



UNDERSTANDING EXPERIENCES WITH INTERPROFESSIONAL COLLABORATION AMONG NURSES, PARAMEDICS, AND PHYSICIANS IN SAUDI EMERGENCY DEPARTMENTS: A QUALITATIVE STUDY

Thamer Musa Ahmed Alanazi, Ahmed Mohammed Ahmed Alatmi, Nawwaf Mownas Alanazi, Tahani Mohammed Ahmed Alatmi, Hanan Mohammed Ahmed Alatmi, Abdulrahman Manaa Saad Almutairi

Abstract

Effective interprofessional collaboration among healthcare professionals is vital for delivering coordinated, safe, high-quality care, especially in chaotic emergency department (ED) settings. However, minimal research exists elucidating the state of interprofessional collaboration between key ED providers in Saudi Arabia. This qualitative study aimed to address this gap by conducting semi-structured interviews with 15 emergency nurses, 15 paramedics, and 15 emergency medicine physicians regarding perspectives and experiences with interprofessional collaboration in two urban Saudi EDs. Transcripts underwent inductive thematic analysis. Several key themes emerged, including perceived benefits of collaboration coupled with inconsistencies in practice, role ambiguity between nurses and paramedics that hindered cooperation, the existence of professional hierarchies affecting team dynamics, the need for a shared mental model when providing urgent care, and influences of the high-pressure ED environment on collaborative interactions. Participants emphasized the importance of interprofessional education initiatives, open and egalitarian communication channels, implementation of structured team training programs, flattening of professional hierarchies, and establishment of protocols to enhance collaboration. Study findings provide important insights that can inform tailored organizational and educational strategies aimed at optimizing interprofessional collaboration among ED providers in Saudi Arabia to enhance delivery of coordinated, team-based emergency care.

Introduction

Effective interprofessional collaboration, defined as cooperative interactions between healthcare professionals with complementary expertise to deliver integrated, cohesive care, is increasingly recognized as foundational for providing high-quality, coordinated, and patient-centered services (Reeves et al., 2017). This is especially salient within chaotic emergency department settings involving urgent, undifferentiated patient needs that require a rapid yet nuanced team response. Suboptimal interprofessional collaboration in the ED has been associated with negative impacts on outcomes including medical errors, delays, mortality, length of stay, and costs, underscoring the critical importance of fostering team-based emergency care (Sewell et al., 2011).



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However, perspectives of ED providers in Saudi Arabia regarding the state of interprofessional collaboration have been notably absent in literature. Elucidating experiences and attitudes can highlight areas of exemplary cooperation versus issues to be addressed at organizational and educational levels. Therefore, this study aimed to qualitatively explore nurse, paramedic, and physician experiences with interprofessional collaboration within two urban Saudi EDs using semi-structured interviews to obtain rich descriptions. Study findings provide insights to guide development of tailored ED initiatives focused on optimizing interprofessional team dynamics, with the ultimate goal of enhancing delivery of coordinated emergency care.

Background

Defining Interprofessional Collaboration

Interprofessional collaboration has been conceptualized as a partnership between healthcare professionals with complementary expertise who work cooperatively to deliver comprehensive, quality care (Suter et al., 2009). Core concepts encompass mutual respect, shared decision making, and open communication to integrate diverse knowledge and roles in united, collaborative practice.

Benefits of Interprofessional Collaboration in the ED

Within emergency medicine, literature indicates interprofessional collaboration improves processes and outcomes including (Sewell et al., 2011; Parker et al., 2013):

- Enhanced efficiency and resource utilization
- Reduced medical errors and adverse events
- Improved clinical reasoning and problem solving
- Increased adherence to clinical practice guidelines
- Higher provider and patient satisfaction
- Reduced morbidity, mortality, complications and readmissions
- Shorter lengths of stay and waiting times

Realizing these benefits depends on optimized team dynamics.

The Importance of Role Clarity for Collaboration

Lack of role clarity between professionals impedes collaboration (Almostadi et al., 2021). Ambiguous overlaps in ED nurse and paramedic roles are common and can generate tension (Walker et al., 2013). Delineating unique contributions and responsibilities facilitates coordination.

Team Dynamics and Leadership Influences

Hierarchy and contested leadership styles also affect ED collaboration (Natasari et al., 2020). Dominance of physician authority can inhibit nursing input and undermine trust. Shifting to shared, egalitarian leadership and decision making fosters inclusion (Almostadi et al., 2021).

Environmental Factors Impacting Collaboration

Finally, the hectic ED environment with shifting priorities and inadequate communication channels hampers coordinated teamwork (Natasari et al., 2020). Strategies like protocols and debriefs are advised (Reeves et al., 2017).

Rationale for Study

This study aimed to build understanding of interprofessional collaboration issues to be addressed and positive aspects to leverage in fostering optimized team-based emergency care in Saudi Arabia.

Study Aim

To explore nurse, paramedic and physician experiences with interprofessional collaboration within Saudi emergency departments, elucidating beneficial practices and areas for improvement.

Theoretical Framework

This study was guided by the Interprofessional Learning Continuum Model which recognizes collaboration is shaped by interactional, organizational, and contextual factors requiring multifaceted initiatives across educational and clinical environments to achieve integration (IPEC, 2016).

Methods

Study Design

An exploratory qualitative design was utilized with semi-structured interviews and thematic analysis.

Settings and Participants

Participants were 45 ED providers, including 15 nurses, 15 paramedics, and 15 physicians recruited from two large tertiary hospitals in Riyadh and Jeddah, Saudi Arabia. Purposive sampling ensured participants had >1 year of ED experience.

Data Collection

Individual semi-structured video interviews lasting 60-90 minutes were conducted focused on eliciting participant perspectives regarding:

- Typical interprofessional interactions in the ED
- Facilitators or barriers to collaboration
- Professional roles, responsibilities and scope overlap
- Team leadership and conflict negotiation
- Communication, protocols, and care planning

- Environmental supports or impediments
- Recommendations for improvement

Interviews were audio recorded, translated to English as needed, and transcribed. Data reached saturation.

Qualitative Analysis

Transcripts underwent iterative inductive thematic analysis as described by Braun and Clarke involving familiarization, initial code generation, searching for themes, refining themes, and defining themes (Braun & Clarke 2006). NVivo software aided organization.

Trustworthiness

Credibility, dependability, confirmability and transferability were established through techniques including member checking, thick description, peer debriefing, audit trails and triangulation (Korstjens & Moser 2018).

Ethical Considerations

Institutional review board approval and informed consent were obtained prior to participation. Identifying details were removed during transcription.

Results

Participant Demographics

The sample included 45 providers with 1-20 years of ED experience, outlined in Table 1.

Table 1. Interview participant demographics

| Profession | Males | Females | Years Experience |
|-------------------|--------------|----------------|-------------------------|
| Nurses | 5 | 10 | 1-8 |
| Paramedics | 9 | 6 | 3-15 |
| Physicians | 12 | 3 | 5-20 |

Thematic Findings

Four main themes emerged, described below with exemplary quotes.

Inconsistent Yet Beneficial Collaboration

All participants valued interprofessional collaboration and recounted positive experiences, but noted inconsistent application:

“When we collaborate well, patients benefit...but it’s not reliable.” (Physician)

Role Ambiguity and Tension

Overlapping nurse/paramedic roles without clear delineation caused confusion and friction:

“We often do the same tasks, creating redundancy...Roles should be defined.” (Nurse)

Hierarchies and Contested Leadership

Many noted physician dominance and lack of structured leadership impeded inclusion:

“Doctors make decisions alone...We need flattened hierarchies and designated leaders.” (Paramedic)

Need for Common Mental Model

Having a shared understanding of the team, situation and plan was deemed crucial:

“We all need the same picture...especially during crises.” (Nurse)

Environmental Pressures Disrupt Collaboration

Chaotic pace, frequent interruptions, inadequate communication channels and lack of structured team protocols challenged coordination:

“It’s so hectic...hard to come together when scrambling.” (Paramedic)

Discussion

This study provides unprecedented insights into the state of interprofessional collaboration between key ED providers in Saudi Arabia. Benefits were recognized, yet numerous areas for improvement emerged including role ambiguities between nurses and paramedics, entrenched professional hierarchies that marginalize input, and environmental barriers that impede teamwork. Implementing interprofessional education to establish common language, values and mental models early on was advised to prime collaboration. Within hospitals, structured team training programs, egalitarian communication policies, designated ED leaders, debriefs, and protocols can help overcome barriers.

As a single country qualitative study, transferability may be limited. However, vivid descriptions aimed to convey context to inform collaborative initiatives locally and abroad. Future research should evaluate team interventions and continue exploring ED collaboration factors as the field evolves. Overall, this study provides a crucial foundation highlighting the need and opportunities to foster optimized interprofessional team-based care in this critical practice setting through deliberate education, training, policy, and environmental changes.

Conclusion

This study elucidated Saudi emergency room providers' experiences with beneficial yet inconsistent interprofessional collaboration, identifying role ambiguities, hierarchies, communication gaps and environmental pressures as key issues. Implementing tailored organizational initiatives alongside interprofessional education is crucial to foster team-based emergency care delivery. Findings provide actionable insights to guide improvement efforts. Ultimately, optimizing ED collaboration promises substantial benefits in safe, coordinated, and patient-centered emergency services.

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