

## Perceptions of Nurses, Physicians, and Respiratory Therapists regarding Interprofessional Collaboration in the Intensive Care Unit of a tertiary care Hospital in Karachi. A Qualitative Explorative Study

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### Abstract

Interprofessional Collaboration (IPC) is pivotal in healthcare, particularly in neonatal intensive care units (ICU). Effective Interprofessional Collaboration between nurses, physicians, and respiratory therapists in patient care can reduce hospital stays, improve the quality of care, and enhance patient health outcomes. It has been determined that Interprofessional Collaboration (IPC) is among the most significant policy strategies for overcoming healthcare staff and patient safety challenges and improving the healthcare organization. This study explores the perceptions of NICU nurses, physicians, and respiratory therapists about IPC in a tertiary care hospital in Karachi, Pakistan. It also investigates the facilitators and barriers to IPC, which impact the quality of patient care. An exploratory qualitative study was conducted through semi-structured interviews of 12 nurses, physicians, and respiratory therapists in a tertiary care hospital neonatal ICU. The study employed a purposive sampling technique, where participants were selected based on their direct engagement in patient care. Interviews were conducted in both Urdu and English, each in-depth interview takes 30-40 minutes. Data analysis proceeded with systematic text condensation, with thematic analysis to determine key patterns and themes. There were three dominant themes identified in the analysis: 1) Attitudes of health professionals toward IPC, emphasizing the significance of patient outcomes and enhanced collaboration opportunities 2) Facilitating factors of effective IPC, stressing the role of effective communication, respect, and trust and professional experience and knowledge; 3) Hindering factors to effective IPC, and the difficulty such as shortage of organizational support, power disparity, workload extension, and factors based on systems. Participants acknowledged the substantial advantages of IPC to improve patient outcomes and stressed the significance of cooperative, respectful, and well-informed practices by healthcare professionals. It also suggests the need to highlight its incorporation in education and research practices. This study adds important insight into the dynamics of IPC in a developing country's healthcare system. It underlines the key position that IPC takes in enhancing patient outcomes and the need for systemic changes to ensure an Interprofessional healthcare culture.

**Keywords:** Interprofessional collaboration, Nurses, Physicians, Respiratory therapists, Neonatal Intensive care unit.

## Introduction

Interprofessional practice (IPC) forms the backbone of modern healthcare organizations, especially in high-use environments such as intensive care units (ICUs). Effective communication among nurses, physicians, and respiratory therapists (RTs) is essential to achieve optimal patient results, minimize medical errors, and ensure effective utilization of existing healthcare resources (Salem and Abdu, 2024). In critical care settings where rapid interventions are generally required, a coordinated and holistic healthcare team plays an important role. IPC in the majority of healthcare institutions particularly in Pakistan is typically subverted by authoritarian hierarchical structures, communication problems, and unclear professional boundaries (Ullah, 2023, Zareen, 2023). Studies in developed countries indicate that IPC enhances clinical judgment, boosts patient satisfaction, and promotes compliance with treatment (Lin et al., 2020) (Gantayet-Mathur et al., 2022). These benefits are supported by structured communication systems, Interprofessional education (IPE), and standardized collaborative protocols. Comparatively, IPC in developing countries such as Pakistan remains underdeveloped due to institutional constraints, shortage of workforce, and lack of formal exposure to Interprofessional education (Islamuddin, 2023). These factors result in disjointed delivery of health care in which nurses, doctors, and RTs do their work in parallel rather than in collaboration, eventually affecting the quality of care (Alsubayti et al., 2024) (Bok et al., 2020). ICU roles are independent but complementary. Nurses have the responsibility for continuous monitoring of patients, direct patient care, and rapid response in emergencies (Lee et al., 2023). Physicians have responsibility for clinical decision-making, diagnostics, and therapeutic planning. Respiratory therapists bring, however, specialized expertise in airway care, ventilator adjustment, and critically ill patient respiratory support (Kyung Min Kirsten et al., 2023) (Inagaki et al., 2023). Alongside these essential, interdependent processes, IPC is often hindered by unclear role demarcation, inflexible hierarchies, and limited interdisciplinary communication (Aamodt et al., 2025). Conquering these barriers is vital to the incorporation of cohesive, patient-centered care teams. In low-resource healthcare settings like those in Pakistan, nurses', doctors', and RTs' attitudes toward IPC become particularly significant (Jabbar et al., 2023). Compared to high-resource health systems that rely on formal organizations for IPC, Pakistan's critical care settings would rather operate based on individual work, which may be subject to professional silos as well as role misconceptions (Zareen, 2023). Breaking these challenges down is crucial for ensuring coordinated patient care that translates to benefits for patients and aid to healthcare teams (Ullah, 2023) (Reeves et al., 2017). While the jobs of nurses, physicians, and respiratory therapists differ, their teamwork is pivotal in ensuring continuity of care and optimal health outcomes (Younas et al., 2023). Nevertheless, institutional barriers such as hierarchical leadership models, redundant roles, and limited Interprofessional communication continue to prevent effective collaboration. Elimination of these barriers is pivotal in the development of integrated care practices as per international standards (Aamodt et al., 2025). Recent research has increasingly emphasized the importance of IPC in improving healthcare quality and safety. There is, nonetheless, a need for more context-specific, in-depth studies—especially in Pakistan to investigate the facilitators and barriers of IPC in ICUs (Leea et al.) (Melkamu et al., 2020). Qualitative research can gain a deeper insight into nurses', doctors', and RTs' lived experiences and perceptions, which will reveal how collaboration evolves in real clinical practice (Landriault, 2015) (Matusov et al., 2022). Moreover, miscommunication or role confusion among professionals can be harmful to patient outcomes, and therefore there is a need to develop and implement IPC-improving interventions (Ahmadih et al., 2019).

## Research Questions:

1. What are the perceptions of nurses, physicians, and respiratory therapists regarding Interprofessional collaboration in a tertiary care hospital in Karachi?
2. What are the factors that promote Interprofessional collaboration between nurses, Physicians, and Respiratory Therapists in the ICU of a tertiary care hospital in Karachi?

3. What are the factors that constrain Interprofessional collaboration between nurses and doctors and Respiratory Therapists in the ICU of a tertiary care hospital in Karachi??

### **Objectives:**

1. To examine the perception of ICU nurses, physicians, and respiratory therapists regarding Interprofessional collaboration in a tertiary care hospital in Karachi.
2. To determine the major factors that affect Interprofessional collaboration between nurses, physicians, and respiratory therapists in the ICU of a tertiary care hospital in Karachi.

### **Significance of the Study**

This research is a significant contribution to the Pakistani healthcare environment because it is one of the earliest qualitative studies exploring how nurses, physicians, and respiratory therapists (RTs) perceive Interprofessional collaboration (IPC) in the neonatal intensive care unit (NICU) of a Karachi private tertiary care hospital. It fills a vital gap in local literature and presents a foundation for future research regarding IPC in Pakistan's critical care environments. An understanding of issues peculiar to nurses, physicians, and RTs during collaboration within hospital settings is paramount. By going into the details of such challenges, only can this study try to ascertain issues at stake hindering high-quality teamwork. It is imperative to know this to break the barriers and design a more harmonious and team-oriented healthcare system. Improved IPC will not only strengthen professional alliances but also streamline the provision of healthcare and positively impact patient outcomes. In addition to overcoming obstacles, this study also seeks to generate new knowledge about facilitators and barriers to Interprofessional collaboration among critical care professionals. The findings will yield valuable knowledge about the dynamics of professional interaction within NICU settings, where care integration is imperative. Lastly, the results of this study will offer a guideline to policymakers, hospital administrators, and educators in terms of recommendations to enhance Interprofessional collaboration and promote patient-centered care in Pakistan's neonatal intensive care units.

### **Literature Review**

The evidence from the literature for Interprofessional collaboration (IPC) among doctors and nurses is addressed in this chapter. Aside from further reviewing the evidence in favor of IPC, it focuses on the experience, attitude, opinion, facilitators, and hindrances to IPC of doctors and nurses working in the intensive care unit.

### **Search strategy**

To support this study, a systematic and comprehensive literature search was conducted to retrieve peer-reviewed articles related to Interprofessional collaboration (IPC) in the critical care environment. The literature search was performed using reliable and widely accepted databases, such as Google Scholar, PubMed, and ScienceDirect. Both Medical Subject Headings (MeSH) and keywords were combined to guarantee the breadth as well as specificity in finding relevant studies. Firstly, the researchers prepared a strategic keyword list designed to capture the essentials of the research. These included: "Experiences" OR "Perceptions" AND "Neonatal Intensive Care Unit" OR "Neonatal Critical Care Unit" OR "NICU" OR "Intensive Care Unit" OR "ICU" AND "Nurses" OR "Registered Nurse" OR "Staff Nurse" AND "Physicians" OR "Doctors" AND "Respiratory Therapists" OR "RTs" AND "Interprofessional Collaboration" OR "Interdisciplinary Collaboration" OR "Multidisciplinary Collaboration". Besides keyword searching, MeSH terms like 'Interprofessional Relations', 'Physicians', 'Nurses', 'Respiratory Therapy', and 'Intensive Care Units' were included to expand the depth and breadth of the search. The terms were combined with the use of Boolean operators (AND, OR) to limit the search results and make sure all dimensions pertinent to the topic were included. To ensure that the literature is up-to-date and applicable, filters were used to only consider studies that had been published in the past decade (2015–2025). This was done purposefully, given the understanding that Interprofessional practice is an ongoing area of healthcare practice,

especially within high-risk settings like NICUs and ICUs. In addition, the search was limited to English-language studies to ensure clarity, consistency, and ease of interpretation. Articles in non-English languages or those published outside the specified time frame were excluded to maintain the focus and coherence of the literature review. The final collection of included studies gave rich information on the perceptions, roles, and collaborative relations of nurses, physicians, and respiratory therapists within intensive care. Generally, the literature identified salient barriers and facilitators of successful IPC and the organizational and interpersonal determinants influencing collaboration within both neonatal and adult intensive care units. These conclusions provide a good basis for situating the present study and emphasize the need to investigate IPC from a multidisciplinary approach within the Pakistani healthcare context.

#### **Impact of Interprofessional Education (IPE) on Interprofessional Collaboration**

In Lebanon, a descriptive study was conducted to analyze the impact of Interprofessional Education (IPE) on Interprofessional collaboration between healthcare professionals. The evidence indicated that professional education as a team in training increased teamwork, respect for each other, and communication, ultimately improving patient care and job satisfaction (Ahmadieh, Mansour, & Saleh, 2019). Additionally, using a controlled trial design, in New Zealand researchers experimented with an IPE program that integrated students from various health professions. The study demonstrated that participants had enhanced role understanding, better communication, and a greater appreciation of teamwork, which explained the integration of IPE into healthcare education (Darlow et al., 2015). Moreover, Chew, Durning, and van Merriënboer (2019) conducted a systematic review to identify facilitators and barriers to Interprofessional collaboration in hospital settings. The review indicated that role clarity, respect between colleagues, and Interprofessional education were essential to effective teamwork, whereas professional silos and lack of defined responsibilities were barriers (Chew, Durning, & van Merriënboer, 2019). In Pakistan, a qualitative study conducted at the CICU and CCU of a Karachi-based tertiary care hospital explored the perception of Interprofessional collaboration among physicians and nurses. Despite the participants agreeing with the importance of teamwork, aspects such as communication delay and professional hierarchy were prominent. Frequent Interprofessional education programs were suggested by the study to foster team-oriented care (Zareen, 2023).

#### **Intensive and Critical Care-Based Collaboration**

In 2019 a study was conducted in Iran using descriptive correlational design in Iranian ICUs to assess the correlation between collaboration among physicians and nurses and patient outcomes. Based on their results, greater collaboration was positively correlated with reduced stress, improved quality of care, and higher professional satisfaction (Aghamohammadi, Soltani, & Momeni, 2019). Similarly, Islam Uddin conducted a qualitative study in a MICU in Pakistan about how the multidisciplinary team in a MICU maintained success in a CLABSI-free setting for nine months. In the study, it was established that teamwork, regular feedback, and communication with infection control officers were crucial in maintaining success (Islamuddin, 2023). In a prospective phenomenological study, Lin et al. aimed to examine Interprofessional collaboration in ICU emergencies. In their initial report, they pointed out that accurate communication, respect for each other, and knowledge of each team member's function were essential in preventing mistakes during high-stress situations (Lin et al., 2020). Additionally, Waheed Ullah (2023) conducted an exploratory qualitative study in the ICU of a tertiary care hospital to determine the challenges that physicians and nurses face in collaborative care. Power dynamics, communication problems, and poorly defined role definitions emerged as the main impediments, calling for institutional reforms and training modules (Ullah, 2023). Furthermore, In Canada, Landriault carried out a case study on the impact of a shared critical care rotation on postgraduate students. Results showed that shared learning led to improved collaboration, communication, and decision-making in high-stakes clinical environments (Landriault, 2015). Cederwall, Theobald, and Tønnesen (2014) studied ICU nurses' experience in Sweden regarding Interprofessional collaboration. They identified that although teamwork

was mostly acceptable, communication failure and hierarchical conflict rendered effectiveness difficult. Supportive leadership and equitable participation were advised to improve ICU dynamics in the study (Cederwall, Theobald, & Tønnesen, 2014).

### Theme 3: Communication, Role Clarity, and Mutual Respect

Quantitative research design, Boev, Xia, and Landers (2022) examined determinants of nurse-physician collaboration. Their findings indicated that communication and respect among roles significantly impacted patient safety and satisfaction, stressing the importance of formal professional interaction (Boev, Xia, & Landers, 2022). Additionally, Salem and Abdu (2024) in Egypt found the critical care nurses' perception of Interprofessional collaboration. Effective communication, in which professional respect was attained in the roles, resulted in stronger teamwork leading to enhanced clinical outcomes and enhanced work performance (Salem & Abdu, 2024). In 2023 a cross-sectional survey was conducted in Pakistani hospitals to identify the most common barriers to Interprofessional collaboration. Hierarchical dominance, communication breakdowns, and not having joint educational sessions were a few of the reasons frequently mentioned, which suggest that healthcare teams need cultural and structural modifications (Jabbar et al., 2023). Furthermore from an international synopsis, Lee and colleagues (2023) synthesized literature that reported perceptions among healthcare professionals concerning pharmacy services from hospitals. According to Lee and colleagues, they concluded that in cases where the pharmacists became part of the interprofessional team through proper communication and role clarification, medication error decreased and improved patient outcomes (Lee et al., 2023). In Saudi Arabia, Alsubayti and co-workers assessed collaborative practices among physicians, nurses, and respiratory therapists. The study revealed that routine interdisciplinary rounds shared records, and established boundaries resulted in enhanced decision-making regarding respiratory care (Alsubayti et al., 2024). A systematic review explored healthcare professionals' expectations of hospital pharmacy services. The review concluded that effective collaboration, on the grounds of trust and active communication, improved therapeutic outcomes and team performance (Kyung Min Kirsten et al., 2023).

### Attitudes, Experiences, and Challenges in Interprofessional Collaboration

Saudi Arabian study in 2019 studied nurses' attitudes to Interprofessional working. More experience and education showed more positive attitudes, and hence ongoing professional development in collaborative skills is required (Alsallum, Al Ghamdi, & Alzahrani, 2019). Similarly, a Comparative cross-sectional study was employed by Elsous et al. (2017) to contrast physicians' and nurses' attitudes toward collaboration in Gaza. Nurses were more receptive toward collaborative practice and emphasized respect towards one another, while physicians have more traditional hierarchical attitudes (Elsous et al., 2017). Using a qualitative method in South Korea to examine nurses' perceptions of Interprofessional collaboration in end-of-life care. Emotional distress, unclear decision-making roles, and communication shortages were key challenges, highlighting the importance of ethical training and team support (Choe, Kim, & Lee, 2015). In the United States, Bowles, Candela, and Xu (2016) surveyed new nursing graduates to ascertain their preparedness for Interprofessional collaboration. Most were uncertain and lacked confidence, mainly due to the fact that they had received minimal exposure to Interprofessional interaction during their education. The study justified offering team-based simulation and mentorship as part of nursing education (Bowles, Candela, & Xu, 2016). Qualitative research exploring nurses' experience of challenges in managing Interprofessional relationships within environments of complex care. Nurses cited burnout, lack of empathy from other colleagues, and low collaboration as significant stressors, emphasizing supportive leadership and Interprofessional training as key interventions (Younas et al., 2023).

## **Methodology**

Interprofessional collaboration between nurses and physicians in the Neonatal Intensive Care Unit (NICU) of a private hospital in Karachi is discussed in this chapter using the research methodology utilized to investigate this topic. The methodology includes the study design, setting, population, inclusion and exclusion criteria, sampling methods, recruitment of participants, data collection processes, and analysis procedures. By defining these elements, this chapter hopes to give a clear picture of how the research was carried out and why certain methods were selected.

### **Study Design**

The research employed an exploratory qualitative design, which is well-suited to the comprehension of intricate phenomena like interprofessional collaboration in healthcare environments. This design enables an in-depth examination of participants' experiences, perceptions, and attitudes, yielding rich qualitative information that can uncover implicit themes and insights. The qualitative method is useful in the capture of interpersonal nuances and contextual factors that shape collaboration among NICU staff.

### **Setting**

The study was carried out at a private tertiary care hospital in Karachi, Pakistan, which is renowned for its state-of-the-art medical facilities and specialized neonatal care. The NICU of this hospital is a critical care unit, where multidisciplinary teams of nurses, physicians, and other healthcare providers work together to deliver high-quality care to critically ill neonates. The choice of this setting is significant, as it offers a unique opportunity to investigate the dynamics of interprofessional collaboration in a high-pressure environment where teamwork is essential for optimal patient outcomes.

### **Population**

The population targeted by this research comprised NICU doctors and nurses at the chosen private hospital. They were selected as the population of interest because they directly engage with patients and are crucial to the collaborative activities within the NICU. Through this population of healthcare workers, the research seeks to understand their own perceptions of collaboration, the obstacles they encounter, and the conditions that promote or hinder teamwork.

### **Selection Criteria**

In order to have a targeted and pertinent sample, particular inclusion and exclusion criteria were developed.

#### **Inclusion Criteria:**

Participants should be registered nurses, physician's respiratory therapists who are actively employed in the NICU. Participants should have at least six months of experience in the NICU so that they would have adequate exposure to the collaborative processes in the unit. Participants should be willing to give informed consent to take part in the study.

#### **Exclusion Criteria:**

Healthcare workers who do not engage in direct patient care in the NICU, e.g., administrative personnel or trainees, were excluded. Participants who have remained in the NICU for less than six months were excluded to ensure that all participants have enough experience to give worthy insights.

### **Sample and Sampling Techniques**

A purposive sampling method was used to identify participants to be included in the study. This non-probability sampling technique permits researchers to choose individuals who share particular characteristics or experiences that are pertinent to the research question. In this instance, NICU physicians and nurses were selected based on their direct participation in interprofessional collaboration. The study sample included 18 participants, 10 being NICU nurses and 8 being NICU physicians. The sample size was sufficient to ensure data saturation, where no further themes or insights could be elicited from the data. Professional role diversity

in the sample ensures a fuller understanding of collaborative dynamics between physicians and nurses in the NICU context.

### **Participant Recruitment**

Recruitment of participants was done after the study had been approved by the ethical review board. The researcher contacted potential participants directly in the hospital, using flyers and information sessions to introduce the purpose and importance of the study. Potential participants were given detailed information on the study, including the fact that participation was voluntary, measures for confidentiality, and the ability to withdraw at any time without penalty. Consent from all participants was informed, and prior to the interviews, all participants provided their home addresses for sending them information after completion of the study. All these measures helped to create a sense of trust as well as transparency between participants and the researcher.

### **Data Collection Procedures**

Data were collected using semi-structured interviews, which ensured flexibility in gaining an understanding of participants' perceptions without losing track of important areas of discussion. Interviews were done in a private room within the hospital to facilitate confidentiality and comfort among the participants. The researcher used planned as well as spontaneous probes during interviews to gain rich and detailed answers from the participants. To facilitate the use of participants' preferred language, interviews were taken in English as well as Urdu, depending upon the individual's ease. The bilingual strategy used helped to communicate ideas and emotions more freely and increased the quality of the collected data. Each interview took around 40-50 minutes and was recorded on audio with the permission of the participants. The researcher also made detailed field notes during the interviews to note non-verbal behavior and emotional expressions, which supplemented the verbal data collected.

### **Data Analysis**

Data analysis was done using systematic text condensation, an exploratory thematic analysis technique that enables the identification of patterns and themes in qualitative data. Bengtsson (2016) stresses the need for concurrent data collection and analysis, meaning these two processes tend to run together. Analysis was done in a systematic way, involving structuring the data, grouping information, using coding, and carrying out intensive exploration and interpretation.

### **The analysis was conducted in four principal steps:**

**Overall Impression:** The researcher read the transcripts to get a broad sense of the data and recognize recurring patterns and themes.

**Recognizing and Classifying Meaning Components:** Meaning units were identified and categorized into themes or categories that reflected the central ideas talked about by participants.

**Condensing:** The researcher condensed and abstracted the content within each theme to pull out the core meaning or essence.

**Synthesizing:** The abbreviated meanings were synthesized to produce descriptions and concepts that were representative of the underlying patterns as they emerged from the data.

### **Ethical Considerations**

Ethical considerations were of prime importance throughout the research process. Before starting the study, the researcher obtained clearance from the AKU ethical review committee. To carry out research in the necessary context, permission was sought from the private hospital in Karachi. The letter of approval was signed by the hospital's Chief Medical Officer to meet

institutional requirements. The researcher obtained signed consent forms from participants who wanted to participate in the study. Participants were free to withdraw from the study at any moment; the researcher would not force them to withdraw. Study participant information was confidential, and only the principal investigator had access to it. By giving a unique ID to each participant at the beginning of the study, confidentiality was ensured throughout the study.

## **Conclusion**

This study emphasizes the importance of interprofessional collaboration between doctors and nurses in intensive care units. Based on studies in the relevant literature, highlight how efficient IPC can result in shorter hospital stays, enhanced quality of care, and improved patient outcomes. The chapter further refers to the barriers to interprofessional collaboration that have been observed in healthcare facilities of developed and developing nations. While earlier research suggests that doctors and nurses can collaborate, there are still issues. This study will contribute to the understanding of these issues by examining NICU healthcare professionals' attitudes. It will also identify the facilitators and barriers to IPC in the ICU unit of a tertiary care hospital in Karachi, Pakistan. The outcomes will provide pragmatic solutions for enhancing teamwork and communication and, therefore, patient care. Interprofessional collaboration among nurses and doctors is essential for optimal patient care. Although obstacles exist, there are numerous facilitators, such as leadership, motivation, and organized interventions that can improve IPC. Nurses' and physicians' attitudinal differences must be remediated by education and culture sessions. The challenges of IPC should be investigated further in future research, encompassing systemic, clinician, and patient-related factors to create a genuinely collaborative healthcare setting. Overall, this study has described the research approach used to investigate interprofessional collaboration between NICU nurses and doctors. Using an exploratory qualitative approach, the study endeavored to gather in-depth knowledge about the collaborative processes within the NICU environment. The process of careful selection of participants, data collection methods, and analysis procedures enhanced the rigor and trustworthiness of the research outcomes.

## **Findings**

It is in this chapter that the key findings of in-depth interviews of nurses and doctors working in the Neonatal Intensive Care Unit (NICU) of a private hospital in Karachi are presented. The primary objective of the interviews was to gather information regarding participants' experiences, perceptions, and challenges within the context of interprofessional collaboration in neonatal care, particularly in the case of neonatal deterioration events. Thematic analysis of interview findings revealed five overarching themes, outlined below. Each theme corresponds to the relevant research question and is emphasized by direct quotations from participants.

### **Theme 1: Shared Clinical Vigilance and Collective Responsibility**

This is a theme that describes the interdependent and collaborative work environment among neonatal healthcare workers. In high-stakes environments such as the NICU, shared vigilance—where multiple professionals watch and react to a patient's state—appears as a fundamental aspect of safe and effective care. Physicians, nurses, and respiratory therapists (RTs) all made the point repeatedly that patient surveillance, early detection, and immediate intervention are not the tasks of a single discipline but the work of many. The findings fall under four subthemes.

#### **Subtheme 1.1: Proactive Observation and Early Detection across Disciplines**

Professionals shared how real-time patient surveillance is a joint function. The continuous monitoring by RTs and nurses, coupled with timely physician input, creates a safety net for fragile neonates.

"I rely on the vigilance of nurses and RTs at the bedside. They often detect changes before I even arrive. It's their observations that guide urgent decisions." – P1.



"We watch each small variation—oxygen level, color, feed response. Any deviation and I alert the team immediately. We're the advance eyes." – N1.

"I don't wait for it to be requested. If there's grunting or retraction in a baby, I report it directly. That's our duty as RTs." – RT1

"There is no pecking order when a baby is in danger. Anyone can recognize deterioration first. The most important thing is acting promptly, not who does it." – P2

### **Subtheme 1.2: Joint Reaction to Clinical Deterioration**

Upon clinically deteriorating neonates, the team acts together. Coordination is instinctual and not directive-based; all professionals know what to do in crises.

"While resuscitating, no one waits. Nurses establish lines, RTs control the airway, and I pay attention to drug interventions. It's instinctive coordination." – P3.

"I know precisely what my role is when the baby falls apart—CPR, med support, calling labs. Everyone moves like a unit." – N2.

"When the physician calls out for suction or a vent setting change, I am already there. We work like a coordinated system." – RT2

"Sometimes I warn the physician before he even lays eyes on the baby, and we schedule an immediate action. Our team effort makes outcomes happen." – N3.

### **Subtheme 1.3: Shared Responsibility for Monitoring and Reporting**

Patient monitoring was found not to be confined to one's own job. Shared accountability exists, with cross-disciplinary feedback being fostered and anticipated.

"If a nurse catches a sign of respiratory distress and pages me early, I totally respect and do something about it. We are accountable to each other." – P4.

"Sometimes it's not even my own baby, but if I hear desaturation alarms, I still go to check on them. It's a matter of accountability." – N4.

"We check ventilator parameters all the time, even if the baby is stable. One undetected sign can be fatal." – RT3

"Even when I'm not directly involved, if I see a sudden change, I take it upon myself to inform the primary team. That's expected here." – RT4

### **Subtheme 1.4: Preventing Errors through Collaborative Oversight**

Numerous participants provided examples where cross-checking between professionals avoided clinical mistakes. Collaborative checks were not perceived as mistrust but as safety measures.

"Prior to giving high-alert medications such as inotropes, we check dosing with the RT and nurse. It prevents dosing errors." – P1.

"I've challenged a bad prescription before, and after speaking with the physician, we rectified it. Such transparency saves lives." – N2.

"Occasionally orders do not concur with ventilator logic. I always double-check and talk to doctors prior to making critical adjustments." – RT2

"We don't take it personally. Cross-checking each other is part of our culture now. If I miss something, I expect my colleague to catch it." – N3.

### **Synthesis of Findings**

The Shared Clinical Vigilance and Collective Responsibility theme captures the strongly ingrained culture of interprofessional teamwork in the NICU. It is defined as Ongoing bedside monitoring shared between RTs and nurses. Physicians value and rely on timely alerts from frontline staff. Implicit role clarity in key events. Interdisciplinary feedback and error prevention mechanisms. The participants did not simply report tasks—they articulated moral and emotional ownership of patient safety. Collaboration wasn't portrayed as procedural but as

a value enacted in each shift. This theme provides the foundation for resilient neonatal care where each eye, hand, and voice matters.

## **Theme 2: Effective Communication as the Key to Collaboration**

Clear, open, and prompt communication was listed among the top facilitators of collaboration between doctors and nurses. Open communication was highlighted by both doctors and nurses as critical, particularly in emergent situations where speedy decision-making is paramount. SBAR (Situation-Background-Assessment-Recommendation) communication tools were frequently cited as top facilitators for effective collaboration, allowing systematic and clear information transmission.

### **Subtheme 2.1: Real-Time Information Exchange Improves Patient Safety**

The respondents emphasized that the capacity to exchange real-time updates, particularly at early signs of clinical deterioration, had direct implications on the outcomes for patients. Reporting in a timely manner facilitated quick decision-making and averted exacerbation of conditions. P1

"As a doctor, I rely greatly on the RTs and nurses to keep me informed, particularly when I am seeing more than one patient. Delay in communication may cause unnecessary complications." P2

"It's very important to inform the doctor and RT immediately if I see a decrease in oxygen saturation or an alteration in consciousness. Early information enables us to act promptly." N1

"When I get an early warning of respiratory distress, I can get the equipment ready and talk to the team ahead of time before the condition gets out of hand." Rt1

"I once prevented a code blue situation because the nurse informed me of minor changes in vitals immediately. That tip made all the difference." P3

These answers indicate that timely communication is not just a procedural imperative but a matter of life and death. Participants associated delays in information exchange with increased risk to patients.

### **Subtheme 2.2: Open and Respectful Dialogue Builds Team Trust**

The quality of the communication was one that was used to explain how valued and respected the team members felt in their work. Participants were able to term spaces where they could voice observations and ideas without fear of dismissal as safe and empowering. N2

"When the doctor wants my opinion or actually hears my input, it makes me feel confident to speak up more. It is like a shared responsibility." RT2

"We all have a part. When our voices are heard, particularly in crises, teamwork becomes second nature." P3

"I've seen things go better when we value each other's opinion. Even if I'm the one making the final decision, communication needs to go in every direction." N3

"Disrespectful communication, even subtle, creates uncertainty. But when we talk to each other as peers in care, things go faster and more easily." P1

These findings illustrate how respectful communication supports psychological safety, driving proactive behavior and mutual accountability. RT3

### **Subtheme 2.3: Role Clarity Enhances Emergency Communication**

Respondents clarified that communication of individual roles—particularly for deteriorating patients—minimized confusion, redundancy, and delay

"In code blue events, everyone needs to know their role. If they are unclear or communication fails, precious seconds are wasted." R3

"When we communicate and define roles during huddles or handovers, it alleviates stress during emergencies." P4

"I value when it is mentioned upfront during the beginning of the shift. If I am aware of who's taking the meds, venting, or IV access, I can pay closer attention." N4

"We need to tell our roles back to each other—what is doing suction, who is on SpO<sub>2</sub> watch. It adds to coordination." RT4

#### **Subtheme 2.4: Communication During Clinical Deterioration Is Essential**

Participants were adamant that throughout patient deterioration, the urgency and accuracy of communication would often dictate the success of the response. P4

"During acute deterioration, we have no time for long-winded explanations—communication needs to be quick, concentrated, and loud enough for all to hear." RT 1

"I frequently warn the team when I notice increased effort with breathing. If that is ignored, the patient can end up requiring intubation. Communication needs to be responded to, not merely heard." N2

"There's a big difference when everyone keeps reporting even small changes. In one instance, a temperature rise and changed behavior were early indicators of sepsis. We acted quickly because communication was consistent." P2

"In my view, communication becomes the single most effective intervention in deterioration—more than drugs or machines." N1

These stories illustrate that communication in crises serves as a coordination device, informing real-time decisions and facilitating timely interventions. RT1

The results as a whole indicate effective communication as an absolute foundation of interprofessional collaboration. Participants perceived communication not just as a clinical necessity but as a relational process of trust, respect, and clarity. Obstacles like delayed updates, unclear role expectations, or hierarchical silencing were perceived to severely interfere with care delivery. Conversely, formalized handovers, active listening, open communication, and mutual validation were portrayed as facilitators of both team cohesion and patient safety.

### **Theme 3: Hierarchical Barriers and Psychological Challenges**

Despite the collaborative arrangements described, NICU hierarchical structures were identified as a significant hurdle to effective decision-making and communication. Nurses had confessed to not wanting to refer to senior doctors, especially when there was a crisis, as they feared being dismissed or accused of overreacting. Doctors acknowledged nurses may not feel comfortable taking a matter higher because of this power differential, potentially leading to prolonged delays in taking significant interventions.

#### **Subtheme 3.1: Professional Inferiority Feelings**

"Sometimes, when we attempt to speak up about our concerns, you feel like you're being dismissed simply because you're a nurse. You second-guess yourself, even when you know what you saw is important." N1

"There have been times when I had clinical evidence of decline—such as declining oxygen levels—but my concerns were dismissed. It's difficult not to feel inferior when you're not included in the final decision-making process." R1

"It's discouraging. You feel you're not on the team, just someone to take orders without question. That sort of environment gets you emotionally closed off in the long run." N4

#### **Subtheme 3.2: Psychological Impact of Being Silenced or Ignored**

"I remember distinctly complaining about a patient's increasing CO<sub>2</sub> levels and recommending a change in ventilation strategy. Nobody listened until nearly too late. That sense of helplessness—that emotional toll—lingers." RT3

"Even as a doctor, sometimes your contribution is disregarded by senior doctors. It's mentally draining when you know that your ideas are only respected for your position and not your experience." P2

"When I get ignored on rounds, it makes me wonder if it's worth saying anything in the first place. That defeat in your own mind becomes something you do daily, and it impacts your own mental health." N2

### **Subtheme 3.3: Fear of Repercussion or Judgment**

"There are moments where you want to voice something but keep quiet out of fear—what if I offend someone above me? That fear of being scolded or mocked creates mental tension." R1

"I have witnessed junior staff refrain from reporting issues because they do not want to be considered 'too loud' or 'difficult.' That fear stops earlier intervention—and sometimes it loses the patient." R3

### **Subtheme 3.4: Emotional Disconnect Due to Power Imbalance**

"When the hierarchy is too rigid, actual collaboration is impossible. You feel like you're just going through the motions rather than practicing medicine as a team. It creates emotional detachment from the people you work with." P3

"When we're not treated as equals, we start to pull back emotionally. You do your work, but the feeling of shared responsibility is lost. That impacts not just care quality but your emotional investment in the work." R4

These results suggest that power dynamics and psychological unease regarding hierarchical structures can adversely affect successful Interprofessional practice, particularly where action speed is called for.

## **Theme 4: Institutional Practice and Training as Drivers of Collaboration**

This theme discusses how institutional policies, formal training, simulation exercises, and institutional support systems foster and maintain interprofessional collaboration in NICU environments. Participants highlighted that in addition to individual willingness, institutional investment in collaborative culture—through formal training, policies, and everyday practice norms—enables professionals to work in synchronized and respectful manners.

### **Subtheme 4.1: Simulation-Based Training Builds Team Trust and Coordination**

Simulation emerged as a cornerstone for practicing collaboration under pressure. Physicians, nurses, and RTs reported that mock drills and structured response simulations improve communication flow, define roles, and instill collective confidence during clinical emergencies.

"Our hospital regularly conducts neonatal code blue simulations. These sessions allow us to rehearse who does what, and we've seen real-life improvements in response times." – P1.

"I am less stressed during emergencies nowadays since I have rehearsed them countless times in our simulation laboratories. We already understand our responsibilities and how to assist each other." – N1.

"When we practice NICU resuscitations, I do exactly what I would do in an actual case. It helps clarify the way RTs communicate with nurses and doctors in real-time." – RT1.

"Practice sessions are a good way to break the ice. We all sit down, and then afterward we debrief and go over what worked or not—it's a tool for growth." – P2

### **Subtheme 4.2: Orientation and Ongoing Education Foster Collective Understanding**

Participants observed that from the time of induction, interprofessional education is highlighted. Training curricula have modules that familiarize professionals with one another's roles and develop mutual respect.

"Part of our residency involved interdisciplinary orientation. Learning what the nurses and RTs can do helped us have a solid basis for working together." – P3

"Our nursing orientation incorporated sessions with physicians and respiratory therapists. It was worthwhile—we knew early on that patient care is a team effort." – N2.

"I liked how our hospital organized learning around shared responsibilities—not only RT work. That encourages respect and smoother team flow." – RT2

"We did have a module on interprofessional communication. It made me feel braver to speak up in rounds and clinical handovers." – N3.

### **Subtheme 4.3: Institutional Protocols Reinforce Consistent Collaboration**

A number of professionals reported that collaboration is integrated into their institutions' clinical processes—particularly through daily rounds, shared documentation, and escalation procedures.

"Each morning, our NICU rounds involve all team members—consultants, nurses, RTs, and pharmacists. It's an institutional standard, and it promotes open communication." – P4.

"We have a standardized handoff tool that's shared across disciplines. So when I report concerns, the physician or RT knows the context right away." – N4.

"The escalation protocol requires that any RT who notices a change inform both the doctor and nurse. That simplicity prevents delay or blame." – RT3

"Joint documentation platforms ensure smooth working. I document ventilator notes knowing both doctor and nurse will read and act accordingly." – RT4

### **Subtheme 4.4: Leadership Support and Culture Define Interprofessional Behavior**

Participants emphasized that strong departmental leadership and administrative support for team-based care help cultivate respectful interprofessional practices.

"Our head of department actively promotes interprofessional case reviews. It sends a message that everyone's voice is valued." – P2

"We're encouraged to attend joint debriefs after critical incidents. That space to reflect together improves trust and teamwork." – N2.

"Nyasho never singles out one profession for mistakes. It's always about system improvement and team learning. That's empowering." – RT3

"We even have interprofessional recognition boards. Seeing my input valued alongside doctors and nurses reinforces equality." – N1.

## **Synthesis of Findings**

This theme indicates that teamwork flourishes not only on individual capability but also on institutional commitment to systematic practice. The results indicate that simulation and joint training are essential to enhance team performance and confidence. Orientation programs that introduce professional roles result in early respect and understanding. Protocols and standard operating procedures institutionalize collaborative behavior. Leadership and administration are key to developing team-based values and accountability. Institutional training is not merely educational—it is transformational, establishing a work culture in which each professional feels ready, respected, and committed to the mission of optimal neonatal care.

## **Theme 5: Emotional and Psychological Consequences of Poor Collaboration**

This theme reflects the intense emotional stress and psychological cost incurred by healthcare professionals when Interprofessional collaboration fails. Participants described feeling moral distress, helplessness, burnout, and self-doubt— particularly in high-risk neonatal environments where patient lives hang in the balance depending on timely, coordinated action. Poor collaboration not only jeopardizes patient outcomes but leaves professionals with long-lasting emotional scars.

### **Subtheme 5.1: Personal Guilt and Moral Distress Following Adverse Results**

"When we don't receive timely or missing critical feedback from the RT or nursing staff, it puts an enormous burden on us as decision-makers. You feel isolated in your duty, and it provides you with a nagging concern—what if I missed something another person might have picked up or reported on time?" – P4.

"I extubated a patient one time with the belief that they were stable, but I learned later that the RT did have problems that were not effectively communicated. That breakdown in

communication gets to you because ultimately the patient was injured. It's an isolated burden to carry." – P1.

"Frustrated and helpless after experiencing a decline which could have been avoided with smooth collaboration, The emotional burn-out persists. Wondering when you get home—if I did everything I could to help, though you know it was a problem with the system?" – N1.

"As an RT, it's frustrating when your clinical input is ignored. I remember pointing out indicators of worsening lung function, and nothing was acted on. The patient suffered a cardiac arrest. That experience still haunts me at night." – RT1

### **Subtheme 5.2: Emotional Isolation and Erosion of Professional Confidence**

"It's heartbreaking when you warn the team early and no one does anything until it's too late. You feel like you're invisible. We do most of our work with patients—yet our voice isn't always heard in interprofessional arenas." – N3.

"Sometimes you know exactly what has to be done, but you are not in the conversation. Feeling excluded hurts—not only professionally, but on a personal level. You are a witness to something you had the knowledge to avoid." – RT4

"There is a feeling of being undervalued when teamwork fails. You start to question your abilities. I have left rooms thinking—did I make any difference at all today? That emotional doubt undermines your confidence." – RT2

"I've cried at the end of shifts. Not because I couldn't do anything, but because nobody listened. That kind of emotional impact gradually wears away your enthusiasm for being a nurse. It makes you scared to complain again." – N1.

### **Subtheme 5.3: Emotional Burnout and Withdrawing From Future Engagements**

"Bad coordination leads to blame games, and that erodes morale. We're already burnt out as doctors—when the internal conflict within the team is there, it just adds to the emotional burnout and reduces trust." – P3.

"When something breaks down in communication, it's the patient who is hurt—emotionally, however, it's all of us. You feel like you're part of a system that failed one person, and that's hard guilt to process." – RT3

"There are moments you would like to rely on the team, but once you have experienced previous instances of poor coordination, you restrain yourself. That caution is due to emotional conflict of past failures—and worse, it can infringe on patient safety too." – P2

"When teamwork fails, it makes a gulf. You start to feel as though you're alone in a battle. That leads to burnout, and worse—it affects how emotionally present you are for the next patient who needs you." – N2.

### **Synthesis of Findings**

These stories show that emotional and psychological damage resulting from ineffective collaboration goes far beyond frustration—it erodes professional identity, inhibits team trust, and ultimately puts future patients at risk through emotional withdrawal and decreased involvement. The repeating factors are:

Moral distress from seeing an avoidable decline.

Frustration from unheard voices and delayed response.

Erosion of self-esteem and confidence, particularly in high-stakes situations.

Burnout and emotional exhaustion, lead to a pattern of disengagement.

Therefore, the evidence highlights that enhancing interprofessional collaboration is not merely an organizational efficiency aim, but a mental health necessity for neonatal care teams.

### **Summary of Findings**

The findings of this study illustrate that Interprofessional collaboration within the NICU is crucial in ensuring timely and effective intervention responses to neonatal deterioration.

Though factors like common vigilance, communication, and institutional support facilitate collaboration, impediments like hierarchical barriers and emotional fatigue during poor collaboration are key hindrances. These findings emphasize the necessity of addressing power dynamics, improved communication strategies, and investment in Interprofessional education to attain a culture of collaborative neonatal care.

## **Thematic Analysis Report: Interprofessional Collaboration in Neonatal Intensive Care Units (NICUs)**

### **Theme 1: Shared Clinical Vigilance and Collective Responsibility**

Participants highlighted the importance of constant, collective focus on patient status across disciplines. The feeling of collective responsibility for patient care assisted teams in detecting early warning signs of deterioration. Nurses, physicians, and respiratory therapists all reported that coordinated vigilance led to safer, timelier decisions.

"It is like we each have a part of the puzzle. When all our inputs are combined, that is when the true picture comes out, particularly with ill neonates." – P2 "Each time I'm able to present an update to the physician and RT simultaneously, we eliminate delays. We are one action unit." – N1 "I am more assured in my findings when the physician and nurse both confirm the trends I am observing." – RT2 "We've prevented severe complications because another person picked up what I did not—the only time this happens is when we are constantly working together." – P1.

### **Theme 2: Collaboration through Effective Communication**

Clear, respectful, and timely communication was described as the foundation of effective collaboration. Practitioners pointed out that when communication flows were set up—both formally (in rounds) and informally (in hallway conversations)—care became better coordinated, and trust grew.

"It's not what you say, but how and when you say it. A polite update at the right moment can alter the course of care." – N4 "When RTs are proactive and report early, it leaves us with more space to act strategically." – P3 "There's a huge difference between being consulted and being told. Collaboration involves listening and being heard." – RT1 "Having handover protocols in place made our coordination so much better—verbal, written, and digital alignment is important." – N2.

### **Theme 3: Hierarchical Barriers and Psychological Challenges**

In spite of good examples of collaboration, most participants admitted that hierarchy tended to stifle open communication. Nurses and respiratory therapists were reluctant to speak up when physicians belittled or overrode their suggestions, creating a sense of professional inferiority.

"I've avoided speaking up sometimes, not because I don't care, but because I don't want to offend someone above me on the chain." – N3 "When the doctor dismisses your input in front of others, it makes you hesitant to ever speak up again." – RT3 "Hierarchy can be subtle but powerful. It impacts whose voice gets heard first—and sometimes, only that voice is important." – N1 "Even if my observation is true, there are times I'm not heard. That discouragement is real and damaging." – RT4

### **Theme 4: Institutional Training and Practice as Drivers of Collaboration**

Participants attributed good collaboration to institutional-level programs like interprofessional simulations, joint ward rounds, and cross-training. Where training emphasized mutual respect and understanding of one another's roles, collaboration improved considerably.

"The most effective collaborations I've experienced were following after we trained together—RTs, nurses, and physicians being able to comprehend one another's workflow." – P1 "Simulation-based training opened our eyes to how much we rely on each other—it was an eye-opener." – RT2 "When departments value teamwork during orientation and education, it

translates to more effective day-to-day partnerships." – N2 "Institutional support makes a difference—if collaboration is exemplified from the top, it becomes the standard at the bedside." – P4.

### **Theme 5: Emotional and Psychological Consequence of Ineffective Collaboration**

Participants disclosed that ineffective collaboration frequently resulted in considerable emotional distress. Helplessness, burnout, guilt, and moral distress were prevalent—especially when avoidable patient deterioration was associated with communication failure.

"When we don't receive timely or missing critical feedback, you sense nagging fear—what if I missed something?" – P4 "It's tragic when you alert the team and nobody does anything. You feel invisible." – N3 "I once raised deteriorating lungs. Nothing changed. The patient coded. That experience still lingers." – RT1 "Being excluded from crucial decisions makes you feel powerless—but the fault still lies with you." – P1 "I've cried after shifts, not due to workload, but because nobody listened. It undermines your confidence." – N1 "When bad collaboration is repeated, you withhold. That emotional reserve hinders safety." – P2 "It creates a divide—you're in a war zone, but isolated. Burnout increases, as does care quality." – N2 "When you're unheard, you wonder if you're valuable. You leave wondering—did I help today at all?" – RT2

### **Conclusion**

The findings indicate that Interprofessional teamwork in NICUs is crucial not only for clinical effectiveness but also for the professional and emotional well-being of healthcare professionals. Successful collaboration depends on mutual vigilance, effective communication, egalitarian collaboration, and supportive organizational practices. In contrast, its failure leads to psychological tension, moral distress, and reduced patient safety. Interventions in the future should address communication training, awareness of hierarchy, and system-level support in a comprehensive manner to ensure resilient, collaborative NICU environments.

### **Discussion**

The aim of this study was to examine the Interprofessional collaboration dynamics among nurse doctors, and respiratory therapists, especially within neonatal intensive care unit (NICU) environments. The findings emphasize the need for quality teamwork and communication among healthcare professionals to ensure patients' best possible outcomes. The main findings of this study, their implications, and how they fit into the literature will be discussed in this chapter.

#### **1. Interprofessional Collaboration and its Impact on Patient Care**

The findings of this research highlight the central importance of Interprofessional collaboration in enhancing patient care. In line with previous research, the findings confirm that nurses, physicians, and respiratory therapists collaboration is directly linked to improved decision-making, improved patient safety, and overall better clinical outcomes. Research conducted by Kaifi, Alotaibi, and Ibrahim (2021) and Boev, Xia, and Landers (2022) has also produced similar findings, illustrating that effective collaboration and respect between the two professions in working environments result in improved delivery of care and fewer medical errors. Specifically, effective communication between the two professions was found to be a key determinant of the success of patient care interventions.

These results agree with the study by Gonzalo et al. (2014), which stated that positive attitudes toward interprofessional communication between doctors and nurses enhance patient care quality. The respondents in the current study observed that when they received support from colleagues in both roles, patient outcomes were significantly improved, and the process of caring became more efficient. This underscores the importance of developing effective communication and collaborative competencies in both medical and nursing education.



## **2. Barriers to Interprofessional Collaboration**

Despite the positive effect of collaboration, there were barriers to effective interprofessional collaboration. One of the main challenges found in this study was the existence of hierarchical systems and role confusion. Obstacles are by Matusov, Garcia, and Harrison (2022), documented that traditional power structures and vagueness over role expectations were common obstacles for effective communication and teamwork. Nurses, particularly in high-stakes settings such as the NICU, felt not valued and uncertain about complaining about their concerns to physicians, and respiratory therapists who might in turn affect patient outcomes. This impediment is corroborated in studies by Aghamohammadi et al. (2019), who determined that mistrust and power conflicts between nurses physicians, and respiratory therapists in ICUs lead to communication failures and ineffective collaboration. Additionally, a similar study pointed out that poor definition of roles and responsibilities may cause miscommunication and delayed care, therefore stressing the necessity for defined team dynamics and clearer role definition.

## **3. Enablers of Effective Collaboration**

In addition, the study also found several facilitators of Interprofessional collaboration, many of which were similar to findings in recent research. Respect and trust were continually emphasized by participants as central to achieving effective collaboration among nurses, physicians and respiratory therapists. Dyess, Sherman, Opalinski, and Eggenberger (2019) also stressed mutual respect in enhancing teamwork and patient care. When the two professions have respect for each other's knowledge and contributions, collaboration is smoother, and care delivery is optimized. Another key facilitator found was the availability of structured interprofessional education (IPE). The respondents in this study reported that team-based care training programs were key to enhancing their collaboration skills. This is corroborated by Homeyer et al. (2018), who discovered that interprofessional education not only enhances knowledge and favorable attitudes toward collaboration but also improves team functioning in clinical practice. Organized IPE programs assist learners in appreciating the specific roles of each profession, and this enhances a sense of varied skills and attitudes, hence enhancing teamwork.

## **4. Leadership and Its Role in Encouraging Collaboration**

Successful leadership of healthcare teams is an important factor in encouraging interprofessional collaboration. The participants in this study emphasized that supportive leadership that encourages open communication and respect is essential in facilitating collaboration between nurses physicians and respiratory therapists. Yamamoto (2022) and O'Leary et al. (2015) also pinpointed leadership as a critical facilitator of successful teamwork, highlighting that effective leadership promotes a culture of trust and collaboration. Leaders who are empathetic and encourage active collaborative decision-making create an environment where members feel valued and empowered to bring their expertise, ultimately enhancing patient outcomes. In addition, leadership in overcoming hierarchical barriers was highlighted in this research. By being keen on collaboration and by making inclusive decision-making processes, power disparities and role confusions can be minimized. This aligns with the work of Dyess et al. (2019), who made the case that formal leadership programs can enhance team dynamics and collaboration.

## **Implications for Practice**

The results of this research have major implications for practice in clinical settings, especially NICUs. To maximize patient care, healthcare organizations need to put in place the establishment of collaborative practices as a priority. This involves providing training programs that encourage communication skills, respect, and shared decision-making. In addition, the establishment of unambiguous role definitions and measures to confront

hierarchical power relationships can be useful in overcoming barriers to successful collaboration. Moreover, incorporating leadership training into the professional education of nurses and physicians is critical. Leaders who promote Interprofessional collaboration and foster a culture of inclusivity will improve teamwork and provide improved patient outcomes. Lastly, healthcare organizations need to continue investing in IPE programs that encourage nurses and physicians to collaborate effectively from the beginning of their careers.

### Limitations and Future Research

Although this research gives insightful information on Interprofessional collaboration, it has limitations. The sample was based on a particular geographic location, which might not reflect the experiences of nurses, physicians, and respiratory therapists in other health systems. More research is needed to examine Interprofessional collaboration in various regions and health systems to provide an understanding of how cultural and institutional forces shape teamwork. In addition, the research depended on self-reporting data, which can be prone to bias. Future studies could include observation or mixed-methods studies to better understand collaboration dynamics among nurses and physicians.

### Conclusion

Overall, this research supports the imperative of Interprofessional collaboration in improving patient care outcomes. The results illustrate that effective communication, respect for each other, and collaborative decision-making are crucial to enhancing collaboration between physicians and nurses. Even with the challenges presented by power relationships and role confusion, facilitators like mutual trust, formalized IPE, and positive leadership can overcome these obstacles. Healthcare organizations need to make Interprofessional collaboration a priority through training, leadership development, and defined roles to maximize patient care and enhance healthcare outcomes.

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