Vol. 5 No. 2 (2026)

Pakistan Journal of Medical & Cardiological Review

https://pakjmcr.com/index.php/1/about

Online ISSN 3007-2387

Print ISSN 3007-2379

Family at the Core: Mapping Challenges and Opportunities in Implementing Family-Centered Care in NICUs

Burhan Ullah
MSN Scholar, ZUFONAM. Email: burhanullah.22634@zu.edu.pk

Rozina Jalaluddin (Corresponding Author)
PhD Scholar and Associate Professor, ZUFONAM. Email: rozina.jalaluddin@zu.edu.pk

Afshan Nazly
Associate Professor, ZUFONAM. Email: afshan.nazly@zu.edu.pk

Author Details

Keywords:
Family-Centered Care, NICU, Neonatal Health, Parental Engagement, Barriers, Facilitators

Received on 12 May 2026
Accepted on 16 Jun 2026
Published on 22 Jun 2026

Corresponding E-mail & Author*:

Rozina Jalaluddin
PhD Scholar and Associate Professor, ZUFONAM. Email: rozina.jalaluddin@zu.edu.pk

Abstract

Background:
Family-Centered Care (FCC) is widely recognized as a gold standard approach to quality neonatal healthcare, particularly in Neonatal Intensive Care Units (NICUs). FCC is built on the principles of dignity and respect, information sharing, participation, and collaboration. FCC supports shared decision-making and active parental involvement in neonatal care.

Objective:
To synthesize existing evidence on the benefits and the barriers nurses faced in implementing FCC practices in the NICUs.

Method:
This scoping review was conducted following the Arksey and O'Malley framework and reported in accordance with the PRISMA 2020 guidelines. A comprehensive search was performed across PubMed, CINAHL, Scopus, Web of Science, and Google Scholar databases. Peer-reviewed full text studies published in English between 2015 and 2024 were included based on predefined inclusion criteria.

Results:
A total, there were 828 articles that were obtained from the search of databases. After screening these studies in terms of their publication year, study features, geography, and context, 250 articles were excluded. The remaining literature was assessed in full text articles based on the inclusion criteria, which led to the selection of 25 articles for the scoping review. In addition, the review of literature revealed three major themes extracted namely concept of Family-Centered Care (FCC); FCC facilitators and FCC barriers in the NICUs.

Discussion:
Globally, Several facilitators to FCC among nurses and parents in NICUs were commonly found as factors facilitating the application of FCC among nurses and parents in NICUs include good nurse-parent communication; nurse and parent education; health policy support; and family-oriented NICU environment. On the other hand, staff shortage; workload, infrastructural constraints; restricted visiting policies;

communication problems; cultural beliefs; and lack of institutional support were all barriers. The above findings are significant since FCC is known to increase the degree of parental involvement, strengthen the parent-child relationship, enhance parental satisfaction, and improve neonatal outcomes. Successful FCC involves both adequate provision of resources and therapeutic communication between nurses and parents.

Conclusion:

FCC implementation in NICUs is shaped by organizational, cultural, and communication factors, with training, resources, and leadership acting as key facilitators. However, persistent systemic barriers and limited context-specific evidence, particularly from Pakistan, highlight the need for future research.

Introduction

The quality of healthcare services plays a significant role in social development, particularly in the area of maternal and child health. Neonatal Intensive Care Units (NICUs) provide specialized medical care for premature and critically ill newborns who require continuous monitoring and advanced clinical support. The hospitalization of infants in NICUs can be a stressful and emotionally challenging experience for parents, who often face anxiety, uncertainty, and limited involvement in their infant's care. Traditionally, neonatal care has been largely provider-centered, with healthcare professionals making most clinical decisions while families remain passive observers.

In recent years, healthcare systems have increasingly emphasized patient-centered approaches that promote collaboration between healthcare providers and families. Family-Centered Care (FCC) has emerged as an important framework that encourages parental involvement in healthcare processes and supports shared decision-making. FCC recognizes families as essential partners in the care of hospitalized infants and emphasizes respect for family values, open communication, and collaborative care planning.

Research has shown that when parents actively participate in neonatal care, infants benefit from improved health outcomes, while parents experience reduced stress and increased confidence in caring for their newborns after discharge. As a result, FCC is widely considered a key component of high-quality neonatal healthcare. However, despite its recognized benefits, the implementation of FCC remains inconsistent across healthcare systems. Therefore, this scoping review aims to explore the barriers and facilitators influencing the implementation of family-centered care in neonatal intensive care units found in existing literature.

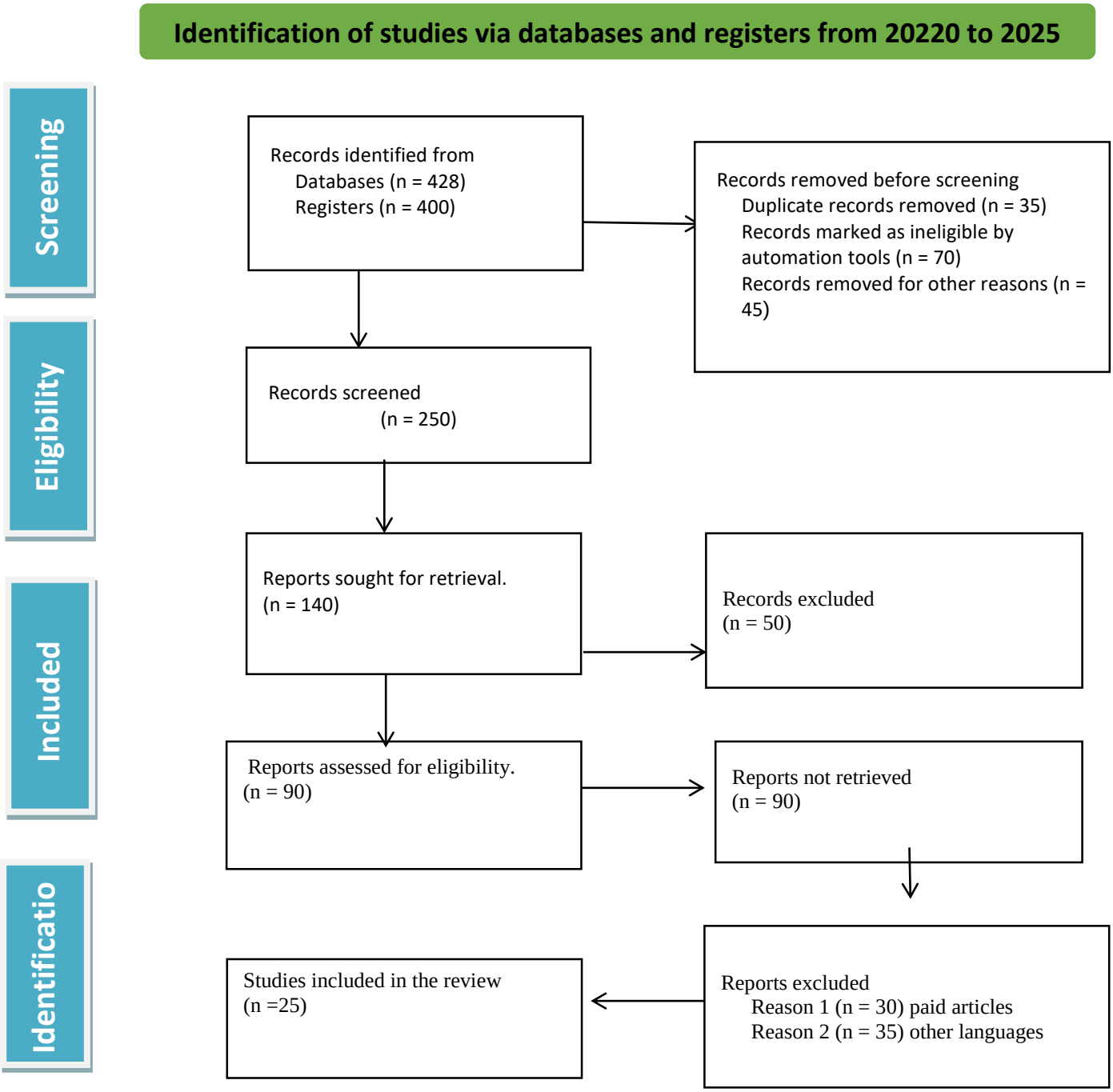
Methods

A scoping review will be conducted following the Arksey and O'Malley Framework and reported in accordance with the PRISMA 2020 guidelines. A comprehensive and systematic search strategy will be developed and applied across multiple electronic databases, including PubMed, CINAHL, Scopus, Web of Science, and Google Scholar. The search strategy will incorporate a combination of keywords and Medical Subject Headings (MeSH) to ensure comprehensive retrieval of relevant studies. Keywords will include terms such as "family-centered care," "family centered care," "parental involvement," "neonatal intensive care unit," "NICU," "implementation," "barriers," "facilitators," and "challenges." Corresponding MeSH terms will include "Family-Centered Care," "Infant, Newborn," "Intensive Care Units, Neonatal," "Parents," "Patient-Centered Care," and "Health Services Accessibility." Boolean operators (AND, OR) and truncation techniques will be applied to refine and expand the search strategy.

The inclusion criteria will consist of peer-reviewed, full-text articles published in the English language within the last ten years, specifically focusing on the implementation, barriers, and facilitators of family-centered care in neonatal intensive care unit settings. Studies employing qualitative, quantitative, or mixed-method designs will be considered to capture a broad range of evidence. The included studies were conducted

across multiple countries, including Brazil, Iran, Ghana, Thailand, Pakistan, China, Canada, Australia, Malta, Turkey, India, and New Zealand.
Conversely, exclusion criteria will include studies not conducted in NICU settings, articles that do not address family-centered care, as well as non-research publications such as editorials, commentaries, letters to the editor, and conference abstracts. The study selection process will involve a two-stage screening approach, where titles and abstracts will first be reviewed to identify potentially relevant studies, followed by a full-text assessment to confirm eligibility. Duplicate records will be removed, and studies that do not meet the inclusion criteria will be excluded to ensure the rigor and transparency of the review process.

PRISMA Flow Chart



Core Concepts of Family-Centered Care

Family-centered care (FCC) is a collaborative model of healthcare in which families are recognized as integral and active members of the infant's care team. This approach emphasizes partnership between healthcare providers and families to ensure holistic and individualized care. Four core principles underpin FCC practice. First, respect and dignity involve acknowledging and valuing families' beliefs, cultural backgrounds, and preferences in all aspects of care. Second, information sharing requires healthcare professionals to provide clear, accurate, timely, and unbiased information to enable informed decision-making. Third, participation encourages families to be actively involved in the infant's care and decision-making processes, according to their desired level of engagement. Finally, collaboration highlights the importance of involving families not only in direct care but also in care planning, program development, and policy-making to enhance the overall quality and responsiveness of healthcare services.

Facilitators Supporting FCC Implementation

Supportive institutional leadership, enabling policies, and access to counseling services play a crucial role in strengthening the implementation of Family-Centered Care (FCC). Evidence suggests that flexible visiting policies, a supportive Neonatal Intensive Care Unit (NICU) environment, effective multidisciplinary collaboration, and psychological support services enhance healthcare professionals' engagement while simultaneously reducing parental stress levels (Heidari & Mardani-Hamooleh, 2020; Almalki, Gildea, & Boyle, 2025). Furthermore, findings from a study conducted in Lahore, Pakistan, indicate that effective communication, flexible visiting arrangements, institutional support, and active healthcare provider engagement serve as key facilitators for the successful implementation of FCC practices within NICU and Pediatric Intensive Care Unit (PICU) settings (Zaidi et al.).

Barriers to FCC Implementation

Several international studies have identified multiple challenges affecting the effective implementation of Family-Centered Care (FCC) in Neonatal Intensive Care Unit (NICU) settings. A key barrier includes increased workload and inadequate nursing staffing, which limit healthcare professionals' ability to engage meaningfully with parents and involve them in neonatal care processes. Additionally, insufficient awareness and understanding of FCC principles among healthcare practitioners have been identified as significant impediments to its effective practice (Abukari & Schmollgruber, 2024).

Structural and organizational constraints further hinder FCC implementation, including limited physical space within NICUs, absence of designated areas for family involvement, restrictive visitation policies, and inadequate institutional support and resources (Heidari & Mardani-Hamooleh, 2020). Communication-related barriers also play a critical role, where differences in language proficiency, cultural background, and educational levels may contribute to misunderstandings and reduce parental participation in shared decision-making processes.

Similarly, a study conducted in Lahore, Pakistan, reported comparable barriers to FCC implementation in NICU settings. These included ineffective communication and inadequate information sharing with families, restrictive visitation policies, limited formal and informal support systems, and low parental health literacy. Furthermore, overcrowding, staffing shortages, and minimal family involvement in care planning were identified as additional factors that significantly hinder the effective implementation of FCC practices (Zaidi et al.).

Table Summary of 25 Studies

S:No	Author(s) & Year	Country	Study Design	Sample Size & Population	Key Findings
1	Fonseca et al., 2020	Brazil	Qualitative	Nurses	**Facilitators:** Presence of family members and staff education(Fonseca, Silveira, Franzoi, & Motta, 2020). **Barriers:** Limited awareness of Family-Centered Care (FCC) among some staff members (Fonseca et al., 2020).
2	(Caffari, 2024).	Malta	Qualitative	9 nurses	**Facilitators:** Positive attitudes toward Family-Centered Care (FCC) and respect for families(Caffari, 2024). **Barriers:** Inadequate infrastructure and a need for staff training(Caffari, 2024).
3	(Heidari & Mardani-Hamooleh, 2020).	Iran(Abukari & Schmollgruber, 2024)	Qualitative	NICU nurses	**Facilitators:** Staff training and effective collaboration(Heidari & Mardani-Hamooleh, 2020). **Barriers:** Cultural constraints, inadequate privacy, and shortage of staff(Heidari & Mardani-Hamooleh, 2020).
4	McDonald & Moloneys, 2023	New Zealand	Mixed-method	Parents & nurses	**Facilitators:** Active parental involvement and effective communication(Dalziell, 2011). **Barriers:** Not clearly specified in the report(Dalziell, 2011).

5	(Abukari & Schmollgruber, 2024).	Ghana	Qualitative	84 participants	**Facilitators:** Respectful care, communication(Abukari & Schmollgruber, 2024). **Barriers:** System-level challenges(Abukari & Schmollgruber, 2024).
6	(Franck et al., 2022).	USA	Cross-sectional	NICU nurses	**Facilitators:** Use of technology (e.g., webcams) and organizational support(Franck et al., 2022). **Barriers:** Not reported(Franck et al., 2022).
7	Carew et al., 2024	Australia	Qualitative	Neonatal nurses	**Facilitators:** Cultural respect and strong leadership support(Caffari, 2024). **Barriers:** Communication gaps(Caffari, 2024).
8	(Dai & Jiang, 2024).	Canada	Scoping Review	Multiple studies	**Facilitators:** Effective communication, adequate infrastructure, and strong teamwork(Dai & Jiang, 2024). **Barriers:** Challenges in managing emotional stress(Dai & Jiang, 2024).
9	(Butler et al., 2026).	Canada	Scoping Review	Multiple studies	**Facilitators:** Supportive policies, collaboration, and education(Butler et al., 2026). **Barriers:** Absence of a standardized (universal) Family-Centered Care (FCC) model(Butler et al., 2026).
10	(Zanoni et	Canada	Qualitativ	HCPs &	**Facilitators:**

	al., 2021) .		e	administrators	Collaboration among stakeholders(Zanoni et al., 2021). **Barriers:** Limited space and staffing constraints(Zanoni et al., 2021).
11	(da Silva, Manzo, de Faria Fioreti, & Silva, 2016).	Brazil	Qualitative	14 nurses	**Facilitators:** Efforts toward adaptation and adjustment(da Silva et al., 2016). **Barriers:** Insufficient recognition of the family's role(da Silva et al., 2016).
12	Vetcho, 2021	Australia	Qualitative	HCPs	**Facilitators:** Effective communication and emotional support(Vetcho, 2022). **Barriers:** Systemic challenges(Vetcho, 2022).
13	(Vetcho, 2022).	Thailand	Qualitative	84 participants	**Facilitators:** Implementation of the Family-Centered Care (FCC) model(Vetcho, 2022). **Barriers:** Staff shortages, cultural beliefs, and limited access(Vetcho, 2022).
14	(Agwiah & Boateng, 2024).	Ghana	Qualitative	NICU nurses	**Facilitators:** Emotional support and parent–child bonding(Agwiah & Boateng, 2024). **Barriers:** Inadequate infrastructure, staff shortages, and cultural factors(Agwiah & Boateng, 2024).
15	(Yalçın & Özçalık, 2025).	Turkey	Qualitative	NICU nurses	**Facilitators:** Positive staff attitudes and collaborative

					practice(Yalçın & Özçalık, 2025). **Barriers:** Not reported(Yalçın & Özçalık, 2025).
16	(Vetcho, Phumdoun, Kain, & Chaisri, 2024).	Thailand	Qualitative	10 nurses, 10 parents	**Facilitators:** Flexible policies and supportive systems(Vetcho et al., 2024). **Barriers:** COVID-related visitation restrictions and communication challenges(Vetcho et al., 2024).
17	Prasopkittikun et al., 2020	Thailand	Mixed-method	142 nurses	**Facilitators:** Positive attitudes among staff(Prasopkittikun, Srichantaranit, & Chunyasing, 2020). **Barriers:** Staff shortages, inadequate training, and perception-related issues(Prasopkittikun et al., 2020).
18	(Wepener, Olivier, & Gerber, 2026).	Iran	Qualitative	Nurses & physicians	**Facilitators:** Increased awareness(Wepener et al., 2026). **Barriers:** Cultural, legal, and operational issues(Wepener et al., 2026).
19	Heidari & Mardani-Hamooleh, 2020	Iran	Qualitative	18 nurses	**Facilitators:** Family involvement(Heidari & Mardani-Hamooleh, 2020). **Barriers:** Inadequate infrastructure and insufficient training
20	(Gómez-Cantarino et al., 2020).	China	Before-after	128 HCPs	**Facilitators:** Availability of education programs(Gómez-Cantarino et al., 2020).

					Barriers: Risk of infection, shortage of staff, and limited parental cooperation(Gómez-Cantarino et al., 2020).
21	.(Mariyam, 2022)	Indonesia	Quantitative	52 nurses	**Facilitators:** Effective communication and shared decision-making(Mariyam, 2022). **Barriers:** Weak role negotiation and gaps in training(Mariyam, 2022).
22	(Rasolpour, Farshi, & Jabraeili, 2024).	Iran	A Correlational Study	154	**Facilitators:** Included respectful staff, continuity of care, quality treatment, professional attitudes, and increased maternal satisfaction(Rasolpour et al., 2024). Barriers: Included limited family-centered care, poor support and communication, low parental involvement, inadequate discharge preparation, and staffing constraints(Rasolpour et al., 2024)..
23	Sarin & Maria, 2019	India	Qualitative	HCWs & parents	**Facilitators:** Parent–child bonding and increased awareness(Maria et al., 2021). **Barriers:** Cultural norms, limited space, and staffing constraints(Maria et

					al., 2021).
24	(Vetcho, Ullman, Petsky, Wiroonpanich, & Cooke, 2023).	Thiland	Qualitative	18 nurses	**Facilitators:** Providing education to parents to support engagement and involvement(Vetcho et al., 2023). **Barriers:** Parental participation challenges, along with cultural and staff-related limitations(Vetcho et al., 2023).
25	Zaidi et al., 2021	Pakistan	Cross-sectional	158 p parents	**Facilitators:** clear information, support systems, flexible policies, open visitation, and , improving stress, understanding, and outcomes.(ZAIDI et al.). **Barriers:** include lack of respect and dignity, stressful ICU environment, poor communication, limited formal and informal support, rigid hospital policies, restricted visitation hours, and COVID-19 restrictions, all of which reduce family involvement (ZAIDI et al.).

Discussion:

This review indicates that Family-Centered Care (FCC) is widely recognized as an effective approach for improving neonatal outcomes and enhancing parental satisfaction in NICU settings. Evidence suggests that several facilitators contribute to its successful implementation, including effective communication, institutional support, staff training, and flexible visitation policies. When healthcare providers engage in clear, respectful, and consistent communication, parents demonstrate greater confidence and active participation in neonatal care. Similarly, nurses who receive formal training in FCC principles are more likely to involve families in care processes. Supportive leadership and enabling organizational policies further strengthen FCC implementation by fostering a collaborative care environment within NICUs.

Despite these facilitating factors, the translation of FCC principles into routine clinical practice remains challenging. The most commonly reported barriers include inadequate

staffing, high workload demands, and limited infrastructural capacity. These challenges are particularly evident in low-resource settings, where NICUs often operate beyond their intended capacity, compelling healthcare professionals to prioritize clinical responsibilities over family engagement. Communication-related difficulties, including inconsistent information sharing and reduced interaction time with families, further undermine trust and limit parental involvement.

Collectively, these findings suggest that effective FCC implementation requires not only individual competency development but also sustained institutional commitment, structural improvements, and policy-level support (Abukari & Schmollgruber, 2024).

In the context of Pakistan, although existing literature has explored FCC, the majority of studies have focused on parental experiences as well as perceived barriers and facilitators to implementation (Zaidi et al.). However, there remains a significant gap in qualitative research examining nurses' perceptions of FCC, particularly in relation to its four core components: respect and dignity, information sharing, participation, and collaboration within NICU settings.

Therefore, further research is warranted within the Pakistani context to explore nurses' perspectives on FCC implementation in NICUs, with the aim of generating context-specific evidence to inform policy development and enhance clinical practice.

Conclusion

This scoping review aimed to identify the barriers and facilitators influencing the implementation of Family-Centered Care (FCC) in NICU settings. The findings indicate that FCC implementation is shaped by a combination of organizational, cultural, and communication-related factors, requiring coordinated efforts among nurses, hospital administrators, and policymakers. Key facilitators include structured staff training, effective communication practices, adequate resource allocation, and culturally sensitive care delivery, all of which enhance parental involvement in neonatal care. Conversely, barriers such as limited staffing, infrastructural constraints, and communication gaps continue to hinder consistent FCC practice, particularly in resource-limited settings. In the Pakistani context, although FCC has been explored in terms of parental experiences and satisfaction, there remains a significant gap in the literature regarding nurses' perceptions of FCC implementation. Notably, no qualitative studies have specifically examined nurses' perspectives in relation to the core FCC domains of respect and dignity, information sharing, collaboration, and participation in NICU settings, highlighting an important area for future research.

Conflict of Interest: Authors declared no conflict of interest

Funding: No external funding received for the publication

REFERENCES

Almalki, M., et al. (2024). "Healthcare professionals' perceptions of family-centred care in
Neonatal intensive care units: A qualitative thematic synthesis."
Patient and family-centered care(Frakking, Michaels, Orbell-Smith, & Le Ray, 2020)
Abukari, A. S., & Schmollgruber, S. J. N. i. C. C. (2024). Perceived barriers of family-centred care in neonatal intensive care units: a qualitative study. *29*(5), 905-915.

Ardres, N. S. (2024). "Improving the Culture of Patient and Family-Centred Partnerships: A
Quality Improvement Project."
Almalki, M., Gildea, A., & Boyle, B. J. J. o. N. N. (2024). Healthcare professionals' Perceptions of family-centred care in neonatal intensive care units: A qualitative thematic synthesis.

Caffari, R. (2024). NPICU nurses' perspectives of family-centred neonatal care in Malta: a
qualitative study. University of Malta,
Dall'Oglio, I., Mascolo, R., Portanova, A., Ragni, A., Amadio, P., Fiori, M., . . . Rocco, G. J.
C. (2022). Staff perceptions of family-centred care in Italian neonatal intensive care
units: a multicenter cross-sectional study. *9*(9), 1401.
Davis, S., Kain, V., Forster, E. M. J. J. o. C., & Health, Y. P. s. (2024). Nurses' attitudes, perception, and knowledge of family-centred care. *5*(2), 4-17
Ding, X., Zhu, L., Zhang, R., Wang, L., Wang, T.-T., & Latour, J. M. J. A. C. C. (2019).
\Frakking, T., Michaels, S., Orbell-Smith, J., & Le Ray, L. J. B. o. q. (2020). Framework for
patient, family-centred care within an Australian Community Hospital: development
and description. *9*(2), e000823.
Gómez-Cantarino, S., García-Valdivieso, I., Moncunill-Martínez, E., Yáñez-Araque, B.,
Ugarte Gurrutxaga, M. I. J. I. j. o. e. r., & health, p. (2020). Developing a family-
Centered care model in the neonatal intensive care unit (NICU): a new vision to
manage healthcare. *17*(19), 7197.
Heidari, H., & Mardani-Hamooleh, M. J. J. o. P. I. C. (2020). Nurses' perception of family-
centered care in neonatal intensive care units. *9*(01),
Hodgson, C. R., Mehra, R., & Franck, L. S. J. C. (2025). Infant and Family Outcomes and
Experiences Related to Family-Centred Care Interventions in the NICU: A Systematic
Review. *12*(3), 290.
Maria, A., Litch, J. A., Stepanchak, M., Sarin, E., Wadhwa, R., & Kumar, H. J. B. (2021).
Assessment of the feasibility and acceptability of family-centered care implemented at a
neonatal intensive care unit in India. *21*, 1-12.

Patient and family-centered care(Frakking et al., 2020)
Prasopkittikun, T., Srichantaranit, A., & Chunyasing, S. J. I. J. o. n. s. (2020). Thai nurses'
Perceptions and practices of family-centered care: The implementation gap. *7*(1), 74-80.
Abukari, A. S., & Schmollgruber, S. J. N. i. C. C. (2024). Perceived barriers of family-centred care in neonatal intensive care units: a qualitative study. *29*(5), 905-915.

Agwiah, V. A., & Boateng, K. H. T. J. A. J. o. P. R. (2024). Family centered care: The perspective of nurses in the neonatal intensive care unit of tamale teaching hospital, Ghana: A qualitative exploration. *14*(3), 27-36.

Almalki, M., Gildea, A., & Boyle, B. J. J. o. N. N. (2025). Healthcare professionals' perceptions of family centred care in neonatal intensive care units: A qualitative thematic synthesis. *31*(1), 15-25.
Butler, A. E., Ridgway, L., Henderson, E. M., Hokke, S., Edvardsson, K., Adams, C., . . . Arefadib, N. J. J. o. C. H. C. (2026). Family-centred care research in paediatrics: A scoping review. *30*(1), 150-166.
Caffari, R. (2024). *NPICU nurses' perspectives of family centred neonatal care in Malta: a qualitative study.* University of Malta,

da Silva, T. R. G., Manzo, B. F., de Faria Fioreti, F. C. C., & Silva, P. M. J. R. d. R. d. E. d. N. (2016). Family-centered care from the perspective of nurses in the Neonatal Intensive Care Unit. *17*(5), 643-650.

Dai, Y., & Jiang, H. J. J. o. t. d. (2024). Family-centered care: addressing challenges and implementing countermeasures in response to novel coronavirus pneumonia prevention and control—a narrative review. *16*(11), 8014-8025.

Dalziell, R. J. K. T. N. N. Z. (2011). Encouraging family-centred care in neonatal practice. *17*(6), 12.

Fonseca, S. A. d., Silveira, A. O., Franzoi, M. A. H., & Motta, E. J. E. C. H. (2020). Family centered-care at the neonatal intensive care unit (NICU): nurses' experiences. *9*(2), 170-190.

Frakking, T., Michaels, S., Orbell-Smith, J., & Le Ray, L. J. B. o. q. (2020). Framework for patient, family-centred care within an Australian Community Hospital: development and description. *9*(2), e000823.

Franck, L. S., Gay, C. L., Hoffmann, T. J., Kriz, R. M., Bisgaard, R., Cormier, D. M., . . . Sun, Y. J. B. p. (2022). Neonatal outcomes from a quasi-experimental clinical trial of family integrated care versus family-centered care for preterm infants in US NICUs. *22*(1), 674.

Gómez-Cantarino, S., García-Valdivieso, I., Moncunill-Martínez, E., Yáñez-Araque, B., Ugarte Gurrutxaga, M. I. J. I. j. o. e. r., & health, p. (2020). Developing a family-centered care model in the neonatal intensive care unit (NICU): a new vision to manage healthcare. *17*(19), 7197.

Heidari, H., & Mardani-Hamooleh, M. J. J. o. P. I. C. (2020). Nurses' perception of family-centered care in neonatal intensive care units. *9*(01), 016-020.

Maria, A., Litch, J. A., Stepanchak, M., Sarin, E., Wadhwa, R., & Kumar, H. J. B. p. (2021). Assessment of feasibility and acceptability of family-centered care implemented at a neonatal intensive care unit in India. *21*(1), 171.

Mariyam, M. (2022). bukti koresponding author_nurse perspektif.

Prasopkittikun, T., Srichantaranit, A., & Chunyasing, S. J. I. j. o. n. s. (2020). Thai nurses' perceptions and practices of family-centered care: The implementation gap. *7*(1), 74-80.

Rasolpour, P., Farshi, M. R., & Jabraeili, M. J. J. o. C. N. (2024). Mothers' Perceptions of Family-Centered Care and Satisfaction with Care in the Neonatal Intensive Care Unit: A Correlational Study. *13*(4), 137-142.

Vetcho, S. (2022). Family-Centred Care Within Thai Neonatal Intensive Care.

Vetcho, S., Phumdoun, S., Kain, V., & Chaisri, P. J. P. R. I. J. o. N. R. (2024). Challenges of Family-Centered Care in a Neonatal Intensive Care Unit during the Visitation Restrictions After COVID-19 Pandemic Peak: A Qualitative Study of Parents' and Nurses' Perspectives.

Vetcho, S., Ullman, A. J., Petsky, H., Wiroonpanich, W., & Cooke, M. J. N. i. c. c. (2023). Parent and interdisciplinary professional perceptions of family-centered care in Thai NICU: a qualitative study. *28*(1), 47-55.

Wepener, C., Olivier, E., & Gerber, B. J. H. S. G. (2026). Nurses' perceptions of family-centred care in neonatal intensive care units: Rapid qualitative evidence synthesis of studies in low-and middle-income countries. *31*, 3236.

Yalçın, N. B., & Özçalık, H. B. J. A. i. N. C. (2025). The Perception of Family-Centered Care of Mothers With a Baby in NICU, and Their Attachment, Maternal Self-Efficacy, and Stress Levels. *25*(6), 626-639.

ZAIDI, W. H., MOHYDIN, M., AHMAD, S. A., ASGHAR, M. R., HASHMI, N., UMAIR, M., & BUTT, A. N. Evaluation of patient and Family-Centered Care; a Survey of Neonatal and Paediatric Intensive Care Units at a Tertiary Care Hospital in Lahore, Pakistan.

Zanoni, P., Scime, N. V., Benzies, K., McNeil, D. A., Mrklas, K., & Open, A. F. i. L. I. N. S. T. J. B. (2021). Facilitators and barriers to implementation of Alberta family integrated care (FICare) in level II neonatal intensive care units: a qualitative process evaluation substudy of a multicentre cluster-randomised controlled trial using the consolidated framework for implementation research. *11*(10), e054938.