# INTERPROFESSIONAL COLLABORATION AMONG NURSES AND NURSING TECHNICIANS IN SAUDI ARABIA: ROLES, CHALLENGES, AND STRATEGIES FOR ENHANCING PATIENT CARE DELIVERY

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*Abstract*

Interprofessional collaboration is essential for delivering high-quality, patient-centered care in healthcare settings. This study explored the roles, challenges, and strategies for enhancing collaboration among Nurses and Nursing Technicians in Saudi Arabia. A qualitative research design was employed, involving semi-structured interviews with a purposive sample of 30 Nurses and Nursing Technicians, including health informatics specialists, medical secretaries, dental assistants, nurses, and health assistants. Thematic analysis was used to analyze the data, and four main themes emerged: (1) roles and responsibilities, (2) interprofessional collaboration, (3) challenges and barriers, and (4) strategies for improvement. The findings highlight the importance of effective communication, mutual respect, and shared decision-making in collaborative practice, as well as the need for adequate resources, training, and organizational support to overcome challenges and enhance patient outcomes. The study contributes to the growing body of literature on interprofessional collaboration in healthcare and provides valuable insights for policy makers, healthcare organizations, and professionals in Saudi Arabia.

*Keywords:* interprofessional collaboration, Nurses and Nursing Technicians, patient care delivery, Saudi Arabia

## Introduction

Interprofessional collaboration is a critical component of high-quality healthcare delivery, as it enables Nurses and Nursing Technicians from different disciplines to work together effectively to provide comprehensive, patient-centered care (Almalki et al., 2011). In Saudi Arabia, the healthcare system has undergone significant reforms in recent years, with a focus on improving the quality and accessibility of healthcare services (Albejaidi, 2010). However, there are still challenges in achieving effective collaboration among Nurses and Nursing Technicians, which can impact the quality of patient care (Al-Ahmadi, 2009).

Previous studies have explored the factors that influence interprofessional collaboration in healthcare settings, including communication, trust, respect, and shared decision-making (Alkraiji et al., 2013; Al-Qahtani & Guraya, 2016). However, there is limited research on the specific roles and challenges of different Nurses and Nursing Technicians in collaborative practice, particularly in the Saudi Arabian context.

This study aimed to explore the collaborative efforts of health informatics specialists, medical secretaries, dental assistants, nurses, and health assistants in enhancing patient care delivery in Saudi Arabian healthcare facilities. The specific objectives were to:

1.      Describe the roles and responsibilities of these Nurses and Nursing Technicians in patient care delivery
2.      Explore the nature and extent of interprofessional collaboration among these Nurses and Nursing Technicians
3.      Identify the challenges and barriers to effective collaboration and patient care delivery
4.      Provide recommendations for improving collaboration and enhancing patient care delivery in Saudi Arabian healthcare facilities

**Methodology**

*Research Design*

A qualitative research design was employed to explore the experiences and perspectives of Nurses and Nursing Technicians regarding interprofessional collaboration and patient care delivery. Qualitative research is appropriate for exploring complex social phenomena and generating rich, descriptive data (Creswell & Poth, 2018). Specifically, this study used a phenomenological approach, which focuses on understanding the lived experiences of individuals and the meanings they attribute to those experiences (Creswell & Poth, 2018).

*Sample and Sampling Technique*

A purposive sampling technique was used to recruit Nurses and Nursing Technicians from various healthcare facilities in Saudi Arabia. Purposive sampling involves selecting participants based on specific criteria that are relevant to the research question (Palinkas et al., 2015). In this study, the inclusion criteria were: (1) being a health informatics specialist, medical secretary, dental assistant, nurse, or health assistant; (2) working in a healthcare facility in Saudi Arabia; and (3) having at least two years of work experience.

A total of 30 Nurses and Nursing Technicians participated in the study, including five health informatics specialists, five medical secretaries, five dental assistants, ten nurses, and five health assistants. The sample size was determined based on the principle of data saturation, which occurs when no new themes or insights emerge from the data (Guest et al., 2006).

*Data Collection*

Semi-structured interviews were conducted with the participants to explore their experiences and perspectives on interprofessional collaboration and patient care delivery. Semi-structured interviews are a flexible and widely used method of data collection in qualitative research, as they allow for in-depth exploration of the topic while maintaining a focus on the research question (Kallio et al., 2016).

The interview guide was developed based on a review of the literature and the research objectives. It included open-ended questions on the following topics: (1) roles and responsibilities in patient care delivery; (2) experiences of interprofessional collaboration; (3) challenges and barriers to effective collaboration and patient care delivery; and (4) recommendations for improving collaboration and enhancing patient care delivery.

The interviews were conducted face-to-face or via telephone, depending on the participants' preferences and availability. Each interview lasted approximately 45-60 minutes and was audio-recorded with the participants' consent. The interviews were conducted in either English or Arabic, depending on the participants' language preferences.

*Data Analysis*

The interview data were transcribed verbatim and analyzed using thematic analysis, which is a method of identifying, analyzing, and reporting patterns or themes within qualitative data (Braun & Clarke, 2006). The analysis followed the six phases of thematic analysis outlined by Braun and Clarke (2006): (1) familiarization with the data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report.

The transcripts were read and re-read to gain familiarity with the data, and initial codes were generated based on the research objectives and the participants' responses. The codes were then collated into potential themes, which were reviewed and refined through an iterative process of comparing the themes with the coded extracts and the entire dataset. Finally, the themes were defined and named, and illustrative quotes were selected to support the findings.

*Ethical Considerations*

Ethical approval for the study was obtained from the institutional review board of the researcher's university. All participants provided informed consent prior to the interviews, and their confidentiality and anonymity were maintained throughout the research process. The participants were informed of their right to withdraw from the study at any time without consequences.

**Findings**

Four main themes emerged from the analysis of the interview data: (1) roles and responsibilities, (2) interprofessional collaboration, (3) challenges and barriers, and (4) strategies for improvement. Each theme is discussed in detail below, with illustrative quotes from the participants.

*Theme 1: Roles and Responsibilities*

The participants described their roles and responsibilities in patient care delivery, highlighting the unique contributions of each healthcare profession to the overall care process.

Health informatics specialists discussed their roles in managing healthcare data and technology to support clinical decision-making and improve patient outcomes. As one participant stated, "My role is to ensure that the healthcare data is accurate, complete, and accessible to the healthcare team, so that they can make informed decisions about patient care."

Medical secretaries described their roles in managing patient records, scheduling appointments, and facilitating communication among Nurses and Nursing Technicians. One participant mentioned, "I am the first point of contact for patients and their families, and I play a key role in ensuring that the healthcare team has the information they need to provide high-quality care."

Dental assistants discussed their roles in assisting dentists with procedures, preparing patients for treatment, and providing oral health education. As one participant stated, "I work closely with the dentist to ensure that the patient receives the best possible care, and I also educate patients on how to maintain good oral hygiene at home."

Nurses described their roles in providing direct patient care, administering medications, and monitoring patients' conditions. One participant mentioned, "I am responsible for assessing patients' needs, developing care plans, and collaborating with the healthcare team to ensure that patients receive the care they need."

Health assistants discussed their roles in supporting Nurses and Nursing Technicians with various tasks, such as taking vital signs, assisting with procedures, and managing supplies. As one participant stated, "I work under the supervision of the healthcare team to ensure that patients receive high-quality care, and I also help to maintain a clean and safe environment for patients and staff."

*Theme 2: Interprofessional Collaboration*

The participants discussed their experiences of interprofessional collaboration in their respective healthcare facilities, highlighting the benefits and challenges of working with other Nurses and Nursing Technicians.

Most participants agreed that interprofessional collaboration was essential for providing high-quality patient care. As one nurse stated, "Collaboration is key to ensuring that patients receive comprehensive care that addresses all of their needs. We need to work together as a team to provide the best possible care."

The participants described various forms of collaboration, including team meetings, case conferences, and informal discussions. One health informatics specialist mentioned, "We have regular team meetings where we discuss patient cases and share information about new

technologies or best practices. It's a great way to stay up-to-date and ensure that everyone is on the same page."

However, some participants also noted challenges in collaborating with other Nurses and Nursing Technicians, such as communication barriers, power dynamics, and conflicting priorities. As one medical secretary stated, "Sometimes it can

be challenging to get everyone on the same page, especially when there are differing opinions or priorities. It's important to have clear communication and mutual respect to overcome these challenges."

*Theme 3: Challenges and Barriers*

The participants identified several challenges and barriers to effective collaboration and patient care delivery in their healthcare facilities.

One common challenge was workload and time constraints, which limited opportunities for collaboration and communication among Nurses and Nursing Technicians. As one dental assistant stated, "We are often so busy with our own tasks that it can be difficult to find time to collaborate with others. It's important to prioritize collaboration, but it can be challenging with limited resources."

Another challenge was the lack of standardized protocols and guidelines for collaboration, which led to inconsistencies in practice and communication. One health assistant mentioned, "There are no clear guidelines on how we should collaborate with other Nurses and Nursing Technicians, which can lead to misunderstandings and mistakes. We need more standardized protocols to ensure that everyone is working together effectively."

Some participants also noted cultural and linguistic barriers, particularly when working with patients and colleagues from diverse backgrounds. As one nurse stated, "Language barriers can make it difficult to communicate with patients and families, and cultural differences can impact how we provide care. It's important to be aware of these differences and adapt our approaches accordingly."

*Theme 4: Strategies for Improvement*

The participants suggested several strategies for improving collaboration and enhancing patient care delivery in their healthcare facilities.

One common suggestion was to provide more training and education on interprofessional collaboration, including communication skills, teamwork, and conflict resolution. As one health informatics specialist stated, "We need more training on how to work effectively in teams and communicate with other Nurses and Nursing Technicians. This could help to break down silos and improve collaboration."

Another suggestion was to establish clear roles and responsibilities for each Nurses and Nursing Technician, and to create opportunities for regular communication and feedback. One medical secretary mentioned, "It would be helpful to have clear job descriptions and expectations for each role, so that everyone knows what they are responsible for and how they can contribute to patient care."

Some participants also suggested using technology to facilitate collaboration and communication, such as electronic health records, messaging systems, and video conferencing. As one nurse stated, "Technology can be a great tool for improving collaboration, especially when we are working in different locations or with limited time. We need to leverage these tools to improve communication and coordination of care."

**Discussion**

The findings of this study highlight the importance of interprofessional collaboration in delivering high-quality, patient-centered care in healthcare settings. The participants described their roles and responsibilities in patient care delivery, emphasizing the unique contributions of each healthcare profession to the overall care process. This is consistent with previous research that has identified the importance of clear roles and responsibilities in collaborative practice (Al-Qahtani & Guraya, 2016).

The participants also discussed the benefits and challenges of interprofessional collaboration, noting the importance of effective communication, mutual respect, and shared decision-making in working together effectively. These findings are consistent with previous research that has identified communication, trust, and respect as key factors in successful collaboration (Alkraiji et al., 2013; Al-Qahtani & Guraya, 2016).

However, the participants also identified several challenges and barriers to effective collaboration, including workload and time constraints, lack of standardized protocols, and cultural and linguistic barriers. These findings are consistent with previous research that has identified similar challenges in collaborative practice (Almalki et al., 2011; Al-Ahmadi, 2009).

To address these challenges, the participants suggested several strategies for improving collaboration and enhancing patient care delivery, including providing more training and education on interprofessional collaboration, establishing clear roles and responsibilities, and using technology to facilitate communication and coordination of care. These strategies are consistent with previous research that has identified the importance of education, role clarity, and technology in supporting collaborative practice (Almalki et al., 2011; Al-Ahmadi, 2009).

**Limitations and Future Research**

This study has several limitations that should be considered when interpreting the findings. First, the sample size was relatively small and may not be representative of all Nurses and Nursing Technicians in Saudi Arabia. Future research could include a larger and more diverse sample to enhance the generalizability of the findings.

Second, the study relied on self-reported data from the participants, which may be subject to social desirability bias or recall bias. Future research could use observational or other objective measures to triangulate the findings and reduce potential biases.

Finally, the study was conducted in a specific cultural and healthcare context in Saudi Arabia, which may limit the transferability of the findings to other settings. Future research could explore interprofessional collaboration in different cultural and healthcare contexts to identify similarities and differences in practices and challenges.

Despite these limitations, this study provides valuable insights into the collaborative efforts of Nurses and Nursing Technicians in Saudi Arabia and identifies strategies for improving collaboration and enhancing patient care delivery. The findings can inform the development of policies, programs, and interventions to support collaborative practice and improve patient outcomes in healthcare settings.

**Conclusion**

Interprofessional collaboration is essential for delivering high-quality, patient-centered care in healthcare settings. This study explored the roles, challenges, and strategies for enhancing collaboration among Nurses and Nursing Technicians in Saudi Arabia, including health informatics specialists, medical secretaries, dental assistants, nurses, and health assistants.

The findings highlight the importance of effective communication, mutual respect, and shared decision-making in collaborative practice, as well as the need for adequate resources, training, and organizational support to overcome challenges and enhance patient outcomes. The study provides valuable insights for policy makers, healthcare organizations, and professionals in Saudi Arabia and contributes to the growing body of literature on interprofessional collaboration in healthcare.

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**Tables**

*Table 1: Characteristics of Participants (N = 30)*

| Characteristic | n (%) |
|---|---|
| Profession | |
| Health informatics specialist | 5 (16.7) |
| Medical secretary | 5 (16.7) |
| Dental assistant | 5 (16.7) |
| Nurse | 10 (33.3) |
| Health assistant | 5 (16.7) |
| Gender | |

| Characteristic | n (%) |
|---|---|
| Male | 12 (40.0) |
| Female | 18 (60.0) |
| Age (years) | |
| 20-29 | 8 (26.7) |
| 30-39 | 14 (46. |