://doi.org/10.3389/fped.2021.740598>.
- Hart, J. L., Turnbull, A. E., Oppenheim, I. M., & Courtright, K. R. (2020). Family-centered care during the COVID-19 era. *Journal of pain and symptom management*, 60(2), e93-e97. <https://doi.org/10.1016/j.jpainsymman.2020.04.017>.
- Ho, A. (2020). Taking family-centered care seriously. *The American Journal of Bioethics*, 20(6), 65-67.
- Hussein, E. (2022). Clients' Perspective towards Family-centered Care Health Services of Family-provider Partnership. *Iraqi National Journal of Nursing Specialties*, 35(2), 41-50.
- Ibrahimalsaleh, F. A., Alharbi, H. N. O., Aljohani, H. N. S., Aljohani, M. T. F., Alkhaibari, H. A. S., Alfaden, A. H., ... & Aljohany, S. S. (2024). The Role of Family-Centered Nursing Theories in Enhancing Primary Healthcare Services. *Journal of International Crisis and Risk Communication Research*, 151-164.
- Jafari, Z., Kermanshahi, S. M. K., & Vanaki, Z. (2023). Communication Barriers to Implementation of Family-Centered Care from Perspective of Mothers and Personnel of Neonatal Intensive Care Unit: A Qualitative Study. *Journal of Archives in Military Medicine*, 11(2).
- Jafarpour, H., Vasli, P., & Manoochehri, H. (2020). How is family involved in clinical care and decision-making in intensive care units? A qualitative study. *Contemporary nurse*, 56(3), 215-229.
- Judge, H., & Ceci, C. (2022). Problematising assumptions about 'centredness' in patient and family centred care research in acute care settings. *Nursing Inquiry*, 29(3), e12448. <https://doi.org/10.1111/nin.12448>.
- Kutahyaliloglu, N. S., & Scafide, K. N. (2023). Effects of family-centered care on bonding: A systematic review. *Journal of Child Health Care*, 27(4), 721-737. <https://doi.org/10.1177/13674935221085799>.
- McAndrew, N. S., Mark, L., & Butler, M. (2020). Timely family feedback to guide family engagement in the intensive care unit. *Critical care nurse*, 40(6), 42-51.
- McNally Keehn, R., Enneking, B., Ramaker, M., Goings, M., Yang, Z., Carroll, A., & Ciccarelli, M. (2020). Family-centered care coordination in an interdisciplinary neurodevelopmental evaluation clinic: outcomes from care coordinator and caregiver reports. *Frontiers in Pediatrics*, 8, 538633.
- Mirlashari, J., Brown, H., Fomani, F. K., de Salaberry, J., Zadeh, T. K., & Khoshkhou, F. (2020). The challenges of implementing family-centered care in NICU from the perspectives of physicians and nurses. *Journal of pediatric nursing*, 50, e91-e98.
- Misak, C., Herridge, M., Ely, E. W., Clay, A., & Mikkelsen, M. E. (2021). Patient and family engagement in critical illness. *Critical Care Medicine*, 49(9), 1389-1401.
- Naef, R., Massarotto, P., & Petry, H. (2020). Family and health professional experience with a nurse-led family support intervention in ICU: A qualitative evaluation study. *Intensive and Critical Care Nursing*, 61, 102916.
- Nikolic, S., Daniel, S., Haque, R., Belkina, M., Hassan, G. M., Grundy, S., ... & Sandison, C. (2023). ChatGPT versus engineering education assessment: a multidisciplinary and multi-

- institutional benchmarking and analysis of this generative artificial intelligence tool to investigate assessment integrity. *European Journal of Engineering Education*, 48(4), 559-614.
- Oude Maatman, S. M., Bohlin, K., Lilliesköld, S., Garberg, H. T., Uitewaal-Poslawky, I., Kars, M. C., & Van den Hoogen, A. (2020). Factors influencing implementation of family-centered care in a neonatal intensive care unit. *Frontiers in pediatrics*, 8, 222. <https://doi.org/10.3389/fped.2020.00222>.
- Paunikar, S., & Chakole, V. (2024). Postoperative Delirium and Neurocognitive Disorders: A Comprehensive Review of Pathophysiology, Risk Factors, and Management Strategies. *Cureus*, 16(9), e68492.
- Power, N. M., North, N., Leonard, A. L., Bonaconsa, C., & Coetzee, M. (2021). A scoping review of mother–child separation in clinical paediatric settings. *Journal of Child Health Care*, 25(4), 534-548.
- Scheunemann, L. P., White, J. S., Prinjha, S., Hamm, M. E., Girard, T. D., Skidmore, E. R., ... & Leland, N. E. (2020). Post–Intensive care unit care. A qualitative analysis of patient priorities and implications for redesign. *Annals of the American Thoracic Society*, 17(2), 221-228.
- Schmollgruber, S. (2024). Developing conceptual guidelines for Family-Centered Care for standard ICU practice: A constructivist grounded theory.
- Schwartz, A. C., Dunn, S. E., Simon, H. F., Velasquez, A., Garner, D., Tran Jr, D. Q., & Kaslow, N. J. (2022). Making family-centered care for adults in the ICU a reality. *Frontiers in psychiatry*, 13, 837708.
- Seniwati, T., Wanda, D., & Nurhaeni, N. (2023). Effects of Patient and Family-Centered Care on Quality of Care in Pediatric Patients: A Systematic Review. *Nurse Media Journal of Nursing*, 13(1).
- Su, Y., Yuki, M., & Hirayama, K. (2020). The experiences and perspectives of family surrogate decision-makers: a systematic review of qualitative studies. *Patient Education and Counseling*, 103(6), 1070-1081.
- Tu, J., & Liao, J. (2021). Primary care providers' perceptions and experiences of family-centered care for older adults: a qualitative study of community-based diabetes management in China. *BMC geriatrics*, 21, 1-10.
- Vetcho, S., Ullman, A. J., Petsky, H., Wiroonpanich, W., & Cooke, M. (2023). Parent and interdisciplinary professional perceptions of family-centered care in Thai NICU: a qualitative study. *Nursing in critical care*, 28(1), 47-55.
- Wang, G., Antel, R., & Goldfarb, M. (2023). The impact of Randomized Family-centered interventions on family-centered outcomes in the adult Intensive Care Unit: a systematic review. *Journal of Intensive Care Medicine*, 38(8), 690-701.
- Wool, J., Irving, S. Y., Meghani, S. H., & Ulrich, C. M. (2021). Parental decision-making in the pediatric intensive care unit: an integrative review. *Journal of Family Nursing*, 27(2), 154-167. <https://doi.org/10.1177/1074840720975869>
- World Health Organization, (2022). Child mortality (under 5 years). Retrieved from <https://www.who.int/news-room/fact-sheets/detail/levels-and-trends-in-child-under-5-mortality-in-2020>. 9th August 2024, at 10 pm.