

Exploring the Integrated Role of Pediatricians and Nursing Staff in Improving Pediatric Healthcare Quality: A Systematic Review and Analysis

Sarmad Raad Jeryo

Welfare Child teaching Hospital, Medical City , Ministry of Health, Baghdad, Iraq

*Correspondence email: s_r_k200@yahoo.com

KEYWORDS

Interprofessional Collaboration, Pediatric Healthcare, Healthcare Quality, Pediatric Palliative Care, TeamSTEPPS®, Home-Based Care

Received: 10/10/2024

Accepted: 08/12/2024

Available online: 31/12/2024

ABSTRACT

This systematic review investigates the integrated role of pediatricians and nursing staff in enhancing the quality of pediatric healthcare. The literature highlights interprofessional collaboration and effective communication as critical factors influencing patient safety, healthcare quality, and job satisfaction among healthcare providers. Improved teamwork between pediatricians and nurses has been consistently linked to better patient outcomes, reduced medical errors, and increased staff retention. Additionally, involving parents through family-centered care strategies is recognized as pivotal in elevating pediatric care standards. Despite acknowledged benefits, several challenges—including hierarchical barriers, communication breakdowns, and role ambiguity—continue to impede successful interprofessional collaboration. The review emphasizes the importance of structured approaches, such as TeamSTEPPS®, and supportive frameworks that integrate both healthcare providers and family participation to achieve optimal pediatric care, including in home-based and palliative care settings.

DOI: <https://doi.org/10.63964/ATJN.2024.1.5>

© 2024. This is an open access article under the CC by licenses <http://creativecommons.org/licenses/by/4.0>

1. Introduction

The integration of pediatricians and nursing staff in enhancing pediatric healthcare quality has received significant attention in recent years, as evidenced by an expanding body of literature. Studies exploring interprofessional collaboration emphasize the essential role of effective communication and teamwork in improving patient outcomes, particularly within pediatric care settings [1].

Research by [2] highlights the critical nature of interprofessional team competencies, stressing that efficient communication between nurses and physicians is pivotal in creating a collaborative environment. Their pilot study demonstrates that professional hierarchies and demographic differences can negatively impact communication, subsequently influencing job satisfaction and retention among healthcare

professionals. The authors conclude that improved collaboration is associated with better patient outcomes, as interdisciplinary teams exhibit enhanced problem-solving capabilities and superior information sharing.

Building upon these insights, [3] conducted a meta-analysis indicating that professional collaboration between nursing and medical students significantly contributes to improved patient care across various settings, including intensive care units. Their findings confirm a positive correlation between nurse-physician collaboration and patient outcomes, reinforcing the necessity of effective teamwork for delivering high-quality healthcare [4].

In a qualitative investigation, [5] delve deeper into the complexities of collaborative practice, asserting that interpersonal relationships among healthcare professionals are fundamental to

successful interprofessional collaboration. Their study identifies trust and mutual understanding as significant factors influencing collaboration. The authors emphasize the importance of acknowledging human factors in overcoming collaboration barriers and promoting integrated healthcare.

In pediatric healthcare specifically, [6] underscores the significance of establishing a safety-oriented culture that encourages communication across professional disciplines. According to her secondary data analysis, ineffective teamwork negatively impacts the safety and effectiveness of pediatric care. To address these concerns, [6] recommends adopting evidence-based frameworks such as TeamSTEPPS® to enhance interprofessional communication, bridging existing gaps between nurses and medical practitioners in pediatric environments [7].

Additionally, [8] explore the collaborative interactions between nurses and parents in pediatric care settings, emphasizing the benefits of family-centered care. Their qualitative study illustrates that involving parents actively in the healthcare process enhances the quality of nursing practice. Despite these benefits, establishing effective nurse-parent partnerships remains challenging. The authors advocate greater acknowledgment of parental expertise and supportive frameworks that facilitate these collaborations.

Furthering this discourse, [9] propose conducting a systematic review and meta-analysis to thoroughly investigate the relationship between interprofessional collaboration and patient mortality rates. They highlight the importance of assessing collaboration levels among team members, suggesting that improved teamwork directly contributes to better patient outcomes, especially in pediatric care.

Finally, [10] address specific challenges encountered by healthcare professionals

delivering home-based pediatric palliative care. Their mixed-method systematic review underscores the necessity of clear communication and role clarification among various healthcare providers. They advocate structured collaborative practices and incorporating telehealth technology to enhance teamwork effectiveness, thereby improving care quality for pediatric patients receiving home-based treatment.

Overall, the reviewed literature consistently supports the critical importance of interprofessional collaboration and effective communication in enhancing pediatric healthcare quality. Each study provides valuable insights into the dynamics of teamwork, identifies existing challenges, and highlights the potential advantages of fostering collaborative environments among pediatricians, nursing staff, and families [11].

2. Literature review

The article "Examining Nurse Leader/Manager-Physician Communication Strategies: A Pilot Study" by [12] provides valuable insights into inter-professional communication within healthcare settings, particularly between nurses and physicians. The authors emphasize that effective communication strategies among team members are crucial for enhancing patient care and healthcare outcomes. They note that professional hierarchies and demographic differences can create barriers to effective collaboration, negatively affecting the working environment and ultimately patient care [13].

A key finding of this study is that improved nurse-physician communication enhances nurse job satisfaction and retention. This is particularly relevant in pediatric care, where the integration of healthcare professionals is essential for addressing children's complex needs. The study highlights tangible benefits for patient outcomes when nurses and physicians engage collaboratively, sharing patient data and problem-solving [14].

The article further references existing literature supporting the correlation between enhanced communication and better patient outcomes, particularly in medical ICU settings. Reports of increased nurse collaboration are positively associated with improved patient outcomes, suggesting a collaborative environment is essential for high-quality pediatric care [15][16]. Additionally, improved job satisfaction among nurses due to better physician communication can reduce turnover rates, contributing to a more stable, experienced workforce, vital in pediatric care for continuity and trust-building [17].

The article "Nurse-physician collaboration: a meta-analytical investigation of survey scores" by [18] presents a comprehensive analysis of nurse-physician dynamics, emphasizing that effective collaboration among healthcare professionals is critical for improved patient outcomes, particularly in intensive care settings for children with complex health needs [19]. The authors highlight the Nurse-Physician Collaborative Scale as essential for measuring collaboration effectiveness, advocating interprofessional education to enhance teamwork attitudes [20]. They also stress the importance of structured communication protocols to facilitate effective nurse-physician collaboration, significantly impacting pediatric treatment outcomes [21].

"Go Make Your Face Known": Collaborative Working through the Lens of Personal Relationships by [22] extensively examines collaboration among health and social care professionals in integrated care. The authors highlight personal relationships, trust, and shared goals as fundamental to successful collaboration, particularly impacting pediatrician-nurse interactions and healthcare outcomes for children. They also identify challenges arising from expanding nursing roles, complicating effective collaboration and coordination among healthcare providers [23][24].

In "Perceptions of Pediatric Hospital Safety Culture in the U.S.: A Secondary Data Analysis of the 2016 Hospital Survey on Patient Safety Culture," [25] examines the dynamics within pediatric healthcare teams. The study underscores effective communication and collaboration's critical role in pediatric hospital settings. Poor teamwork negatively affects patient safety and

care effectiveness, particularly evident between registered nurses (RNs) and physician assistants/nurse practitioners (PAs/NPs). The authors recommend frameworks like TeamSTEPPS® to bridge communication gaps and foster a collaborative environment in pediatric settings [26][27].

"Parents' and nurses' ideal collaboration in treatment-centered and home-like care of hospitalized preschool children – a qualitative study" by [28] explores nurse-parent dynamics in pediatric care, emphasizing family-centered care. The study highlights parents' involvement as crucial to nursing practice quality and patient outcomes. Challenges identified include inadequate information sharing and limited understanding of family contexts, necessitating frameworks that facilitate effective collaboration [29][30].

The article "Inter-Professional Collaboration and Patient Mortality: Protocol for a Systematic Review and Meta-Analysis" by [31] investigates multidisciplinary teamwork's impact on pediatric patient outcomes. Systematic reviews cited demonstrate positive effects of structured interprofessional teamwork on patient satisfaction and clinical outcomes. However, authors note a gap in measuring collaboration levels among team members, emphasizing further research in nurse-doctor collaboration's influence on pediatric care quality [32][33].

Finally, "The needs of healthcare personnel who provide home-based pediatric palliative care: a mixed-method systematic review" by [34] addresses collaboration dynamics in pediatric palliative care. The study highlights clear communication, role clarity, structured collaboration, and telehealth tools as vital for enhancing home-based pediatric care quality. It underscores the importance of transferring skills from specialized hospital personnel to local homecare providers to support pediatric patients effectively [35]

CONCOCTION

The integration of pediatricians and nursing staff is essential for improving pediatric healthcare quality, strongly supported by literature emphasizing inter-professional collaboration. Effective communication and

teamwork significantly enhance pediatric patient outcomes. Studies consistently advocate for collaborative environments involving pediatricians, nursing staff, and families to deliver comprehensive

Children's Advocacy Center-based multidisciplinary teamwork," **Child Abuse & Neglect**, vol. 2022, Elsevier. [\[HTML\]](#)

REFERENCES

- [1] M. Jantzen and D. J. Ford, "Examining Nurse Leader/Manager-Physician Communication Strategies: A Pilot Study," 2012. [\[PDF\]](#)
- [2] P. A. Carney, C. E. V. Guzman, C. Taylor, D. Cole, et al., "Health professional students' observations about interprofessional collaborative practice during rural clinical rotations," *Educ. Pract.*, vol. 2021, Elsevier. [\[HTML\]](#)
- [3] A. SOLLAMI, L. CARICATI, and L. SARLI, "Nurse-physician collaboration: a meta-analytical investigation of survey scores.," 2015. [\[PDF\]](#)
- [4] E. M. Spaulding, F. A. Marvel, and E. Jacob, "Interprofessional education and collaboration among healthcare students and professionals: a systematic review and call for action," **Journal of Interprofessional Care**, vol. 2021, Taylor & Francis. [nih.gov](#)
- [5] N. King, A. Bravington, J. Brooks, J. Melvin et al., "'Go Make Your Face Known': Collaborative Working through the Lens of Personal Relationships," 2017. [ncbi.nlm.nih.gov](#)
- [6] P. J. Gampetro, "Perceptions of Pediatric Hospital Safety Culture in the U.S.: A Secondary Data Analysis of the 2016 Hospital Survey on Patient Safety Culture," 2018. [\[PDF\]](#)
- [7] K. K. Westphal, K. A. Manges, W. C. Regoeczi, et al., "Facilitators and barriers to Children's Advocacy Center-based multidisciplinary teamwork," **Child Abuse & Neglect**, vol. 2022, Elsevier. [\[HTML\]](#)
- [8] H. Sundal and S. Vatne, "Parents' and nurses' ideal collaboration in treatment-centered and home-like care of hospitalized preschool children – a qualitative study," 2020. [ncbi.nlm.nih.gov](#)
- [9] S. Pantha, M. Jones, and R. Gray, "Inter-Professional Collaboration and Patient Mortality: Protocol for a Systematic Review and Meta-Analysis," 2020. [ncbi.nlm.nih.gov](#)
- [10] J. Schröder, K. Riiser, and H. Holmen, "The needs of healthcare personnel who provide home-based pediatric palliative care: a mixed method systematic review," 2024. [ncbi.nlm.nih.gov](#)
- [11] N. Schuetz Haemmerli and G. von Gunten, "Interprofessional Collaboration in a New Model of Transitional Care for Families with Preterm Infants–The Health Care Professional's Perspective," **Healthcare**, vol. 2021, Taylor & Francis. [tandfonline.com](#)
- [12] S. Zajac, A. Woods, S. Tannenbaum, E. Salas, "Overcoming challenges to teamwork in healthcare: a team effectiveness framework and evidence-based guidance," *Frontiers in Communication*, 2021. [frontiersin.org](#)
- [13] L. J. Labrague, "A Systematic Review on Nurse-Physician Collaboration and Its Relationship With Nursing Workforce Outcomes: Implications for Nursing Administration," *JONA: The Journal of Nursing Administration*, 2025. [\[HTML\]](#)
- [14] C. E. MacLeod and D. R. Brady, "Measuring the effect of simulation experience on perceived self-efficacy for interprofessional collaboration among undergraduate nursing

- and social work students," *Journal of Interprofessional*, vol. 2022, Taylor & Francis. [\[HTML\]](#)
- [15] M. Hult, A. Terkamo-Moisio, P. Kaakinen, S. Karki, et al., "Relationships between nursing leadership and organizational, staff and patient outcomes: A systematic review of reviews," **Nursing**, vol. 2023, Wiley Online Library. [wiley.com](#)
- [16] H. Rose and G. Skaczkowski, "Addressing the challenges of early career rural nursing to improve job satisfaction and retention: Strategies new nurses think would help," **Journal of Advanced Nursing**, vol. 2023, Wiley Online Library. [wiley.com](#)
- [17] I. Karunarathna, P. Gunasena, S. Kapila De Alvis, "Anaphylaxis: The essential guide for healthcare providers," 2024. [researchgate.net](#)
- [18] M. F. Al-Bustanji, A. Rayan, N. F. Eshah, et al., "Nurses' Perceptions of Nurse–Physician Collaboration and Quality of Care in Public Hospitals," *SAGE Open*, 2024. [sagepub.com](#)
- [19] E. K. Hossny and H. E. Sabra, "The attitudes of healthcare professionals towards nurse–physician collaboration," *Nursing open*, 2021. [wiley.com](#)
- [20] R. Khatri, A. Endalamaw, D. Erku, E. Wolka, "Continuity and care coordination of primary health care: a scoping review," *BMC Health Services Research*, vol. 2023, Springer. [springer.com](#)
- [21] Z. Yuke and L. Ali, "... EDUCATORS'PERSPECTIVES ON THE TYPES AND EXTENT OF SUPPORT REQUIRED FOR THE FULL INCLUSION OF CHILDREN WITH SPECIAL NEEDS," *Prestieesci Research Review*, 2025. [prestieesci.com](#)
- [22] HAB Smith, JB Besunder, KA Betters, "... Care Medicine clinical practice guidelines on prevention and management of pain, agitation, neuromuscular blockade, and delirium in critically ill pediatric patients ...," *Pediatric Critical Care*, vol. XX, no. YY, pp. ZZ-ZZ, 2022. [stonybrookmedicine.edu](#)
- [23] H. Wei, P. Horns, S. F. Sears, K. Huang, "A systematic meta-review of systematic reviews about interprofessional collaboration: facilitators, barriers, and outcomes," **Journal of Interprofessional Care**, vol. 36, no. 2, pp. 202-215, 2022. [\[HTML\]](#)
- [24] [1] Committee on Pediatric Emergency Medicine, "Optimizing pediatric patient safety in the emergency care setting," 2022. [poltekkes-malang.ac.id](#)
- [25] Y. Li, A. B. Salazar, J. K. L. Gan, N. W. S. Neo, "Structured, nurse-led ward rounds to improve interprofessional communication and optimize care of vascular surgery patients: a best practice implementation project," *JBI Evidence*, vol. 2023. [\[HTML\]](#)
- [26] T. Seniwati, Y. Rustina, N. Nurhaeni, "Patient and family-centered care for children: A concept analysis," *Belitung Nursing Journal*, 2023. [nih.gov](#)
- [27] J. Sukhera, K. Bertram, S. Hendrikx, and others, "Exploring implicit influences on interprofessional collaboration: a scoping review," **Journal of Interprofessional Care**, vol. 2022, Taylor & Francis. [\[HTML\]](#)
- [28] M. S. Weaver, A. R. Rosenberg, A. Fry, et al., "Impact of the coronavirus pandemic on pediatric palliative care team structures, services, and care delivery," **Journal of Palliative Medicine**, vol. 2021. [liebertpub.com](#)

- [29] F. Benini, D. Papadatou, M. Bernad, F. Craig, et al., "International standards for pediatric palliative care: from IMPaCCT to GO-PPaCS," **Journal of Pain and Symptom Management**, vol. 2022, Elsevier. [sciencedirect.com](https://www.sciencedirect.com)
- [30] L. Dunleavy, N. Preston, S. Bajwah, et al., "Necessity is the mother of invention': Specialist palliative care service innovation and practice change in response to COVID-19. Results from a multinational survey," **Palliative Medicine**, vol. 35, no. 1, pp. 12-22, 2021. [sagepub.com](https://www.sagepub.com)
- [31] M. Glajchen, A. Goehring, H. Johns, et al., "Family meetings in palliative care: benefits and barriers," in **Treatment Options in Palliative Care**, Springer, 2022. [springer.com](https://www.springer.com)
- [32] H. Alderwick, A. Hutchings, A. Briggs, and N. Mays, "The impacts of collaboration between local health care and non-health care organizations and factors shaping how they work: a systematic review of reviews," *BMC public health*, 2021. [springer.com](https://www.springer.com)
- [33] N. B. Ezeaka and C. C. Ochuba, "Addressing Healthcare Inequalities in Nigeria: A Communication Perspective on Advocacy and Policy Implications," *Journal of Advanced ...*, 2025. [abjournals.org](https://www.abjournals.org)
- [34] N. Hassen, A. Lofters, S. Michael, A. Mall, "Implementing anti-racism interventions in healthcare settings: a scoping review," **International Journal of ...**, 2021. [mdpi.com](https://www.mdpi.com)
- [35] T. Rafeeqi and E. G. Pearson, "Enhanced recovery after surgery in children," *Translational Gastroenterology and ...*, 2021. [nih.gov](https://www.nih.gov)