



## EXPLORING THE PERCEPTIONS AND EXPERIENCES OF HEALTH ASSISTANT NURSING TECHNICIANS IN IMPLEMENTING EVIDENCE-BASED PRACTICE IN SAUDI HOSPITALS

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### Abstract

**Background:** Evidence-based practice (EBP) is crucial for delivering high-quality patient care and improving healthcare outcomes. Health assistant nursing technicians (HANTs) play a vital role in implementing EBP in clinical settings. This study aimed to explore the perceptions and experiences of HANTs in implementing EBP in Saudi hospitals.

**Methods:** A qualitative descriptive study was conducted using semi-structured interviews with 20 purposively selected HANTs working in various healthcare settings in Saudi Arabia. The interviews were audio-recorded, transcribed verbatim, and analyzed using thematic analysis.

**Results:** Four main themes emerged from the data: (1) understanding of EBP, (2) barriers to implementing EBP, (3) facilitators of implementing EBP, and (4) strategies to promote EBP implementation. The participants demonstrated a basic understanding of EBP but identified several barriers, including lack of time, inadequate resources, and limited knowledge and skills. The facilitators included organizational support, teamwork, and personal motivation. The participants suggested various strategies to promote EBP implementation, such as providing education and training, involving HANTs in decision-making, and creating a supportive work environment.



**Conclusion:** HANTs in Saudi Arabia face various challenges in implementing EBP, but they also recognize the importance of EBP in improving patient care. Healthcare organizations should provide the necessary support, resources, and training to enable HANTs to effectively implement EBP in their practice. Further research is needed to develop and evaluate interventions to promote EBP among HANTs in Saudi Arabia.

**Keywords:** evidence-based practice, health assistant nursing technicians, perceptions, experiences, qualitative research, Saudi Arabia

## Introduction

Evidence-based practice (EBP) is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients (Sackett et al., 1996). EBP involves integrating individual clinical expertise with the best available external clinical evidence from systematic research (Melnik et al., 2014). The implementation of EBP has been shown to improve patient outcomes, reduce healthcare costs, and enhance the quality of care (Melnik et al., 2016).

Health assistant nursing technicians (HANTs) are an essential part of the healthcare workforce in Saudi Arabia. They work under the supervision of registered nurses and physicians to provide direct patient care, including administering medications, monitoring vital signs, and assisting with activities of daily living (Al-Mutairi et al., 2015). HANTs play a crucial role in implementing EBP in clinical settings, as they are often the frontline staff who deliver care to patients (Al-Mutairi et al., 2016).

Despite the importance of EBP, various barriers to its implementation have been identified in the literature, including lack of time, inadequate resources, and limited knowledge and skills (Bajracharya et al., 2019; Baird & Miller, 2015). These barriers can be particularly challenging for HANTs, who may have limited access to education and training opportunities (Al-Mutairi et al., 2016). To date, few studies have explored the perceptions and experiences of HANTs in implementing EBP, particularly in the context of Saudi Arabia.

Therefore, this study aimed to explore the perceptions and experiences of HANTs in implementing EBP in Saudi hospitals. The specific objectives were to:

1. Explore HANTs' understanding of EBP and its importance in clinical practice.
2. Identify the barriers and facilitators to implementing EBP among HANTs in Saudi hospitals.
3. Explore HANTs' suggestions for strategies to promote EBP implementation in their practice.

The findings of this study can inform the development of interventions and policies to support HANTs in implementing EBP and ultimately improve the quality of patient care in Saudi Arabia.

## Methods

### Study Design

A qualitative descriptive study was conducted using semi-structured interviews to explore the perceptions and experiences of HANTs in implementing EBP in Saudi hospitals. Qualitative research is particularly useful for exploring complex phenomena and generating rich, detailed data about participants' perspectives and experiences (Colorafi & Evans, 2016). The semi-structured interview approach allows for flexibility in exploring participants' responses while ensuring that key topics are covered (DeJonckheere & Vaughn, 2019).

### Setting and Participants

The study was conducted in various healthcare settings in Saudi Arabia, including public and private hospitals, primary healthcare centers, and long-term care facilities. A purposive sampling technique was used to recruit HANTs who met the following inclusion criteria: (1) currently working as a HANT in a healthcare setting in Saudi Arabia, (2) having at least one year of clinical experience, and (3) willing to participate in the study. The sample size was determined by data saturation, which was achieved after interviewing 20 participants.

### Data Collection

Data were collected through individual, face-to-face, semi-structured interviews conducted by the first author (N.F.A.) between January and March 2022. The interviews were conducted in a private room at the participants' workplace or a location of their choice. Each interview lasted approximately 45-60 minutes and was audio-recorded with the participants' permission.

The interview guide was developed based on a review of the literature and the study objectives. The guide included open-ended questions and probes to explore the participants' understanding of EBP, barriers and facilitators to implementing EBP, and suggestions for strategies to promote EBP implementation. The interview guide was piloted with two HANTs who were not included in the final sample, and minor revisions were made based on their feedback.

### Data Analysis

The audio-recorded interviews were transcribed verbatim and analyzed using thematic analysis, as described by Braun and Clarke (2006). The analysis involved six phases: (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 first author (N.F.A.) independently coded the transcripts, and the coding was reviewed and refined by the second author (A.M.R.). The themes were discussed and agreed upon by all authors.

### Trustworthiness

The trustworthiness of the study was ensured through various strategies, including member checking, peer debriefing, and maintaining an audit trail. Member checking involved presenting

the preliminary findings to five participants and obtaining their feedback on the accuracy and completeness of the interpretation. Peer debriefing involved discussing the findings with two experienced qualitative researchers who were not involved in the study. An audit trail was maintained by keeping detailed records of the data collection and analysis processes.

### **Ethical Considerations**

The study was approved by the Institutional Review Board of King Saud bin Abdulaziz University for Health Sciences (IRB No. SP-20/125). Written informed consent was obtained from all participants prior to data collection. The participants were informed of their right to withdraw from the study at any time without any consequences. The participants' confidentiality was maintained by assigning them a unique code and removing any identifying information from the transcripts.

### **Results**

#### **Characteristics of Participants**

Twenty HANTs participated in the study, including 12 females and 8 males. The participants' ages ranged from 24 to 45 years (mean = 32.5 years). The participants had clinical experience ranging from 2 to 20 years (mean = 8.3 years). The participants worked in various healthcare settings, including public hospitals (n = 8), private hospitals (n = 6), primary healthcare centers (n = 4), and long-term care facilities (n = 2). The characteristics of the participants are summarized in Table 1.

Table 1: Characteristics of Participants (N = 20)

<b>Characteristic</b>	<b>n (%)</b>
Gender	
- Male	8 (40%)
- Female	12 (60%)
Age (years)	
- 20-29	6 (30%)
- 30-39	10 (50%)

Characteristic	n (%)
- 40-49	4 (20%)

## Themes

Four main themes emerged from the data: (1) understanding of EBP, (2) barriers to implementing EBP, (3) facilitators of implementing EBP, and (4) strategies to promote EBP implementation. Each theme is described below with illustrative quotes from the participants.

### Theme 1: Understanding of EBP

The participants demonstrated a basic understanding of EBP as the use of research evidence to guide clinical practice. However, their understanding varied in depth and clarity. Some participants described EBP as following guidelines and protocols, while others emphasized the importance of integrating research evidence with clinical expertise and patient preferences.

"Evidence-based practice is using the best available research evidence to make decisions about patient care." (Participant 3)

"EBP is following the guidelines and protocols that are based on research." (Participant 11)

"EBP is not just about using research, but also considering the patient's values and preferences and the clinician's experience." (Participant 7)

Most participants recognized the importance of EBP in improving patient outcomes and reducing healthcare costs. They believed that EBP could help standardize care, reduce variations in practice, and ensure that patients receive the most effective interventions.

"EBP is important because it helps us provide the best possible care to our patients based on scientific evidence." (Participant 15)

"By using EBP, we can reduce the risk of complications and improve patient satisfaction." (Participant 6)

### Theme 2: Barriers to Implementing EBP

The participants identified several barriers to implementing EBP in their practice, including lack of time, inadequate resources, and limited knowledge and skills. Many participants reported that their heavy workload and staff shortages left them little time to search for and appraise research evidence.

"We are always busy with patient care, so we don't have time to read research articles or attend training on EBP." (Participant 18)

"Sometimes we don't have access to computers or the internet to search for evidence." (Participant 9)

Some participants also mentioned that the lack of organizational support and the resistance to change among some colleagues and managers were barriers to implementing EBP.

"Not everyone is supportive of EBP. Some people prefer to do things the way they have always been done." (Participant 13)

"We need more support from our managers and the hospital administration to implement EBP." (Participant 5)

### **Theme 3: Facilitators of Implementing EBP**

The participants identified several facilitators of implementing EBP, including organizational support, teamwork, and personal motivation. Many participants emphasized the importance of having a supportive work environment that values and promotes EBP.

"When the hospital provides us with the resources and training we need, it becomes easier to implement EBP." (Participant 16)

"Having a team that is committed to EBP and works together to find and apply the best evidence is very helpful." (Participant 8)

Some participants also mentioned that their personal motivation and interest in learning were facilitators of implementing EBP.

"I am always eager to learn new things and improve my practice, so I try to read research articles and attend workshops on EBP whenever I can." (Participant 2)

"Seeing the positive impact of EBP on patient outcomes motivates me to continue implementing it in my practice." (Participant 19)

### **Theme 4: Strategies to Promote EBP Implementation**

The participants suggested various strategies to promote EBP implementation among HANTs in Saudi Arabia. The most common suggestions included providing education and training, involving HANTs in decision-making, and creating a supportive work environment.

"We need more training on how to search for and appraise research evidence and how to apply it in practice." (Participant 20)

"Involving us in developing guidelines and protocols based on research evidence would help us feel more invested in EBP." (Participant 14)

"Creating a culture that supports and rewards EBP would encourage more HANTs to adopt it in their practice." (Participant 1)

Some participants also suggested establishing EBP champions or mentors who could provide guidance and support to their colleagues in implementing EBP.

"Having someone who is knowledgeable and passionate about EBP to guide and support us would be very helpful." (Participant 10)

"We could have EBP champions in each unit or department who could lead projects and share best practices with their colleagues." (Participant 4)

### **Discussion**

This study explored the perceptions and experiences of HANTs in implementing EBP in Saudi hospitals. The findings suggest that HANTs have a basic understanding of EBP and recognize its importance in improving patient outcomes, but they face several barriers to implementing it in practice. These barriers include lack of time, inadequate resources, limited knowledge and skills, and lack of organizational support. The findings are consistent with previous studies that have identified similar barriers to EBP implementation among nurses and other healthcare professionals (Bajracharya et al., 2019; Baird & Miller, 2015).

Despite the barriers, the participants also identified several facilitators of implementing EBP, including organizational support, teamwork, and personal motivation. These facilitators highlight

the importance of creating a supportive work environment that values and promotes EBP. Previous studies have shown that organizational support, such as providing resources and training, can enhance healthcare professionals' knowledge, skills, and attitudes towards EBP (Melnik et al., 2016).

The participants suggested various strategies to promote EBP implementation among HANTs in Saudi Arabia, such as providing education and training, involving HANTs in decision-making, and creating a supportive work environment. These strategies are consistent with the recommendations of previous studies that have emphasized the need for multifaceted interventions to promote EBP (Melnik et al., 2016; Saunders & Vehviläinen-Julkunen, 2017). For example, providing education and training can improve HANTs' knowledge and skills in EBP, while involving them in decision-making can enhance their sense of ownership and commitment to EBP.

The findings of this study have important implications for healthcare organizations and policymakers in Saudi Arabia. To promote EBP implementation among HANTs, healthcare organizations should provide the necessary resources, such as access to research databases and training opportunities. They should also create a supportive work environment that values and rewards EBP, such as by establishing EBP champions or mentors and involving HANTs in decision-making. Policymakers should also develop national guidelines and standards for EBP education and training for HANTs and other healthcare professionals.

This study has several strengths, including the use of a qualitative descriptive approach that allowed for an in-depth exploration of HANTs' perceptions and experiences. The study also included participants from various healthcare settings, which enhances the transferability of the findings. However, the study also has some limitations. The sample size was relatively small, and the participants were recruited from a single region in Saudi Arabia, which may limit the generalizability of the findings. Future studies should include larger and more diverse samples from different regions of the country.

## **Conclusion**

This study explored the perceptions and experiences of HANTs in implementing EBP in Saudi hospitals. The findings suggest that HANTs face various barriers to implementing EBP, including lack of time, inadequate resources, and limited knowledge and skills. However, they also recognize the importance of EBP in improving patient outcomes and identified several facilitators, such as organizational support and personal motivation. The participants suggested various strategies to promote EBP implementation, such as providing education and training, involving HANTs in decision-making, and creating a supportive work environment.

Healthcare organizations and policymakers in Saudi Arabia should provide the necessary support and resources to enable HANTs to effectively implement EBP in their practice. This includes providing access to research databases, offering training opportunities, establishing EBP champions or mentors, and involving HANTs in decision-making. Future research should focus on developing and evaluating interventions to promote EBP among HANTs and other healthcare professionals in Saudi Arabia.



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