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Family-centered care models in pediatric nursing and their effectiveness on patients' health outcomes: A systematic review

Çocuk hemşireliğinde aile merkezli bakım modelleri ve hasta sağlık sonuçlarına etkisi: Sistematik bir inceleme

Raheleh Sabetsarvestania

^a Necmettin Erbakan University, Konya, Turkey

ABSTRACT

Purpose: In contemporary healthcare, the paradigm of family-centered care has emerged as a pivotal framework within the realm of pediatric nursing. This review aims to explore various family-centered care models in pediatric nursing to determine their effectiveness in improving patient outcomes.

Method: A comprehensive literature search was conducted in databases, including PubMed/MEDLINE, CINAHL, Cochrane Library, Scopus, and Web of Science. The search strategy utilized a combination of keywords related to "family-centered care," "pediatric nursing," and "effectiveness." The inclusion criteria were studies published in English, on family-centered care models in pediatric nursing, randomized controlled trials (RCTs), quasi-experimental studies, observational studies, and systematic reviews/meta-analyses, studies reporting outcomes related to patient and family satisfaction, clinical outcomes, and quality of care. The exclusion criteria were studies not related to family-centered care in pediatric nursing, non-English language publications without available translations, case reports, editorials, letters, and opinion pieces, studies lacking clear methodology or reporting. A narrative synthesis conducted to summarize findings from included studies.

Results: In this study 25 articles were reviewed. The synthesis of findings from the systematic review underscores the positive impact of family-centered care models in pediatric nursing. The evidence consistently suggests that the implementation of such models contributes to improved patient outcomes (quality of life, pain reduction), heightened family engagement, and an overall enhancement of the quality of care. The diversity in family-centered care models, as identified in the selected studies, highlights the adaptability of these frameworks to various healthcare settings and patient populations.

Conclusion: This systematic review introduced five models that can be used in family-centered care in pediatric settings, emphasizing the importance of family involvement in care decisions. As healthcare institutions continue to strive for patient-centered and family-oriented care, the findings of this review provide a foundation for further research, policy development, and the continuous improvement of pediatric healthcare delivery.

Keywords: Family-centered care; effectiveness; models; pediatric nursing

ÖZET

Amaç: Çağdaş sağlık hizmetlerinde aile merkezli bakım paradigması, pediatri hemşireliği alanında önemli bir çerçeve olarak ortaya çıkmıştır. Bu derleme, pediatri hemşireliğinde çeşitli aile merkezli bakım modellerini araştırmayı ve bunların hasta sonuçlarını iyileştirmedeki etkinliğini belirlemeyi amaclamaktadır.

Yöntem: PubMed/MEDLINE, CINAHL, Cochrane Library, Scopus ve Web of Science gibi veritabanlarında kapsamlı bir literatür taraması yapıldı. Arama stratejisinde "aile merkezli bakım", "pediatri hemşireliği" ve "etkinlik" ile ilgili anahtar kelimelerin bir kombinasyonu kullanıldı. Dahil edilme kriterleri, pediatri hemşireliğinde aile merkezli bakım modelleri hakkında İngilizce yayınlanmış çalışmalar, randomize kontrollü çalışmalar (RKÇ'ler), yarı deneysel çalışmalar, gözlemsel çalışmalar ve sistematik incelemeler/meta-analizler, hasta ve aileyle ilgili sonuçları bildiren çalışmalardır. Memnuniyet, klinik sonuçlar ve bakım kalitesi. Dışlama kriterleri, pediatri hemşireliğinde aile merkezli bakımla ilgili olmayan çalışmalar, çevirileri olmayan İngilizce dışındaki yayınlar, vaka raporları, başyazılar, mektuplar ve görüş yazıları, açık metodolojisi veya raporlaması olmayan çalışmalardı. Dahil edilen çalışmalardan elde edilen bulguları özetlemek için yürütülen bir anlatı sentezi.

Bulgular: Bu çalışmada 25 makale incelenmiştir. Sistematik incelemeden elde edilen bulguların sentezi, aile merkezli bakım modellerinin pediatri hemşireliğinde olumlu etkisinin altını çizmektedir. Kanıtlar, bu tür modellerin uygulanmasının hasta sonuçlarının iyileştirilmesine (yaşam kalitesi, ağrının azaltılması), aile katılımının arttırılmasına ve bakım kalitesinin genel olarak iyileştirilmesine katkıda bulunduğunu tutarlı bir şekilde göstermektedir. Seçilen çalışmalarda belirlendiği gibi aile merkezli bakım modellerindeki çeşitlilik, bu çerçevelerin çeşitli sağlık hizmetleri ortamlarına ve hasta popülasyonlarına uyarlanabilirliğini vurgulamaktadır.

Sonuç: Bu sistematik derleme, bakım kararlarında ailenin katılımının önemini vurgulayarak pediatri hemşireliğinin gelişen ortamına değerli bilgiler katmaktadır. Sağlık kurumları hasta merkezli ve aile odaklı bakım için çabalamaya devam ederken, bu incelemenin bulguları daha fazla araştırma, politika geliştirme ve pediatrik sağlık hizmeti sunumunun sürekli iyileştirilmesi için bir temel oluşturmaktadır.

Anahtar Kelimeler: Aile merkezli bakım; etkililik; modeller; pediatri hemşireliği

* Corresponding author.

E-mail address: Rahelehsabet88@gmail.com (R.S)

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Introduction

In contemporary healthcare, the paradigm of family-centered care has emerged as a pivotal framework, particularly within the realm of pediatric nursing (Ramezani, Shirazi, Sarvestani & Moattari, 2014; Seniwati, Rustina, Nurhaeni & Wanda, 2023). The acknowledgment that a child's well-being is intricately linked to the dynamics and support provided by their family has reshaped the landscape of healthcare delivery (Schor, 2003). Family-centered care represents more than just a model; it embodies a philosophy that places families at the core of decision-making, collaboration, and care planning (Arabiat, Whitehead, Foster, Shields & Harris, 2018).

Family-centered care in pediatric departments is characterized by a collaborative partnership between healthcare providers and families, fostering shared decision-making and open communication. This model respects the diversity of family structures, cultures, and values, tailoring care plans accordingly. Emphasizing comprehensive and coordinated care, it addresses the physical, emotional, and social needs of both the child and the family, promoting continuity across different healthcare settings. Furthermore, familycentered care encourages the active participation of family members in the care process, allowing them to be present during medical discussions and decision-making, empowering them to play a vital role in advocating for the well-being of their child within the healthcare system (Abukari & Schmollgruber, 2023; Seniwati et al., 2023). As pediatric nursing strives to evolve in response to the changing needs of young patients and their families, an exploration of the diverse family-centered care models becomes imperative (Hockenberry, Wilson & Rodgers, 2021). The multifaceted nature of pediatric healthcare requires a nuanced understanding of the dynamics between healthcare providers, pediatric patients, and their families (Nicholson et al., 2020). This review seeks to synthesize current evidence on family-centered care models, identifying key principles and characteristics that distinguish them. By doing so, we aspire to foster a deeper understanding of the role family-centered care plays in shaping the landscape of pediatric nursing, with the overarching goal of enhancing the well-being of pediatric patients and their families.

Method

Aim

The primary objective of this systematic review is to explore various family-centered care models in pediatric nursing to determine their effectiveness in improving patient outcomes and enhancing family engagement.

Ouestions

The review will address the following research questions:

- 1. What are the key family-centered care models implemented in pediatric nursing?
- 2. How do these models differ in their principles and characteristics?
- 3. What evidence exists regarding the effectiveness of these models in pediatric care?

Search Strategy

This review was done in 2023. In doing this study, we pay attention to the PRISMA guideline. A comprehensive literature search was conducted in major databases, including PubMed/MEDLINE, CINAHL, Cochrane Library, Scopus, and Web of Science. The search strategy will utilize a combination of controlled vocabulary terms (e.g., MeSH terms) and keywords related to "family-centered care," "pediatric nursing," and "effectiveness."

Inclusion and Exclusion Criteria

Inclusion criteria: Studies published in English, studies focusing on family-centered care models in pediatric nursing, randomized controlled trials (RCTs), quasi-experimental studies, observational studies, and systematic reviews/meta-analyses, studies reporting outcomes related to patient and family satisfaction, clinical outcomes, and quality of care.

Exclusion criteria: Studies not related to family-centered care in pediatric nursing, non-English language publications without available translations, case reports, editorials, letters, and opinion pieces, studies lacking clear methodology or reporting. We considered no time limit.

Data- synthesis: A narrative synthesis conducted to summarize findings from included studies.

Results

After searching the databases, 745 articles were found. After removing the duplicate and extracting the unrelated articles (due to methodological issues and population), 25 articles were reviewed (both quantitative and qualitative). Family-centered care is a philosophy and approach to healthcare rather than a single, rigidly defined model. Family-centered care is an approach to healthcare that involves patients and their families in decision-making and care processes. Key elements include collaborative decision-making, open communication, respect for diversity and cultural competence, emotional and psychological support, continuity of care, inclusion of family in care activities, education and information sharing, respect for privacy and confidentiality, and flexible, individualized care plans. This approach recognizes the importance of addressing not only the medical needs of the patient but also the emotional and social aspects affecting the entire family (Ramezani et al., 2014).

Different healthcare settings and institutions may adopt various frameworks or models to implement family-centered care based on their unique needs and patient populations. Table 1 showed a few recognized models and frameworks that align with the principles of family-centered care that are summarized in the following section.

- 1- The Partnering with Families Model: This model emphasizes collaboration and partnership between healthcare providers and families. It acknowledges the expertise of families in the care of their children and promotes shared decision-making (McDonald, Prichard & O'Byrne, 2015). Key Principles: Collaboration, partnership, shared decision-making, acknowledging family expertise. Effectiveness: Studies suggest that involving families as partners in care decision-making can lead to improved patient and family satisfaction, better adherence to treatment plans, and enhanced communication between healthcare providers and families (Day, 2013; Ford, Ruge, Capple, O'hren & Roth, 2012).
- 2- The Maternal-Child Health Bureau's Family-Centered Care Model: Developed by the Maternal-Child Health Bureau, this model focuses on the integration of family-centered care principles in maternal and child health services. It emphasizes family involvement, cultural competence, and community engagement (Goode & Jones, 2006). Key Principles: Family involvement, cultural competence, community engagement. Effectiveness: The emphasis on cultural competence has been shown to improve the delivery of culturally sensitive care, leading to increased satisfaction among diverse patient populations (Care & Care, 2012).
- **3- The Institute for Patient- and Family-Centered Care (IPFCC) Model**: The IPFCC is a non-profit organization that promotes the principles of patient- and family-centered care. While not a specific model, the IPFCC provides valuable resources and guidance for healthcare institutions aiming to implement family-centered care (Grant & Johnson, 2019). **Key Principles**: Patient and family

engagement, collaboration, respect, and dignity. **Effectiveness**: Organizations that adopt IPFCC principles often report improvements in patient and family satisfaction, as well as enhanced communication and collaboration among healthcare teams (Hsu et al., 2019).

- 4- The Calgary Family-Centered Care Model: Developed at the Alberta Children's Hospital in Canada, this model emphasizes family involvement in care planning and decision-making. It includes principles such as dignity and respect, information sharing, participation, and collaboration (Leahey & Wright, 2016). Key Principles: Family involvement in care planning and decision-making, dignity and respect, information sharing, collaboration. Effectiveness: Implementation of this model has been associated with positive outcomes such as improved family satisfaction, increased involvement in care, and enhanced communication among healthcare providers, patients, and families (Mileski, McClay, Heinemann & Dray, 2022).
- 5- The American Academy of Pediatrics (AAP) Family-Centered Care Guidelines: The AAP provides guidelines and recommendations for family-centered care in pediatric practice. These guidelines emphasize family involvement in care decisions, effective communication, and collaboration between healthcare providers and families (Donney, Ghandour, Kogan & Lewin, 2022). Key Principles: Family involvement in care decisions, effective communication, collaboration. Effectiveness: Implementation of AAP guidelines has been associated with improved pediatric care quality, increased family satisfaction, and better outcomes for pediatric patients (Knighton & Bass, 2021).

Table 1. Models and frameworks that align with the principles of family-centered care

Models	Definition	Key Principles	Effectiveness
The Partnering with	This model emphasizes	Collaboration,	Improved patient and family
Families Model	collaboration and	partnership, shared	satisfaction, better adherence to
	partnership between	decision-making,	treatment plans, and enhanced
	healthcare providers and	acknowledging family	communication between healthcare
	families.	expertise.	providers and families.
The Maternal-Child	This model focuses on the	Family involvement,	Improve the delivery of culturally
Health Bureau's	integration of family-	cultural competence,	sensitive care, leading to increased
Family-Centered Care	centered care principles in	community engagement.	satisfaction among diverse patient
Model	maternal and child.		populations.
The Institute for	This model promotes the	Patient and family	Improvements in patient and family
Patient- and Family-	principles of patient- and	engagement,	satisfaction, as well as enhanced
Centered Care	family-centered care.	collaboration, respect,	communication and collaboration
(IPFCC) Model		and dignity.	among healthcare teams.
The Calgary Family-	This model emphasizes	Family involvement in	Improved family satisfaction, increased
Centered Care Model	family involvement in care	care planning and	involvement in care, and enhanced
	planning and decision-	decision-making, dignity	communication among healthcare
	making.	and respect, information	providers, patients, and families
		sharing, collaboration.	
The American	This model emphasizes	Family involvement in	Improved pediatric care quality,
Academy of Pediatrics	family involvement in care	care decisions, effective	increased family satisfaction, and better
(AAP) Family-Centered	decisions, effective	communication,	outcomes for pediatric patients.
Care Guidelines	communication, and	collaboration.	
	collaboration between		
	healthcare providers and		
	families.		

Discussion

The synthesis of findings from the systematic review underscores the positive impact of family-centered care models in pediatric nursing. The evidence consistently suggests that the implementation of such models contributes to improved patient outcomes, heightened family engagement, and an overall enhancement of the quality of care (Bombard et al., 2018). The diversity in family-centered care models, as identified in the selected studies, highlights the adaptability of these frameworks to various healthcare settings and patient populations.

The observed improvements in patient outcomes align with the core tenets of family-centered care, emphasizing the holistic well-being of pediatric patients. Enhanced satisfaction, reduced stress levels, and improved adherence to treatment plans collectively demonstrate the positive impact of involving families in the care process (King, Teplicky, King & Rosenbaum, 2004). The consistent theme of increased family engagement speaks to the success of family-centered care models in fostering collaboration and partnership. The active involvement of families in care decisions and improved communication with healthcare providers contribute to a more patient-centered and personalized approach to pediatric nursing (Gafni-Lachter, 2015). The positive influence on the overall quality of pediatric nursing care is a significant finding (Done, Oh, Im, & Park, 2020). Family-centered care not only improves care coordination and continuity but also contributes to the creation of supportive healthcare environments. This, in turn, has implications for long-term health outcomes and the overall experience of pediatric patients and their families (Vetcho, Cooke & Ullman, 2020).

Despite the overall positive trends, variations in the implementation of family-centered care models were noted across studies. Challenges such as cultural considerations, resource limitations, and the need for ongoing staff training emerged as influential factors. Recognizing these variations is crucial for healthcare institutions aiming to implement family-centered care, as it highlights the importance of tailoring approaches to suit the unique needs of diverse patient populations (Mirlashari et al., 2020).

Conclusion

In conclusion, the evidence synthesized in this systematic review strongly supports the effectiveness of family-centered care models in pediatric nursing. The positive impact on patient outcomes, family engagement, and the quality of care is evident across diverse healthcare settings. However, it is essential to acknowledge the variations in implementation and the challenges faced by healthcare providers. These nuances underscore the need for targeted strategies and ongoing support to optimize the integration of family-centered care into pediatric nursing practices. This systematic review contributes valuable insights to the evolving landscape of pediatric nursing, emphasizing the importance of family involvement in care decisions. As healthcare institutions continue to strive for patient-centered and family-oriented care, the findings of this review provide a foundation for further research, policy development, and the continuous improvement of pediatric healthcare delivery.

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