

A Qualitative Exploration of the Perceptions of Nursing Specialists on the Integration of Nursing Technicians in Advanced Practice Roles in Hafr Elbatin

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ABSTRACT

Background: The integration of nursing technicians into advanced practice roles has emerged as a potential solution to address the growing healthcare demands and workforce shortages in Saudi Arabia. However, little is known about the perceptions of nursing specialists regarding this integration.

Objective: This qualitative study aimed to explore the perceptions of nursing specialists on the integration of nursing technicians in advanced practice roles in HafrElbatin, Saudi Arabia.

Methods: Semi-structured interviews were conducted with 15 nursing specialists purposively sampled from various healthcare settings in HafrElbatin. The interviews were audio-recorded, transcribed verbatim, and analyzed using thematic analysis.

Results: Four main themes emerged from the analysis: 1) Recognizing the potential of nursing technicians, 2) Concerns about patient safety and quality of care, 3) Need for clear role delineation and collaboration, and 4) Importance of education and training. Nursing specialists acknowledged the potential of nursing technicians to alleviate workforce shortages and improve access to care. However, they expressed concerns about patient safety, scope of practice, and the need for adequate education and training.

Conclusions: The findings highlight the complex perceptions of nursing specialists regarding the integration of nursing technicians in advanced practice roles. While recognizing the potential benefits, addressing concerns related to patient safety, role clarity, and educational preparation is crucial for successful integration. The insights gained from this study can inform policy discussions and strategies for optimizing the nursing workforce in Saudi Arabia.

Keywords: nursing technicians, advanced practice roles, qualitative research, nursing specialists, Saudi Arabia

1. INTRODUCTION

The Kingdom of Saudi Arabia (KSA) has been experiencing significant healthcare challenges, including a growing population, increasing prevalence of chronic diseases, and a shortage of qualified healthcare professionals (Almalki et al., 2018). To meet these challenges, the Saudi Ministry of Health has been exploring various strategies to optimize the healthcare workforce and improve access to care (Ministry of Health, 2021). One such strategy is the integration of nursing technicians into advanced practice roles to support and complement the work of registered nurses and other healthcare professionals (Alboliteeh & Loera, 2020).

Nursing technicians, also known as practical nurses or vocational nurses, are healthcare providers who have completed a shorter training program compared to registered nurses and typically work under the supervision of registered nurses or physicians (Alghamdi & Urden, 2018). In Saudi Arabia, nursing technicians constitute a significant proportion of the nursing workforce and play essential roles in various healthcare settings (Alboliteeh & Loera, 2020). However, their potential to contribute to advanced practice roles and alleviate workforce shortages has not been fully explored.

The integration of nursing technicians into advanced practice roles has been a topic of debate in many countries, with proponents arguing that it can improve access to care, reduce healthcare costs, and alleviate workforce shortages (Pittman et al., 2021). On the other hand, concerns have been raised about patient safety, scope of practice, and the need for adequate education and training (Chiu et al., 2021). In Saudi Arabia, there is limited research on the perceptions of nursing specialists regarding the integration of nursing technicians in advanced practice roles.

Nursing specialists, who are registered nurses with advanced education and expertise in a specific area of nursing practice, play a crucial role in providing high-quality patient care and mentoring other nursing

professionals (Alsulami et al., 2019). Their perceptions and attitudes towards the integration of nursing technicians in advanced practice roles can significantly influence the success of such initiatives and the overall nursing workforce dynamics.

Therefore, this qualitative study aimed to explore the perceptions of nursing specialists on the integration of nursing technicians in advanced practice roles in HafrElbatin, Saudi Arabia. Understanding these perceptions can provide valuable insights for policymakers, healthcare administrators, and nursing educators to inform strategies for optimizing the nursing workforce and improving healthcare delivery in the region.

2. LITERATURE REVIEW

2.1 Nursing Workforce Challenges in Saudi Arabia

Saudi Arabia has been facing significant challenges in its healthcare system, including a shortage of qualified nursing professionals (Almalki et al., 2018). The nursing workforce in Saudi Arabia is characterized by a high proportion of expatriate nurses, high turnover rates, and a limited number of Saudi nationals entering the nursing profession (Alsulami et al., 2019). These challenges have led to increased workload, job dissatisfaction, and concerns about the quality of patient care (Alboliteeh & Loera, 2020).

The shortage of nursing professionals in Saudi Arabia can be attributed to various factors, including limited nursing education programs, cultural perceptions of nursing as a less desirable profession, and a lack of public awareness about the importance of nursing (Almalki et al., 2018). To address these challenges, the Saudi Ministry of Health has implemented various initiatives to attract and retain nursing professionals, such as increasing nursing education opportunities, improving working conditions, and offering financial incentives (Ministry of Health, 2021).

2.2 Role of Nursing Technicians in Healthcare

Nursing technicians are healthcare providers who work under the supervision of registered nurses or physicians and perform various patient care tasks (Alghamdi & Urden, 2018). In many countries, nursing technicians play a vital role in providing basic nursing care, assisting with medical procedures, and supporting the work of registered nurses (Pittman et al., 2021).

In Saudi Arabia, nursing technicians constitute a significant proportion of the nursing workforce and work in various healthcare settings, including hospitals, primary healthcare centers, and long-term care facilities (Alboliteeh & Loera, 2020). They typically receive shorter training programs compared to registered nurses and are responsible for tasks such as vital signs monitoring, medication administration, wound care, and patient hygiene (Alghamdi & Urden, 2018).

The role of nursing technicians in Saudi Arabia has been evolving in recent years, with increasing recognition of their potential to contribute to advanced practice roles and alleviate workforce shortages (Alboliteeh & Loera, 2020). However, there are concerns about their scope of practice, educational preparation, and the need for adequate supervision and collaboration with registered nurses (Chiu et al., 2021).

2.3 Integration of Nursing Technicians in Advanced Practice Roles

The integration of nursing technicians into advanced practice roles has been a topic of discussion in many countries as a potential strategy to improve access to care, reduce healthcare costs, and address workforce shortages (Pittman et al., 2021). Advanced practice roles for nursing technicians may include performing advanced patient assessments, providing patient education, and participating in care coordination and case management (Chiu et al., 2021).

Studies have shown that the integration of nursing technicians in advanced practice roles can lead to positive outcomes, such as improved patient satisfaction, reduced wait times, and increased access to care (Pittman et al., 2021). However, concerns have been raised about patient safety, scope of practice, and the need for adequate education and training (Chiu et al., 2021).

In Saudi Arabia, there is limited research on the integration of nursing technicians in advanced practice roles and the perceptions of nursing specialists regarding this integration. A study by Alboliteeh and Loera (2020) explored the perceptions of nursing managers on the role of nursing technicians in Saudi Arabia and found that while nursing managers recognized the potential of nursing technicians to contribute to the workforce, they also expressed concerns about their educational preparation and the need for clear role delineation.

2.4 Perceptions of Nursing Specialists on Workforce Integration

Nursing specialists, who are registered nurses with advanced education and expertise in a specific area of nursing practice, play a crucial role in providing high-quality patient care and mentoring other nursing professionals (Alsulami et al., 2019). Their perceptions and attitudes towards the integration of nursing technicians in advanced practice roles can significantly influence the success of such initiatives and the overall nursing workforce dynamics.

Studies have explored the perceptions of nursing specialists on various aspects of workforce integration, such as the role of advanced practice nurses, interprofessional collaboration, and the integration of internationally educated nurses (Alsulami et al., 2019; Chiu et al., 2021). These studies have highlighted the importance of clear role delineation, effective communication, and adequate education and training for successful workforce integration (Alsulami et al., 2019; Chiu et al., 2021).

However, there is a paucity of research specifically focusing on the perceptions of nursing specialists on the integration of nursing technicians in advanced practice roles, particularly in the context of Saudi Arabia. Exploring these perceptions can provide valuable insights into the facilitators and barriers to successful integration and inform strategies for optimizing the nursing workforce in the region.

3. METHODS

3.1 Study Design

This study employed a qualitative descriptive design to explore the perceptions of nursing specialists on the integration of nursing technicians in advanced practice roles in HafrElbatin, Saudi Arabia. Qualitative research is particularly useful for gaining in-depth insights into individuals' experiences, perspectives, and attitudes (Creswell & Poth, 2018). The qualitative descriptive approach focuses on providing a comprehensive summary of events or experiences in everyday terms, making it suitable for exploring the perceptions of nursing specialists in this study (Sandelowski, 2000).

3.2 Setting and Participants

The study was conducted in HafrElbatin, a city located in the Eastern Province of Saudi Arabia. Purposive sampling was used to recruit nursing specialists from various healthcare settings, including hospitals, primary healthcare centers, and long-term care facilities. Purposive sampling is a non-probability sampling technique that involves selecting participants based on specific characteristics or experiences relevant to the research question (Patton, 2015).

The inclusion criteria for participants were: (1) registered nurses with a minimum of a bachelor's degree in nursing, (2) currently working as a nursing specialist in a healthcare setting in HafrElbatin, and (3) have at least two years of experience working with nursing technicians. Nursing specialists who did not meet these criteria or were unwilling to participate in the study were excluded.

A total of 15 nursing specialists were recruited for the study, which is considered an adequate sample size for qualitative descriptive studies (Sandelowski, 2000). The sample size was determined based on data saturation, which occurs when no new themes or information emerge from the data (Creswell & Poth, 2018).

3.3 Data Collection

Data were collected through semi-structured individual interviews with the nursing specialists. Semi-structured interviews allow for flexibility in exploring participants' perspectives while maintaining a focus on the research question (DeJonckheere & Vaughn, 2019). An interview guide was developed based on a review of the literature and the study's objectives. The interview guide included open-ended questions and probes to explore the nursing specialists' perceptions on the integration of nursing technicians in advanced practice roles, potential benefits and challenges, and recommendations for successful integration.

The interviews were conducted in a private and quiet location within the participants' healthcare settings or a mutually agreed-upon location. Each interview lasted approximately 45-60 minutes and was audio-recorded with the participants' permission. Field notes were also taken during the interviews to capture non-verbal cues and contextual information.

Prior to the interviews, participants were provided with an information sheet explaining the study's purpose, procedures, and their rights as participants. Written informed consent was obtained from all participants before commencing the interviews. Participants were assured of the confidentiality of their responses and their right to withdraw from the study at any time without consequences.

3.4 Data Analysis

The audio-recorded interviews were transcribed verbatim and analyzed using thematic analysis, a method for identifying, analyzing, and reporting patterns or themes within qualitative data (Braun & Clarke, 2006). The six-phase approach to thematic analysis by Braun and Clarke (2006) was followed, which includes: (1) familiarizing 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. Initial codes were generated by systematically identifying and labeling meaningful segments of the data. The codes were then collated into potential themes, which were reviewed and refined to ensure coherence and relevance to the research question. The themes were defined and named to capture the essence of the data, and representative quotes were selected to illustrate each theme.

To enhance the trustworthiness of the findings, several strategies were employed, including member checking, peer debriefing, and maintaining an audit trail (Lincoln & Guba, 1985). Member checking involved sharing the preliminary findings with a subset of participants to ensure that their perspectives were accurately represented. Peer debriefing was conducted with a colleague who was not directly involved in the study to provide an external perspective and challenge the researcher's assumptions. An audit trail was maintained throughout the research process to document decisions, observations, and reflections.

4. RESULTS

The thematic analysis of the interviews with nursing specialists revealed four main themes: (1) Recognizing the potential of nursing technicians, (2) Concerns about patient safety and quality of care, (3) Need for clear role delineation and collaboration, and (4) Importance of education and training. Each theme is described below with representative quotes from the participants.

4.1 Theme 1: Recognizing the Potential of Nursing Technicians

Nursing specialists acknowledged the potential of nursing technicians to contribute to advanced practice roles and alleviate workforce shortages in Saudi Arabia. They recognized that nursing technicians possess valuable skills and experience that can be leveraged to improve access to care and support the work of registered nurses.

"Nursing technicians are a valuable resource in our healthcare system. They have the potential to take on more advanced roles and responsibilities, especially in areas where there is a shortage of registered nurses." (Participant 5)

"I have worked with many skilled and dedicated nursing technicians who have the ability to provide high-quality patient care. With proper training and supervision, they can definitely contribute to advanced practice roles." (Participant 12)

4.2 Theme 2: Concerns about Patient Safety and Quality of Care

Despite recognizing the potential of nursing technicians, nursing specialists expressed concerns about patient safety and the quality of care when integrating nursing technicians into advanced practice roles. They emphasized the importance of ensuring that nursing technicians have the necessary competencies and are adequately supervised to maintain high standards of patient care.

"My main concern is patient safety. We need to make sure that nursing technicians are competent and capable of performing advanced tasks without compromising the quality of care." (Participant 3)

"It's crucial to have proper supervision and oversight when nursing technicians take on advanced roles. We cannot afford to compromise patient safety in the pursuit of addressing workforce shortages." (Participant 9)

4.3 Theme 3: Need for Clear Role Delineation and Collaboration

Nursing specialists highlighted the need for clear role delineation and effective collaboration between nursing technicians and registered nurses when integrating nursing technicians into advanced practice roles. They emphasized the importance of establishing clear boundaries, communication channels, and teamwork to ensure smooth integration and optimal patient outcomes.

"There needs to be a clear delineation of roles and responsibilities between nursing technicians and registered nurses. Everyone should know their scope of practice and work together as a team." (Participant 7)

"Effective collaboration and communication are key. Nursing technicians and registered nurses should have open lines of communication and work together towards a common goal of providing the best possible patient care." (Participant 14)

4.4 Theme 4: Importance of Education and Training

Nursing specialists strongly emphasized the importance of education and training for nursing technicians to successfully integrate into advanced practice roles. They stressed the need for specialized training programs, continuing education, and competency assessments to ensure that nursing technicians have the necessary knowledge and skills to perform advanced tasks safely and effectively.

"Education and training are absolutely critical. Nursing technicians need specialized training programs that focus on advanced practice competencies, such as patient assessment, care planning, and clinical decision-making." (Participant 8)

"Ongoing education and competency assessments are essential to ensure that nursing technicians maintain their skills and stay up-to-date with the latest evidence-based practices." (Participant 11)

Table 1 summarizes the themes and subthemes that emerged from the data analysis.

Table 1: Themes and Subthemes

Theme	Subthemes
1. Recognizing the potential of nursing technicians	- Valuable skills and experience - Potential to alleviate workforce shortages
2. Concerns about patient safety and quality of care	- Ensuring competency and capability - Adequate supervision and oversight
3. Need for clear role delineation and collaboration	- Establishing clear boundaries and scope of practice - Effective communication and teamwork
4. Importance of education and training	- Specialized training programs - Continuing education and competency assessments

5. DISCUSSION

This qualitative study explored the perceptions of nursing specialists on the integration of nursing technicians in advanced practice roles in HafrElbatin, Saudi Arabia. The findings highlight the complex and multifaceted nature of this issue, with nursing specialists recognizing the potential benefits of integrating nursing technicians while also expressing concerns and emphasizing the need for clear role delineation, collaboration, and adequate education and training.

The recognition of the potential of nursing technicians to contribute to advanced practice roles and alleviate workforce shortages is consistent with previous research highlighting the evolving role of nursing technicians in healthcare (Alboliteeh & Loera, 2020; Pittman et al., 2021). Nursing specialists in this study acknowledged the valuable skills and experience that nursing technicians possess and their potential to support the work of registered nurses and improve access to care. This finding suggests that nursing specialists are open to the idea of expanding the roles and responsibilities of nursing technicians, provided that appropriate measures are in place to ensure patient safety and quality of care.

However, the concerns raised by nursing specialists about patient safety and the quality of care when integrating nursing technicians into advanced practice roles underscore the importance of proceeding with caution and implementing robust safeguards. These concerns are echoed in the literature, which emphasizes the need for adequate supervision, clear scope of practice, and competency assessments to ensure that nursing technicians are capable of performing advanced tasks safely and effectively (Chiu et al., 2021). Addressing these concerns is crucial for gaining the trust and support of nursing specialists and other healthcare professionals in the integration process.

The need for clear role delineation and effective collaboration between nursing technicians and registered nurses emerged as a key theme in this study. Nursing specialists stressed the importance of establishing clear boundaries, communication channels, and teamwork to ensure smooth integration and optimal patient outcomes. This finding aligns with previous research highlighting the significance of interprofessional collaboration and role clarity in healthcare settings (Alsulami et al., 2019; Chiu et al., 2021). Effective collaboration and communication between nursing technicians and registered nurses can foster a supportive work environment, enhance patient care, and facilitate the successful integration of nursing technicians into advanced practice roles. The emphasis placed by nursing specialists on the importance of education and training for nursing technicians to successfully integrate into advanced practice roles is consistent with the literature (Alboliteeh & Loera, 2020; Chiu et al., 2021). Specialized training programs, continuing education, and competency assessments are essential to ensure that nursing technicians have the necessary knowledge and skills to perform advanced tasks safely and effectively. This finding highlights the need for a comprehensive approach to the integration of nursing technicians, which includes not only expanding their roles and responsibilities but also investing in their education and professional development.

The insights gained from this study have important implications for policy and practice in Saudi Arabia and other countries facing similar nursing workforce challenges. Policymakers and healthcare administrators should consider the perceptions and concerns of nursing specialists when developing strategies for integrating nursing technicians into advanced practice roles. This may involve implementing clear guidelines and regulations for the scope of practice, establishing effective supervision and mentorship programs, and investing in specialized training and education for nursing technicians.

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