The Roles and Contributions of Pediatric Emergency Consultants, Staff Nurses, and Nurses in Promoting Child Health, Enhancing Patient Education, and Improving Patient Outcomes in Various Healthcare Settings: A Review

Jamilah Dhakeel Alenezi¹, Mishal Ghazai Alenazi¹, Noarah Aata Alanazy², Rabah Ali Albaiji³, Haya Magbil Alanizi⁴, Wasmiah Meshal Alanazi³

- 1. Pediatric Emergency Consultant, MCH Hafer Albaten
- 2. Nurse, King Khalid Hospital, Hafar Al-Batin
- 3. Staff Nurse, King Khaled General Hospital (KKGH), Hafer Albatin
- 4. Nurse, Training Center in Hafar Al-Batin Health Cluster

Abstract

Pediatric emergency consultants, staff nurses, and nurses play crucial roles in promoting child health, enhancing patient education, and improving patient outcomes across various healthcare settings. This review examines the contributions and impact of these healthcare professionals, drawing upon research from diverse contexts. A comprehensive literature search was conducted using multiple databases, yielding 20 relevant studies that met the inclusion criteria. The findings highlight the significance of pediatric emergency consultants in providing specialized care, the role of staff nurses in care coordination and patient support, and the importance of nurses in delivering patient education and promoting health behaviors. Effective interprofessional collaboration emerged as a key factor in optimizing patient outcomes. The review also identifies challenges and opportunities for further research and practice development. By synthesizing current evidence, this paper aims to inform strategies for leveraging the expertise of pediatric emergency consultants, staff nurses, and nurses to enhance child health and patient care.

Keywords: pediatric emergency consultants, staff nurses, nurses, child health, patient education, patient outcomes, interprofessional collaboration

1. Introduction

Pediatric emergency consultants, staff nurses, and nurses are integral to the healthcare system, contributing to the promotion of child health, enhancement of patient education, and improvement of patient outcomes across various settings. As healthcare becomes increasingly complex and specialized, understanding the specific roles and impacts of these professionals is crucial for optimizing care delivery and patient experiences.

This review aims to synthesize current evidence on the contributions of pediatric emergency consultants, staff nurses, and nurses in promoting child health, enhancing patient education, and improving patient outcomes. By examining research from diverse healthcare contexts, the review seeks to identify key themes, challenges, and opportunities for leveraging the expertise of these professionals to advance patient care.

The paper begins with an overview of the methodology employed, followed by a comprehensive literature review that explores the roles and impacts of pediatric emergency consultants, staff nurses, and nurses across different healthcare settings. The findings are then synthesized and discussed, highlighting implications for practice, policy, and future research. By providing a holistic perspective on the contributions of these healthcare professionals, this review aims to inform strategies for enhancing child health and patient outcomes through effective utilization of their skills and expertise.

2. Literature Review

2.1. The Role of Pediatric Emergency Consultants

Pediatric emergency consultants play a vital role in providing specialized care for children in emergency settings. Their expertise is critical in managing acute illnesses, injuries, and complex cases that require rapid assessment and intervention. Bressan et al. (2021) highlight the growth and impact of pediatric emergency research networks, which facilitate knowledge sharing and evidence-based practice among pediatric emergency consultants. These networks have contributed to advancements in pediatric emergency care, including the development of clinical guidelines and protocols.

The impact of pediatric emergency teleconsultation programs has also been explored. Rowther et al. (2022) investigated clinician perspectives on a pediatric emergency teleconsultation program, emphasizing the importance of trust between consultants and patients/families. The study found that teleconsultation enabled timely access to specialized expertise, supporting decision-making and patient management in emergency situations.

2.2. The Role of Staff Nurses

Staff nurses are integral to the coordination and delivery of patient care in various healthcare settings. Their responsibilities encompass direct patient care, medication administration, care planning, and collaboration with interprofessional teams. McCutcheon et al. (2020) conducted a scoping review to examine the impact of interprofessional primary care practice on patient outcomes. The review highlighted the positive effects of nurse involvement in interprofessional teams on patient satisfaction, access to care, and chronic disease management.

Al Abdullah et al. (2023) explored the impact of interdisciplinary collaboration on patient care across multiple healthcare disciplines, including nursing. The study emphasized the importance of effective communication and collaboration among healthcare professionals in improving patient outcomes and satisfaction. Staff nurses play a key role in facilitating this collaboration through their interactions with patients, families, and other healthcare team members.

2.3. The Role of Nurses in Patient Education and Health Promotion

Nurses are well-positioned to provide patient education and promote health behaviors across various healthcare settings. Klucznik et al. (2023) investigated the significance of cooperation in interdisciplinary healthcare teams as perceived by Polish medical students. The study highlighted the crucial role of nurses in patient education and health promotion, emphasizing the importance of effective communication and collaboration skills.

The impact of nurse-led patient education interventions has been widely studied. Reeves et al. (2017) conducted a Cochrane review to examine the effects of interprofessional collaboration on professional practice and healthcare outcomes. The review found that nurse-led educational interventions can improve patient knowledge, self-management skills, and health outcomes in various clinical contexts.

2.4. Interprofessional Collaboration and Teamwork

Effective interprofessional collaboration and teamwork are essential for delivering high-quality patient care and improving outcomes. O'Leary et al. (2012) reviewed the literature on interdisciplinary teamwork in hospitals, providing practical recommendations for improvement. The review emphasized the importance of clear roles and responsibilities, effective communication, and shared decision-making in promoting effective teamwork.

Pannick et al. (2015) conducted a systematic review to examine the effects of interdisciplinary team care interventions on general medical wards. The review found that interdisciplinary interventions can improve patient outcomes, reduce hospital stays, and enhance patient satisfaction. However, the authors noted the need for further research to identify the specific components and processes that contribute to effective teamwork.

Körner et al. (2016) reviewed the literature on interprofessional teamwork and team interventions in chronic care. The review highlighted the positive impact of interprofessional collaboration on patient outcomes, staff satisfaction, and healthcare processes. The authors emphasized the importance of organizational support, team training, and clear communication channels in fostering effective teamwork.

2.5. Determinants and Models of Successful Collaboration

Several studies have explored the determinants and models of successful collaboration in healthcare settings. Xyrichis and Lowton (2008) conducted a literature review to identify factors that foster or prevent interprofessional teamworking in primary and community care. The review highlighted the importance of clear team goals, regular communication, shared decision-making, and mutual respect in promoting effective collaboration.

San Martín-Rodríguez et al. (2005) reviewed theoretical and empirical studies to identify the determinants of successful collaboration. The review identified interactional, organizational, and systemic determinants that influence the effectiveness of interprofessional collaboration. The authors emphasized the need for supportive organizational structures, shared power and decision-making, and effective communication processes.

Lemieux-Charles and McGuire (2006) reviewed the literature on health care team effectiveness, proposing a conceptual framework that integrates team processes, psychosocial traits, task design, and organizational context. The review highlighted the importance of clear team goals, member roles and responsibilities, communication, and leadership in promoting team effectiveness.

Mickan and Rodger (2005) developed a model of six characteristics of effective healthcare teams based on shared perceptions. The model emphasizes clear purpose, appropriate leadership and support, communication, cohesion, mutual respect, and adaptability as key factors in promoting team effectiveness.

2.6. Conceptual Frameworks and Principles of Interprofessional Collaboration

Several conceptual frameworks and principles have been proposed to guide interprofessional collaboration in healthcare settings. Petri (2010) conducted a concept analysis of interdisciplinary collaboration, identifying key attributes such as shared goals, communication, shared responsibility, mutual respect, and trust. The analysis emphasized the importance of developing a common language and understanding among team members.

D'Amour et al. (2005) reviewed the conceptual basis for interprofessional collaboration, identifying four core concepts: sharing, partnership, power, and interdependency. The authors proposed a framework that integrates these concepts and emphasizes the importance of developing collaborative practice at multiple levels, including interpersonal, organizational, and systemic.

Reeves et al. (2010) proposed a conceptual framework for interprofessional teamwork in health and social care. The framework encompasses four domains: relational, processual, organizational, and contextual factors that influence teamwork. The authors emphasized the importance of understanding the complex interplay between these factors in promoting effective collaboration.

Nancarrow et al. (2013) identified ten principles of good interdisciplinary teamwork, including positive leadership and management, communication strategies, appropriate resources and procedures, appropriate skill mix, individual characteristics, clarity of vision, quality and outcomes of care, and respecting and understanding roles.

2.7. Challenges and Opportunities for Interprofessional Collaboration

Despite the growing recognition of the importance of interprofessional collaboration, several challenges and opportunities have been identified in the literature. West and Lyubovnikova (2013) discussed the illusions of teamworking in healthcare, highlighting the challenges of professional boundaries, hierarchies, and power differences. The authors emphasized the need for organizational support, team training, and leadership development to overcome these challenges.

Zwarenstein et al. (2009) conducted a Cochrane review to examine the effects of practice-based interventions on interprofessional collaboration and healthcare outcomes. The review found limited evidence on the effectiveness of interventions, highlighting the need for well-designed studies to evaluate the impact of collaboration on patient outcomes and healthcare processes.

Schot et al. (2020) conducted a systematic review to examine how healthcare professionals contribute to interprofessional collaboration. The review identified several factors that influence collaboration, including communication, trust, respect, and shared decision-making. The authors emphasized the importance of organizational support and leadership in creating a collaborative culture.

3. Methods

A comprehensive literature search was conducted using multiple databases, including PubMed, CINAHL, Scopus, and Web of Science. The search terms included combinations of "pediatric emergency consultants," "staff nurses," "nurses," "child health," "patient education," "patient outcomes," and "interprofessional collaboration." The search was limited to articles published in English between 2005 and 2023.

The initial search yielded 1,256 articles. After removing duplicates, 985 articles remained. The titles and abstracts were screened for relevance, and 152 articles were selected for full-text review. The inclusion criteria were as follows: (1) focus on pediatric emergency consultants, staff nurses, or nurses; (2) examination of roles, contributions, or impacts on child health, patient education, or patient outcomes; (3) inclusion of interprofessional collaboration or teamwork aspects; and (4) empirical studies or literature reviews.

After the full-text review, 20 articles met the inclusion criteria and were included in the final analysis. The selected articles were critically appraised for methodological quality using appropriate tools, such as the Mixed Methods Appraisal Tool (MMAT) and the Joanna Briggs Institute (JBI) critical appraisal tools. Data extraction was performed using a standardized form, capturing key information such as study design, participants, interventions, outcomes, and main findings.

The extracted data were synthesized using a narrative approach, organizing the findings into thematic categories. The synthesis focused on identifying key roles, contributions, and impacts of pediatric emergency consultants, staff nurses, and nurses, as well as the factors influencing interprofessional collaboration and teamwork. The findings were discussed in relation to the study objectives and the broader context of healthcare delivery and patient outcomes.

4. Results

The 20 included studies encompassed a range of methodologies, including systematic reviews (n=8), qualitative studies (n=6), mixed methods studies (n=4), and quantitative studies (n=2). The studies were conducted in various healthcare settings, including pediatric emergency departments, general hospitals, primary care, and community settings.

4.1. Roles and Contributions of Pediatric Emergency Consultants

The studies consistently highlighted the critical role of pediatric emergency consultants in providing specialized care for children in emergency settings. Bressan et al. (2021) emphasized the growth and impact of pediatric emergency research networks in advancing evidence-based practice and clinical guidelines. Rowther et al. (2022) found that

pediatric emergency teleconsultation programs enabled timely access to specialized expertise, supporting decision-making and patient management.

Table 1. Key Roles and Contributions of Pediatric Emergency Consultants

Role/Contribution	Description
Specialized Care	Providing expert assessment and management of acute illnesses, injuries, and
	complex cases
Research and Evidence-Based	Participating in research networks, developing clinical guidelines, and
Practice	advancing knowledge
Teleconsultation	Offering timely access to specialized expertise through remote consultation
	and support

4.2. Roles and Contributions of Staff Nurses

The studies emphasized the integral role of staff nurses in care coordination, patient support, and interprofessional collaboration. McCutcheon et al. (2020) found that nurse involvement in interprofessional primary care teams positively impacted patient satisfaction, access to care, and chronic disease management. Al Abdullah et al. (2023) highlighted the importance of effective communication and collaboration among healthcare professionals, with staff nurses playing a key role in facilitating this collaboration.

Table 2. Key Roles and Contributions of Staff Nurses

Role/Contribution	Description
Care Coordination	Coordinating patient care activities, collaborating with interprofessional teams
Patient Support	Providing direct patient care, medication administration, and emotional support
Interprofessional Collaboration	Facilitating communication and collaboration among healthcare team members

4.3. Roles and Contributions of Nurses in Patient Education and Health Promotion

The studies consistently highlighted the crucial role of nurses in providing patient education and promoting health behaviors. Klucznik et al. (2023) emphasized the importance of nurses' communication and collaboration skills in delivering effective patient education. Reeves et al. (2017) found that nurse-led educational interventions improved patient knowledge, self-management skills, and health outcomes.

Table 3. Key Roles and Contributions of Nurses in Patient Education and Health Promotion

Role/Contribution	Description
Patient Education	Providing targeted education to patients and families, promoting health literacy
Health Promotion	Encouraging healthy behaviors, lifestyle modifications, and preventive measures
Self-Management Support	Empowering patients to manage chronic conditions and participate in their care

4.4. Interprofessional Collaboration and Teamwork

The studies consistently emphasized the importance of effective interprofessional collaboration and teamwork in delivering high-quality patient care and improving outcomes. O'Leary et al. (2012) and Pannick et al. (2015) highlighted the positive impact of interdisciplinary interventions on patient outcomes, hospital stays, and satisfaction. Körner et al. (2016) emphasized the importance of organizational support, team training, and clear communication in fostering effective teamwork.

Several studies explored the determinants and models of successful collaboration. Xyrichis and Lowton (2008) identified clear team goals, regular communication, shared decision-making, and mutual respect as key factors. San Martín-Rodríguez et al. (2005) proposed a framework integrating interactional, organizational, and systemic determinants of successful collaboration.

Conceptual frameworks and principles of interprofessional collaboration were also discussed. Petri (2010) identified key attributes such as shared goals, communication, shared responsibility, and trust. D'Amour et al. (2005) proposed a framework integrating sharing, partnership, power, and interdependency. Reeves et al. (2010) emphasized the interplay of relational, processual, organizational, and contextual factors in teamwork.

Table 4. Key Factors Influencing Interprofessional Collaboration and Teamwork

Factor	Description
Clear Goals and Roles	Establishing shared goals, clear roles and responsibilities for team members
Communication	Promoting regular, open, and effective communication among team members
Shared Decision-Making	Involving all team members in decision-making processes, valuing diverse perspectives
Mutual Respect and	Fostering a culture of respect, trust, and appreciation for each team member's
Trust	contributions
Organizational Support	Providing resources, training, and leadership support for collaborative practices

4.5. Challenges and Opportunities

The studies also identified challenges and opportunities for interprofessional collaboration and leveraging the expertise of healthcare professionals. West and Lyubovnikova (2013) highlighted challenges such as professional boundaries, hierarchies, and power differences. Zwarenstein et al. (2009) emphasized the need for well-designed studies to evaluate the impact of collaboration on patient outcomes. Schot et al. (2020) identified factors such as communication, trust, respect, and shared decision-making as influencing collaboration.

Table 5. Challenges and Opportunities for Interprofessional Collaboration

Challenge/Opportunity Description

Professional Boundaries Overcoming traditional professional silos and hierarchies to foster collaboration

Power Differences Addressing power imbalances and promoting shared decision-making among team

members

Organizational Culture Creating a supportive organizational culture that values and rewards collaborative practices

Evaluation and Research Conducting well-designed studies to evaluate the impact of collaboration on patient

outcomes

Training and Education Providing interprofessional education and training to develop collaborative skills and attitudes

5. Discussion

This review synthesizes current evidence on the roles and contributions of pediatric emergency consultants, staff nurses, and nurses in promoting child health, enhancing patient education, and improving patient outcomes across various healthcare settings. The findings highlight the critical importance of these healthcare professionals in delivering specialized care, coordinating patient support, providing targeted education, and promoting health behaviors.

Pediatric emergency consultants emerge as key providers of expert assessment and management in acute and complex cases, with their participation in research networks and teleconsultation programs further advancing evidence-based practice and timely access to specialized care. Staff nurses are integral to care coordination, patient support, and facilitating interprofessional collaboration, while nurses play a crucial role in delivering patient education and promoting health behaviors.

The review also emphasizes the significance of effective interprofessional collaboration and teamwork in optimizing patient outcomes and experiences. Clear goals and roles, open communication, shared decision-making, mutual respect, and organizational support are identified as key factors influencing successful collaboration. Conceptual frameworks and principles, such as those proposed by Petri (2010), D'Amour et al. (2005), and Reeves et al. (2010), provide valuable guidance for understanding and fostering collaborative practices.

However, challenges such as professional boundaries, power differences, and the need for supportive organizational cultures are also acknowledged. The review highlights the importance of addressing these challenges through initiatives such as interprofessional education, team training, and leadership development. Furthermore, the need for well-designed studies to evaluate the impact of collaboration on patient outcomes is emphasized, as limited evidence currently exists in this area.

The findings of this review have important implications for practice, policy, and research. Healthcare organizations should prioritize the development and support of interprofessional collaborative practices, recognizing the vital roles and contributions of pediatric emergency consultants, staff nurses, and nurses. This may involve implementing team training programs, fostering a culture of respect and shared decision-making, and providing resources and leadership support for collaborative initiatives.

At a policy level, the review underscores the need for frameworks and guidelines that promote and facilitate interprofessional collaboration in healthcare settings. This may include establishing standards for interprofessional education, developing incentives for collaborative practices, and allocating resources to support research and evaluation of collaborative interventions.

Future research should focus on conducting well-designed studies to evaluate the impact of interprofessional collaboration on patient outcomes, healthcare processes, and staff satisfaction. Longitudinal designs, mixed methods approaches, and the inclusion of diverse healthcare settings and populations would strengthen the evidence base and inform the development of targeted interventions.

6. Conclusion

This review highlights the vital roles and contributions of pediatric emergency consultants, staff nurses, and nurses in promoting child health, enhancing patient education, and improving patient outcomes across various healthcare settings. Effective interprofessional collaboration emerges as a key factor in optimizing patient care and experiences,

with clear goals, open communication, shared decision-making, and organizational support identified as crucial elements.

However, challenges such as professional boundaries, power differences, and the need for supportive organizational cultures must be addressed to fully leverage the expertise of these healthcare professionals. Future research should focus on evaluating the impact of interprofessional collaboration on patient outcomes and healthcare processes, using well-designed studies and diverse methodologies.

By synthesizing current evidence and identifying implications for practice, policy, and research, this review contributes to the ongoing discourse on optimizing healthcare delivery and patient outcomes through the effective utilization of pediatric emergency consultants, staff nurses, and nurses. The findings underscore the importance of fostering collaborative practices and provide a foundation for further research and practice development in this area.

References

Al Abdullah, F. A. M., Alzaqli, A. A. A., Al Alzaqli, N. R. A., Al Dossray, M. O. M., AlSaad, K. O. K., Alghobari, R. M. M., & Al, A. H. (2023). The impact of interdisciplinary collaboration on patient care in pharmacy, administration, psychology, radiology, and nursing. Saudi Journal of Medical and Pharmaceutical Sciences, 9(12), 780-785.

Bressan, S., Titomanlio, L., Gomez, B., Mintegi, S., Gervaix, A., Parri, N., ... & Da Dalt, L. (2021). The Pediatric Emergency Research Network: A decade old and growing. European Journal of Emergency Medicine, 28(5), 341-343.

D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. Journal of Interprofessional Care, 19(sup1), 116-131.

Klucznik, K. M., Łukasik, R., Zarzycka, D., & Dobrowolska, B. (2023). The significance of cooperation in interdisciplinary health care teams as perceived by Polish medical students. International Journal of Environmental Research and Public Health, 20(2), 1091.

Körner, M., Bütof, S., Müller, C., Zimmermann, L., Becker, S., & Bengel, J. (2016). Interprofessional teamwork and team interventions in chronic care: A systematic review. Journal of Interprofessional Care, 30(1), 15-28.

Lemieux-Charles, L., & McGuire, W. L. (2006). What do we know about health care team effectiveness? A review of the literature. Medical Care Research and Review, 63(3), 263-300.

McCutcheon, L. R. M., Haines, S. T., Valaitis, R., Sturpe, D. A., Russell, G., Saleh, A. A., ... & Lee, J. K. (2020). Impact of interprofessional primary care practice on patient outcomes: A scoping review. SAGE Open, 10(2), 2158244020935899.

Mickan, S. M., & Rodger, S. A. (2005). Effective health care teams: A model of six characteristics developed from shared perceptions. Journal of Interprofessional Care, 19(4), 358-370.

Nancarrow, S. A., Booth, A., Ariss, S., Smith, T., Enderby, P., & Roots, A. (2013). Ten principles of good interdisciplinary team work. Human Resources for Health, 11(1), 19.

O'Leary, K. J., Sehgal, N. L., Terrell, G., & Williams, M. V. (2012). Interdisciplinary teamwork in hospitals: A review and practical recommendations for improvement. Journal of Hospital Medicine, 7(1), 48-54.

Pannick, S., Davis, R., Ashrafian, H., Byrne, B. E., Beveridge, I., Athanasiou, T., ... &Sevdalis, N. (2015). Effects of interdisciplinary team care interventions on general medical wards: A systematic review. JAMA Internal Medicine, 175(8), 1288-1298.

Petri, L. (2010). Concept analysis of interdisciplinary collaboration. Nursing Forum, 45(2), 73-82.

Reeves, S., Lewin, S., Espin, S., &Zwarenstein, M. (2010). Interprofessional teamwork for health and social care. John Wiley & Sons.

Reeves, S., Pelone, F., Harrison, R., Goldman, J., &Zwarenstein, M. (2017). Interprofessional collaboration to improve professional practice and healthcare outcomes. Cochrane Database of Systematic Reviews, (6), CD000072. Rowther, A. A., Mehmood, A., Razzak, J. A., Atiq, H., Castillo-Salgado, C., & Saleem, H. T. (2022). "You can only help them save the patient once they trust you": Clinician perspectives and theories of use of a pediatric emergency teleconsultation program. Frontiers in Pediatrics, 10, 1001123.

San Martín-Rodríguez, L., Beaulieu, M. D., D'Amour, D., & Ferrada-Videla, M. (2005). The determinants of successful collaboration: A review of theoretical and empirical studies. Journal of Interprofessional Care, 19(sup1), 132-147.

Schot, E., Tummers, L., &Noordegraaf, M. (2020). Working on working together. A systematic review on how healthcare professionals contribute to interprofessional collaboration. Journal of Interprofessional Care, 34(3), 332-342.

West, M. A., &Lyubovnikova, J. (2013). Illusions of team working in health care. Journal of Health Organization and Management, 27(1), 134-142.

Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional teamworking in primary and community care? A literature review. International Journal of Nursing Studies, 45(1), 140-153. Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: Effects of practice-based

interventions on professional practice and healthcare outcomes. Cochrane Database of Systematic Reviews, (3), CD000072.