

Article

Bridging Barriers to Evidence-Based Practice and Knowledge Utilisation: Leadership Strategies in Acute Care Nursing

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Abstract: The implementation of evidence-based practice (EBP) is crucial for improving patient outcomes and healthcare delivery, yet it faces significant challenges in acute care settings due to organisational barriers, resource limitations, and leadership complexities. This study explores how ward managers (WMs) facilitate knowledge utilisation (KU) and promote EBP adoption in these environments. A longitudinal qualitative case study was conducted over eight months in two acute care hospitals in the East Midlands, England. Data were collected through semi-structured interviews with 23 WMs, nonparticipant observations, and document analysis. Thematic analysis was used to identify key findings. Six themes emerged: navigating leadership challenges, overcoming organisational and resource barriers, sustaining EBP through learning networks, integrating technology, tailoring EBP to patient-centred care, and providing emotional support for staff. Hybrid leadership strategies, combining directive and collaborative approaches, were critical in addressing barriers, fostering engagement, and embedding EBP into workflows. Mentorship and resource management also played pivotal roles. The study highlights the need for tailored leadership strategies, innovative resource utilisation, and sustainable learning networks to overcome systemic challenges and promote EBP. These findings provide actionable insights for fostering evidence-informed care environments in resource-constrained acute care settings.



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1. Introduction

Incorporating evidence-based practice (EBP) into nursing care is essential for improving patient outcomes and raising the standard of healthcare delivery [1,2]. EBP refers to the systematic utilisation of the most reliable evidence, integrated with clinical expertise and patient values, to inform healthcare decisions and enhance care quality [3,4]. It also encompasses the practical use of research-informed knowledge to guide nursing interventions and professional practices. Organisations such as the United Kingdom's National Institute for Health and Care Excellence (NICE) and the Nursing and Midwifery Council (NMC) advocate strongly for the integration of EBP in clinical settings, highlighting its importance in improving patient care and enhancing professional accountability [2,3]. However, the implementation of EBP in acute care environments remains uneven, exposing notable gaps in knowledge utilisation, leadership practices, and organisational support structures [5,6].

Knowledge utilisation (KU), defined as the process of translating and applying research evidence into actionable practices, is essential for closing the gap between research

findings and clinical implementation [7]. As a key element of EBP, KU requires healthcare professionals to critically engage with and seamlessly incorporate evidence into routine care. Studies show that KU is a complex process influenced not only by access to evidence but also by contextual, organisational, and leadership factors [8,9]. While knowledge translation, which focuses on adapting evidence for practical use, and implementation science, which examines methods for promoting evidence integration, are vital for advancing EBP, healthcare organisations often face systemic obstacles. These include limited resources, heavy workloads, and resistance from staff, which hinder progress [10–12].

Leadership, particularly from nurse managers (WMs), is critical in driving the successful adoption of EBP. Effective leadership enhances staff engagement, facilitates the dissemination of knowledge, and supports evidence-based care delivery. Transformational leadership, which prioritises empowerment and collaborative decision-making, has been shown to be particularly effective in fostering EBP adoption [13,14]. However, there is limited research on how WMs adjust their leadership approaches to support KU in environments with constrained resources [12]. Furthermore, a deeper understanding is needed of how leadership strategies interact with organisational challenges and impact the sustainability of EBP over time, highlighting a significant gap in the existing literature.

While previous research has identified barriers such as insufficient resources, cultural resistance, and a lack of professional development opportunities [4,8], there has been limited exploration of the specific strategies WMs use to overcome these challenges. Acute care settings in the UK are frequently marked by financial limitations, staff shortages, and competing clinical priorities [5,6]. Innovative strategies, such as partnership collaborations and mentorship initiatives, are seen as critical for advancing organisational efforts to adopt EBP [4,8]. However, the processes through which these approaches are implemented, expanded, and maintained over time remain insufficiently studied.

There is increasing interest in the role of learning networks in sustaining EBP practices. Informal mentorship and structured peer learning initiatives are acknowledged as vital facilitators of knowledge sharing [14,15]. However, their effectiveness in bridging knowledge gaps and reducing staff resistance requires further exploration. Existing research often neglects how learning networks evolve in response to organisational and resource constraints. Likewise, the relationship between leadership styles, the function of learning networks, and their combined impact on EBP implementation remains insufficiently examined, highlighting an important area for further investigation [16].

This study aims to address these gaps by investigating how WMs in acute care settings promote knowledge utilisation and facilitate the integration of EBP. It specifically examines the approaches WMs use to enable KU within EBP frameworks, analyses strategies for overcoming systemic barriers, and assesses the influence of leadership styles and learning networks on the long-term sustainability of EBP practices.

2. Materials and Methods

2.1. Research Design

This study employed a collective qualitative case study design to explore EBP implementation in two acute care hospitals in the East Midlands, England. The collective case study approach, as outlined by Stake [17] and Yin [18], is well suited for examining multiple cases with shared characteristics while enabling cross-case comparisons. A qualitative approach was chosen for its ability to capture complex, context-bound phenomena such as EBP adoption through rich, descriptive data, providing insights into participants' lived experiences, leadership practices, and organisational challenges [19,20].

This design supports an interpretative lens, recognising that EBP adoption is influenced by cultural and contextual factors unique to each organisation [21,22]. By treating

EBP as a context-dependent phenomenon, the approach allowed for a nuanced analysis of how leadership practices and resource availability shape implementation processes.

The study integrated multiple data sources, including interviews, observations, and document analysis, ensuring triangulation to enhance validity and reliability [23,24]. This methodological rigour is particularly valuable in healthcare research, where understanding the interplay between leadership, organisational culture, and outcomes requires in-depth contextual analysis [25,26]. Adhering to the Consolidated Criteria for Reporting Qualitative Research (COREQ) ensures transparency and methodological robustness in reporting results [25].

2.2. Study Settings

This study was conducted in two acute care hospitals which were purposively selected for their contrasting organisational approaches to leadership and EBP implementation. One hospital had structured leadership training programmes and emphasised shared governance, whereas the other relied on informal mentorship and leadership. These differences provide a valuable framework for exploring how varying leadership styles influence EBP adoption and sustainability [18]. Both hospitals also established communication channels for implementing national EBP guidelines, further supporting their selection.

Purposive sampling ensured that the sites were well positioned to address the study's objectives by capturing variations in leadership dynamics and organisational contexts [27]. Accessibility and willingness to participate enable prolonged engagement, which is critical for qualitative inquiry [25]. Fieldwork was conducted over an 8-month period in 2022, with weekly site visits alternating between the hospitals.

2.3. Sample Size

A total of 23 NMs participated in the study. In the UK, WMs are required to be registered nurses, as mandated by the NMC [3]. This ensures that WMs possess the clinical expertise and leadership skills necessary to oversee nursing teams and implement evidence-based practices. The inclusion criteria for this study were as follows: (1) actively employed WMs; (2) individuals with at least two years of experience in managing nursing staff; and (3) those willing to participate and who signed the informed consent form.

Participants were excluded if they had to withdraw due to work-related commitments or health issues during the interview period. Tables 1 and 2 present the demographics of the participants. The participants at both study sites were similar, with nurse–patient ratios indicating some staff vacancies, although these were not advertised. A footnote has been added to the tables to clarify the abbreviations used for academic qualifications (MSc, BSc).

Table 1. Participants' demography (Site 1).

ID	Qualification	Experience (Years)	Ward Speciality
1	BSc	26	Surgical
2	BSc	22	Surgical
3	BSc	29	Medical
4	BSc	22	Medical
5	MSc	26	Surgical
6	BSc	14	Surgical
7	BSc	17	Medical
8	BSc	24	Medical
9	BSc	28	Intensive Care
10	BSc	26	Intensive Care
11	BSc	26	Surgical
12	MSc	21	Medial

MSc: Master of Science; BSc: Bachelor of Science.

Table 2. Participants' demography (Site 2).

ID	Qualification	Experience (Years)	Ward Speciality
1	MSc	18	Surgical
2	BSc	27	Surgical
3	BSc	20	Medical
4	BSc	24	Medical
5	BSc	21	Medical
6	BSc	27	Surgical
7	BSc	13	Surgical
8	BSc	23	Medical
9	BSc	18	Medical
10	BSc	22	Surgical
11	BSc	21	Intensive Care

MSc: Master of Science; BSc: Bachelor of Science.

2.4. Data Collection

Data collection was conducted over an 8-month intensive fieldwork phase from January to August 2022. This period was part of a broader six-year timeline (2017–2023) that included preparatory activities such as securing ethical approval, engaging with study sites, and refining data collection tools. Prolonged engagement facilitated relationship-building and a deep contextual understanding, while the focused 8-month phase enabled systematic and in-depth data collection [28,29].

Interviews with 23 ward managers (WMs) were conducted once during this phase, with each session lasting 60–90 min. All interviews were carried out by the lead researcher, ensuring consistency and reducing variability in interpretation [27]. Despite the extended timeline, attrition did not affect the study, as all data were collected within the concentrated fieldwork period, preserving continuity and depth.

Three complementary data collection methods were employed: semi-structured interviews, nonparticipant observations, and document analysis. This triangulation approach enhanced the credibility and comprehensiveness of the findings by capturing multiple perspectives on EBP implementation [24,30]. Semi-structured interviews followed the guide outlined in Table 3, allowing flexibility in questioning to explore participants' experiences while maintaining alignment with the study's objectives [31,32].

Table 3. Interview guide.

How do you incorporate EBP into the culture and routine activities of your clinical unit? Prompts:
○ How do you promote the use of research-based knowledge in your clinical practice?
○ How do you perceive your leadership role in influencing evidence-based practice adoption among your team?
○ What do you consider to be the key factors that help sustain long-term evidence-based practice in your unit?

Nonparticipant observations focused on WMs' leadership practices, their interactions with nursing staff, and the practical implementation of EBP within the ward environment. Document analysis further contextualised findings by examining clinical guidelines, protocols, and internal policies related to EBP. The integration of these methods provided rich, contextual data and ensured a holistic understanding of EBP implementation [27].

Relevant hospital documents, including clinical guidelines, protocols, EBP policies, and internal audits, were systematically reviewed. These documents provided a critical lens for understanding the formal structures supporting (or limiting) EBP adoption [33]. The analysis also contextualised the interviews and observational data, allowing for the triangulation of findings [24].

2.5. Data Analysis

Thematic analysis, as outlined by Braun and Clarke [34], was employed to analyse and organise the findings systematically. This framework is widely recognised for its flexibility, enabling researchers to utilise both inductive and deductive approaches to identify, analyse, and report patterns or themes within the data [34,35]. The method is particularly suited for addressing complex phenomena such as EBP implementation in healthcare settings, as it allows for the exploration of detailed qualitative data while ensuring rigour and transparency [36].

The analysis followed Braun and Clarke's six-phase thematic analysis framework [34], which ensured a systematic and iterative approach. The process began with familiarisation through repeated reading of interview and observation transcripts to immerse researchers in the data, capturing initial impressions and insights. Meaningful data segments were then systematically coded using NVivo software, with codes generated inductively to reflect participant experiences related to EBP promotion, leadership, resource management, and organisational challenges. These codes were organised into broader themes, such as 'leadership for EBP promotion' and 'strategies for overcoming barriers', with subthemes like 'shared decision-making' and 'mentorship' providing detailed insights. Themes were reviewed and refined for coherence and alignment with the dataset and study objectives, ensuring distinctiveness and depth. They were then clearly defined and contextualised, linking them explicitly to study goals, such as nurse managers' strategies for facilitating research utilisation. Findings were presented with verbatim participant quotes to enhance credibility and authenticity, illustrating cross-site comparisons to identify commonalities and site-specific nuances. This multilevel, iterative approach ensured comprehensive and contextually grounded findings while retaining the unique contributions of each study site.

To enhance rigour, cross-site comparisons were integrated throughout the thematic analysis process. By systematically comparing themes across the two study sites, the analysis revealed both shared and unique elements of EBP implementation strategies. This multilevel approach ensured that the findings were comprehensive and contextually grounded, allowing for a unified discussion while retaining the unique contributions of each site [18].

2.6. Ethical Considerations

The study was conducted in accordance with the Declaration of Helsinki, which outlines ethical principles for medical research involving human subjects [37]. Informed consent was obtained from all participants before data collection. The participants received detailed information sheets and consent forms explaining the study's purpose, confidentiality measures, data handling practices, and their right to withdraw without consequences [38]. Consent was verbally reconfirmed at the start of each observation and interview session in compliance with the General Data Protection Regulation (GDPR) [39].

To protect participants' anonymity, all the data were securely stored and set for destruction following publication. Identifiable information was removed during transcription and reported to maintain confidentiality [24]. The researcher's professional background was shared to build trust and rapport, ensuring participants' confidence in the research

process [40]. Throughout the study, participants were treated respectfully to uphold ethical principles and maintain professional standards [20,37].

2.7. Rigour

Rigour was achieved through a systematic and transparent approach to data collection, analysis, and reflexivity. Repeated observations during critical activities, including ward rounds, staff meetings, and mentoring sessions, allowed the researchers to capture variations over time and across different settings. The observation of WMs' leadership behaviours in their natural contexts provided insights into practices that participants may not have explicitly articulated during interviews. This complemented the self-reported data and enhanced overall credibility [18,40].

To further strengthen credibility, member checking was performed following the thematic analysis. Preliminary findings and summarised transcripts were shared with selected participants to validate interpretations and invite clarifications. This process confirmed the accuracy of the findings, ensuring that they reflected participants' lived experiences while providing opportunities for additional insights [24,37].

Triangulation was achieved by integrating data from semi-structured interviews, non-participant observations, and document analysis. For example, leadership challenges described in interviews were corroborated through observational data, including discussions at team meetings or mentoring sessions. Document analysis, including clinical guidelines, protocols, and hospital policies, provided additional context by identifying structural enablers and barriers to EBP adoption [23,33]. This methodological integration ensured a robust, comprehensive, and trustworthy representation of the phenomenon under study.

Data saturation was achieved iteratively throughout data collection and analysis. The researchers continually analysed the data during the 8-month fieldwork phase, identifying thematic redundancy as it emerged across interviews, observations, and document reviews. This iterative process ensured that the data were sufficiently rich and comprehensive to address the study objectives [34,41].

Reflexivity was embedded throughout the study to minimise bias and enhance transparency. The lead researcher, a registered nurse with extensive experience in EBP implementation and nursing leadership, maintained a reflexive journal. This journal documented preconceptions, emerging insights, and potential biases during data collection and analysis, allowing for ongoing critical reflection [42,43]. This practice ensured a balanced and nuanced interpretation of the findings, while acknowledging the researcher's dual role as both an observer and interpreter of the data [44].

3. Results

This section presents the key themes that emerged from the analysis of interviews, observations, and document reviews, focusing on how WMs navigated challenges to implement and sustain EBP. The findings are organised into six interconnected themes: leadership challenges, organisational and resource barriers, learning strategies, technological integration, patient-centred care, and emotional support for staff. These themes reflect the multifaceted nature of EBP implementation, and the strategies employed to address barriers and leverage enablers.

To provide clarity and structure, the themes were broken down into categories and subcategories, which are summarised succinctly in Table 4a,b. These tables highlight the core components of the findings, including specific challenges, strategies, and insights derived from the data. The tables also provide examples of quotes to contextualise the themes and demonstrate their practical implications.

Table 4. Themes, categories, subcategories, and free codes.

(a)			
Theme	Subcategory	Free Codes	Examples of Quotes
Navigating Leadership Challenges	Balancing directive and collaborative leadership	Directive leadership (Site 1): authoritative instructions, non-negotiable EBP implementation.	<i>I make it very clear that we cannot deliver high-quality care without following the latest evidence... it's non-negotiable.</i>
		Collaborative leadership (Site 2): participatory decision-making, fostering ownership.	<i>What adjustments would make this protocol work best for our ward? Your feedback is critical to its success.</i>
		Evolution of leadership styles: directive to collaborative (Site 1); collaborative to structured accountability (Site 2).	
	EBP champions vs. resistance	EBP mentors (Site 1): senior staff mentoring juniors. - Resistance (Site 1): disruption of routines.	<i>This method is backed by evidence to reduce infections... let's make it a standard part of our practice today.</i>
		Accountability mechanisms: linking EBP to performance evaluations.	<i>Some senior staff feel that new protocols disrupt established routines. It takes time to show them the benefits</i>
	Navigating resource constraints	Time constraints (Site 1): internal knowledge sharing, workshop summaries.	<i>I attended a training session on this protocol and will walk you through the key points so we can start implementing it right away.</i>
		Financial limitations (Site 2): external partnerships, free workshops.	<i>We don't have the budget for subscriptions to the latest research, so we rely heavily on what's freely available or what we can access through partnerships</i>
		Practical solutions: embedding EBP into existing workflows.	
	Accountability mechanisms	Performance reviews (Site 1): staff recognition to reinforce EBP compliance.	<i>I want to recognise [...] for their commitment to the wound care project. This is exactly the kind of leadership we need to drive change.</i>
		Goal setting (Site 2): staff ownership through personal EBP goals and follow-ups.	<i>Let's review the goals we set last month... how are you progressing, and what support do you need?</i>
(b)			
Theme	Subcategory	Free codes	Examples of quotes
Overcoming organisational and resource barriers	Staffing and financial constraints	Staffing shortages (Site 1): integrating EBP into routines.	<i>We're constantly short-staffed, and it's difficult for nurses to find the time to read research or attend EBP training sessions.</i>
		Financial barriers (Site 2): reliance on partnerships for journals and training.	<i>We rely heavily on what's freely available or what we can access through partnerships.</i>
		Peer learning for knowledge sharing.	
	Organisational cultural barriers	Lack of protocols (Site 1): vague guidelines, step-by-step operationalisation.	<i>The guidelines are vague, so I work with my team to break them down into steps they can follow during their shifts.</i>
		Resistance to change (Site 2): scepticism from experienced nurses addressed through team discussions.	<i>Some of the older staff see no reason to change what's been working for years. It takes time and many discussions to get them on board.</i>

Table 4. Cont.

(b)			
Theme	Subcategory	Free codes	Examples of quotes
Sustaining EBP Through Learning	Creative resource management	Small-scale EBP pilots (Site 1): measurable success leading to adoption.	<i>We started small so we could show results quickly. Once we had data to prove it worked, it was easier to get the rest of the team and leadership on board.</i>
		External partnerships (Site 2): mutual benefits for access to resources and workshops.	<i>Finding mutual benefits was key. . .the universities get real-world data, and we get access to resources we wouldn't otherwise have.</i>
	Informal mentorship and knowledge sharing	Site 1: senior nurses mentoring juniors during ward rounds.	<i>I specifically ask my senior staff to guide others. If they have attended a workshop or gained new knowledge, they are expected to cascade it to their teams.</i>
		Site 2: informal sharing supplemented with peer discussions to address resistance.	<i>Peer-to-peer sharing helps. It's a slow process to change mindsets, but it's effective over time.</i>
	Peer learning as a structured approach	Site 2: regular group discussions on training outcomes.	<i>If you've learned something useful, make sure you share it in tomorrow's huddle.</i>
Site 1: ad hoc peer learning during team huddles and handovers.	<i>Ad hoc peer learning happens during huddles, but it's more informal and relies on senior staff to take initiative.</i>		
Technological Integration for EBP	Formal CPD and external partnerships	Site 1: internal CPD leveraging senior staff expertise.	<i>Our senior staff have enough experience to lead training sessions, so we use them to address immediate knowledge gaps.</i>
		Site 2: university partnerships enabling workshops, training, and resource access.	<i>We have great opportunities for training, but not everyone can attend. That's why we rely on those who do to share their learning with the rest of the team.</i>
	Digital tools and resources for EBP	Site 1: real-time access to guidelines via hospital intranet.	<i>I rely on our intranet for quick access to guidelines. It's faster and ensures that we're following current evidence.</i>
Barriers to technological adoption	Barriers to technological adoption	Site 2: e-learning modules for flexible professional development.	<i>The e-learning system has been truly effective. It allows staff to complete modules at their own pace without taking them off the ward.</i>
		Information technology literacy gaps (Site 1): reluctance among senior staff.	<i>I just don't trust myself with these systems; I don't want to mess it up.</i>
Tailoring EBP to Patient-Centred Care	Integrating patient preferences	Need for hands-on information technology training and peer support to address generational gaps.	<i>We need more hands-on support to use these tools confidently.</i>
		Site 2: protocols adapted based on patient feedback. Balancing evidence with patient voices to foster trust and improved outcomes.	<i>Evidence provides the foundation, but patients' voices guide us. . .I'll adjust the protocol if a patient says, 'This works better for me.'</i>
	Addressing diverse patient populations	Site 1: integrating cultural preferences alongside evidence-based protocols safely and inclusively.	<i>If you're more comfortable with this approach, we'll adjust it. . . but I'll explain what the evidence says too.</i>
		Site 1: integrating cultural preferences alongside evidence-based protocols safely and inclusively.	<i>We'll use the evidence-backed dressing, but we can add the herbal treatment they're familiar with as long as it doesn't interfere.</i>

Figure 1 complements these findings by providing a comprehensive visual summary of the barriers and enablers to EBP implementation. The figure is organised around five key themes, visually representing the relationship between the central concept of EBP implementation and the identified themes.

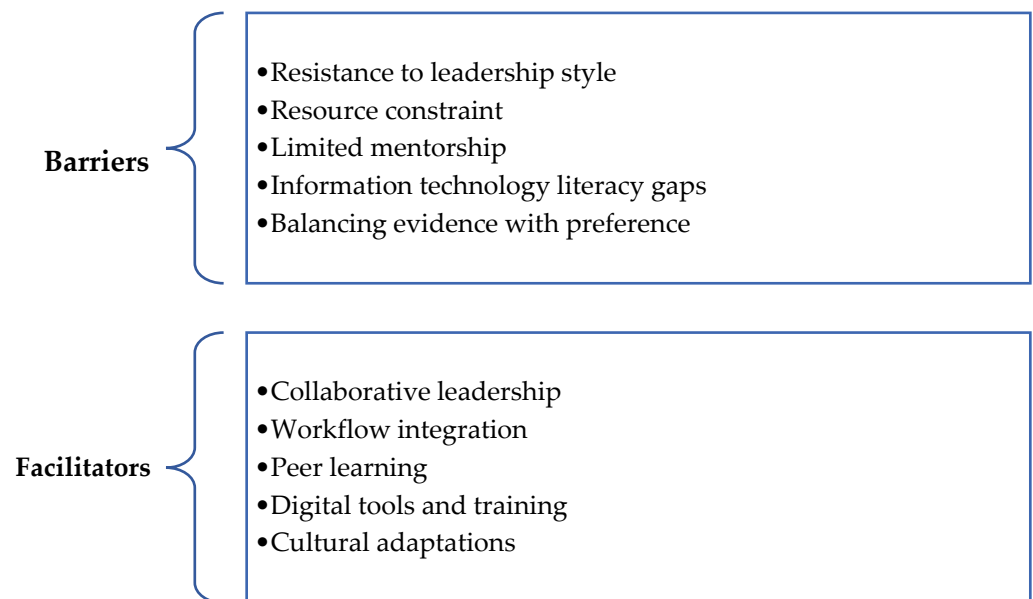


Figure 1. Explicit summary of the barriers and enablers.

At the core of Figure 1 is the concept of EBP implementation, serving as the central focus and emphasising its connection to the identified themes. The five themes—navigating leadership challenges, overcoming organisational and resource barriers, sustaining EBP through learning, technological integration, and tailoring EBP to patient-centred care—encircle the central node, representing the primary categories of analysis. Each theme branches out to highlight specific barriers and enablers.

Barriers, depicted in red, include challenges such as resistance to leadership styles, staffing shortages, and information technology literacy gaps. Conversely, enablers, shown in green, emphasise facilitators like collaborative leadership, workflow integration, and the adaptation of protocols to cultural contexts. The diagram effectively illustrates the interplay between these factors, using directional connections and proportional elements to highlight their relative significance and interdependence. This structured and visually engaging representation enhances the interpretability of the findings, allowing readers to grasp the complexities of EBP implementation quickly.

Table 4a,b further detail the themes, subcategories, and associated free codes, illustrating how WMs addressed specific challenges and leveraged strategies to overcome them. These tables are integral to understanding the practical applications of the findings and their relevance to the broader context of EBP.

3.1. Navigating Leadership Challenges

This theme explores how WMs navigated their dual clinical and managerial roles to implement EBP in the face of significant organisational constraints. By employing adaptive leadership strategies, WMs at both sites addressed challenges such as staff shortages, financial limitations, and resistance to change. They utilised a combination of directive and collaborative leadership approaches, mentorship, accountability mechanisms, and creative resource management to foster a culture of EBP. These findings highlight how leadership styles evolve over time as WMs adapt to overcome barriers and achieve measurable outcomes.

3.1.1. Balancing Directive and Collaborative Leadership

Ward managers at Site 1 adopted a directive leadership style to address the immediate challenges of acute staffing shortages and resource limitations. The observational notes captured that Participant 2 delivered clear and authoritative instructions during team meetings to ensure that staff understood expectations for EBP implementation. Participant 2 firmly stated, *“I make it very clear that we cannot deliver high-quality care without following the latest evidence. . . it’s non-negotiable”*. This directive approach proved essential in launching small-scale EBP projects such as a pilot wound care protocol. During one team discussion, Participant 2 clarified the changes to staff workflows by saying, *“We’ve integrated this protocol into your current workflow. It is designed to minimise disruption while improving outcomes”*. This clear communication fostered staff engagement, and document analysis revealed that infection rates decreased by 15% over six months following the protocol’s implementation.

In contrast, some WMs at Site 2 demonstrated a collaborative leadership style. For example, during team meetings, Participant 1 encouraged staff to contribute to decision-making processes. In one session, Participant 1 asked nurses for feedback on adapting a pain management protocol, facilitating dialogue by saying, *“What adjustments would make this protocol work best for our ward? Your feedback is critical to its success”*. This participatory approach empowered nurses, giving them a sense of ownership and accountability in implementing EBP. A registered nurse remarked, *“. . .we feel more involved here. . . it’s not just about following orders; we actually get a say in how EBP is integrated”*.

Over time, leadership styles at both sites evolved. In Site 1, directive leadership gradually incorporated collaborative elements as staff gained confidence in EBP, transitioning from instruction-driven methods to teamwork and dialogue. Conversely, at Site 2, the initially collaborative leadership approach matured into a more structured framework that included goal setting and accountability mechanisms, ensuring sustained engagement with EBP practices.

3.1.2. Overcoming the Paradox of EBP Champions Versus Resistance

Ward managers in both sites faced the challenge of cultivating EBP champions among staff while simultaneously addressing resistance, particularly from experienced nurses. In Site 1, WMs such as Participant 9, who had been trained in EBP, were tasked with mentoring junior colleagues. During ward rounds, Participant 9 demonstrated a new infection control protocol, explaining, *“This method is backed by evidence to reduce infections. . .let’s make it a standard part of our practice today”*. This mentoring was instrumental in building confidence among less experienced staff; however, resistance from some WMs persisted. Participant 5 acknowledged this challenge, stating, *“Some senior staff feel that new protocols disrupt established routines. It takes time to show them the benefits”*.

To address resistance, WMs at Site 1 implemented accountability mechanisms, linking EBP compliance to performance evaluations. During a performance review, Participant 2 reinforced the importance of leading by example, saying, *“You’ve been a great mentor, but I’d like to see you apply the same evidence in your own practice. . .it’s about leading by example”*. This strategy appears to have created a sense of responsibility while reinforcing the role of senior staff as advocates for EBP.

In Site 2, resistance was mitigated through dialogue and collaborative problem solving. Hesitant nurses were encouraged to identify barriers to EBP and propose solutions, leading some initially sceptical staff to become advocates. For example, a WM who had initially resisted a new wound care protocol later led a peer learning session after witnessing its success. During the session, the nurse admitted, *“. . . I was sceptical, but after seeing the results, I now understand why it’s worth the effort”*. This transformation highlights the value

of involving staff in decision-making processes to address resistance and foster ownership of EBP initiatives.

3.1.3. Accountability Mechanisms in Leadership

Accountability mechanisms emerged as a central strategy for sustaining EBP initiatives at both sites. In Site 1, Participant 3 integrated performance reviews and recognition programmes to reinforce EBP compliance and motivate staff. During a team huddle, Participant 3 recognised a staff member's contribution, stating, *"I want to recognise [. . .] for their commitment to the wound care project. This is exactly the kind of leadership we need to drive change"*. This public recognition reinforced positive behaviours and encouraged others to engage with EBP initiatives.

In Site 2, accountability was embedded into the collaborative process. Staff were encouraged to set personal EBP goals during team meetings, which were revisited during follow-up sessions. The observational notes captured that Participant 1 facilitated a review session, stating, *"Let's review the goals we set last month. . . how are you progressing, and what support do you need?"* By creating a shared sense of responsibility, WMs fostered a culture of accountability where staff actively engaged with EBP as part of their professional growth.

The use of accountability mechanisms at both sites highlights the critical role of leadership in sustaining EBP initiatives. Through performance reviews, recognition programmes, or collaborative goal setting, these strategies ensured that EBP became embedded in the organisational culture, fostering long-term engagement and measurable outcomes.

3.2. Overcoming Organisational Resource Constraints

This theme examines how WMs address organisational and resource barriers such as staffing shortages, financial constraints, and cultural resistance to EBP. These findings highlight the adaptability of NMs, as they have implemented creative strategies to embed EBP into daily routines, leveraged external partnerships, and fostered participatory decision-making. The differences between the two sites underscore the varied nature of the challenges and the tailored approaches needed to overcome these barriers.

3.2.1. Interplay Between Staffing and Financial Constraints

Both sites faced significant resource challenges, but the nature of these constraints varied. In Site 1, staffing shortages left nurses overwhelmed, limiting their capacity to engage in EBP activities such as attending external training or reviewing research. Participant 7 described the ongoing difficulties: *"We're constantly short-staffed, and it's difficult for nurses to find the time to read research or attend EBP training sessions"*. Observational data supported this, with nurses frequently seen rushing between patients, leaving little opportunity for nonclinical activities.

To address this, Participant 9 implemented a strategy of embedding EBP into routine practices. For example, during the pilot of a wound care protocol, nurses trialled the new guidelines during their regular patient assessments. Participant 9 explained this pragmatic approach: *"We had to fit it into what they were already doing. Instead of creating new tasks, we integrated them into their normal wound assessments"*. By aligning EBP activities with existing workflows, staff engagement was maximised without adding extra burden.

In Site 2, financial constraints were the primary challenge, limiting access to journals, databases, and professional development opportunities. Participant 11 reflected on the impact of these limitations: *"We don't have the budget for subscriptions to the latest research, so we rely heavily on what's freely available or what we can access through partnerships"*. Document analysis confirmed that hospital funding prioritised essential training, leaving little room for EBP-related initiatives.

To address these challenges, Participant 1 established external partnerships with universities and healthcare organisations, which provided free access to research resources and workshops. The observational notes recorded Participant 1 negotiating with leadership to allocate time for staff attendance, emphasising, *“These workshops are essential for our staff to stay updated on best practices. We need to allocate time for at least two nurses per session”*. Additionally, participant 1 introduced peer-sharing sessions where nurses who attended external training cascaded their learning to colleagues. One nurse reflected positively on this approach: *“I couldn’t attend the workshop, but hearing the summary today helps me know what I can apply in my practice”*.

These findings highlight how WMs employ strategic and creative approaches to address staffing and financial constraints, ensuring that EBP activities are practical, accessible, and sustainable within the limitations of each site.

3.2.2. Organisational Cultural Barriers

Organisational cultural barriers to EBP were significant, but their manifestations differed between the two sites. In Site 1, the absence of formalised EBP protocols created uncertainty about how to integrate research into practice. Document analysis revealed that clinical guidelines encouraged staff to consult evidence but lacked clear processes for EBP implementation. Participant 4 acknowledged this ambiguity, stating that *“...the guidelines are vague, so I work with my team to break them down into steps they can follow during their shifts”*. By operationalising EBP in a step-by-step manner, Participant 4 addressed the gap in formal processes and provided practical guidance for staff to follow.

At Site 2, cultural resistance to change was a more prominent challenge. Experienced nurses were hesitant to abandon established practices in favour of new EBP protocols. Participant 10 reflected on this resistance, stating, *“...some of the older staff see no reason to change what’s been working for years. It takes time and many discussions to get them on board”*.

The observational notes captured a team meeting where Participant 1 addressed this resistance by involving the team in adapting a new pain management protocol. Initially, one experienced nurse voiced their doubts: *“I don’t see how this is better than what we’ve been doing”*. However, through open discussions, staff were able to identify practical benefits, and the same nurse eventually acknowledged, *“If it makes documentation easier and improves patient pain control, I guess it is worth trying”*. This collaborative approach successfully reduced resistance by empowering staff to contribute to decision-making processes.

By addressing these organisational cultural barriers through practical guidance, open dialogue, and participatory leadership, WMs at both sites demonstrated adaptability and resilience in fostering EBP implementation.

3.2.3. Creative Resource Management

In the face of limited resources, WMs at both sites employed innovative strategies to maximise their impact. At Site 1, small-scale pilot projects were instrumental in demonstrating the value of EBP. Participant 9 initiated a wound care protocol on a single ward to minimise disruption while showcasing measurable outcomes. Reflecting on this approach, Participant 9 stated, *“We started small so we could show results quickly. Once we had data to prove it worked, it was easier to get the rest of the team and leadership on board”*. Observations revealed that Participant 9 tracked metrics such as wound healing rates and patient satisfaction during ward rounds, using this evidence to advocate for broader adoption of the protocol. Document analysis confirmed that the hospital implemented the protocol across multiple wards six months after the initial pilot.

The longitudinal nature of the findings revealed how small-scale successes built momentum for broader organisational change. As seen above, the initial wound care project

expanded to multiple wards, demonstrating the scalability of small, focused initiatives. Participant 9 reflected on this progress, stating, “. . .we started as an experiment on one ward, but now it’s standard practice across the hospital”.

At Site 2, external partnerships emerged as a key strategy for accessing resources. Formal agreements with universities provided free access to research journals, training workshops, and expertise. Participant 10 described this mutually beneficial arrangement, stating, “Finding mutual benefits was key. . .the universities get real-world data, and we get access to resources we wouldn’t otherwise have”. Observational notes recorded a university-led workshop where nurses discussed strategies for integrating research into practice. Following the session, Participant 1 encouraged attendees to share their learning, saying, “If you’ve learned something useful, make sure you share it in tomorrow’s huddle”.

These creative approaches demonstrate the resourcefulness of WMs at both sites. Whether through small-scale pilot projects or external partnerships, WMs overcome significant constraints to ensure the successful implementation and sustainability of EBP.

3.3. Sustaining EBP Through Formal and Informal Learning

This theme explores how WMs fostered informal and formal learning networks to sustain EBP initiatives despite organisational challenges. By leveraging mentorship, peer learning, and professional development, WMs address knowledge gaps and build staff confidence over time.

3.3.1. Informing Mentorship and Knowledge Sharing

Informal mentorship emerged as a key strategy for addressing EBP knowledge gaps, particularly in the context of staffing shortages. Senior nurses trained in EBP were tasked with mentoring junior colleagues, creating opportunities for practical, on-the-job learning. Participant 5 explained this approach, stating, “I specifically ask my senior staff to guide others. If they have attended a workshop or gained new knowledge, they are expected to cascade it to their teams. It’s a practical way to get everyone on board”. Observational notes captured a ward huddle where a senior nurse demonstrated an evidence-based wound care technique to junior staff, with Participant 5 providing oversight and encouragement.

In Site 2, informal mentorship was similarly valued but was supplemented with structured peer learning sessions to address staff resistance. Participant 3 acknowledged ongoing challenges, noting, “We still have staff who prefer the old ways of doing things. It’s a slow process to change their mindset, but peer-to-peer sharing helps”. Over time, persistent mentorship efforts at both sites proved effective in mitigating resistance and building confidence among staff.

3.3.2. Peer Learning as a Structured Approach

While informal mentorship dominated at Site 1, Site 2 employed a more structured approach to peer learning. Regularly scheduled group discussions provided platforms for nurses to share knowledge gained from external training and explore its practical implications. During an observed session, a senior nurse who had attended a university-led workshop on pain management facilitated an interactive discussion, sharing handouts and answering questions. Participant 1 ensured that the session was inclusive and focused on practical application, creating an environment where nurses felt supported in translating evidence into practice.

In contrast, Site 1 relied on less formal peer learning opportunities during team huddles and shift handovers. While effective, these ad hoc sessions were dependent on the initiative of individual WMs and senior staff.

3.3.3. Formal Continuous Professional Development and External Partnership

Formal CPD initiatives varied between the two sites. In Site 1, internal CPD relied on in-house expertise, with senior nurses delivering targeted training sessions. Participant 7 explained, “. . .we had to be creative with our resources. Our senior staff have enough experience to lead training sessions, so we use them to address immediate knowledge gaps”.

In Site 2, external partnerships played a critical role in enabling formal CPD opportunities. Agreements with universities provided access to workshops, online training modules, and journal subscriptions. Participant 11 reflected on the logistical challenges of participation, stating, “We have great opportunities for training, but not everyone can attend. That’s why we rely on those who do to share their learning with the rest of the team”. To address this, Participant 1 implemented structured peer-sharing sessions, ensuring that knowledge from external training reached all staff.

These findings highlight the importance of both informal and formal learning strategies in sustaining EBP. By fostering mentorship, peer learning, and professional development, WMs equipped staff with the knowledge and confidence needed to integrate EBP into daily practice.

3.4. Technological Integration for EBP Implementation

Ward managers at both sites emphasised the critical role of technology in enabling EBP by facilitating real-time access to evidence, supporting decision-making, and enhancing training initiatives. While technology has proven to be valuable in addressing resource constraints, its adoption has been hindered by IT literacy gaps, particularly among older staff members. Despite these challenges, digital tools have contributed significantly to streamlining workflows and improving staff engagement with EBP.

3.4.1. Digital Tools and Resources for EBP

Electronic clinical guidelines played a central role in enabling real-time EBP integration at Site 1. Digital platforms, such as the hospital intranet, provide immediate access to evidence-based protocols, ensuring that WMs and their teams can make informed decisions during patient care. This was demonstrated during a ward round when Participant 4 accessed the NICE-recommended wound care protocol, stating, “This guideline recommends applying the new dressing every three days. . .it’s evidence-backed, so let’s implement it from today”. By utilising this tool, Participant 4 was able to provide clear guidance, reinforcing confidence and clarity among staff. In a subsequent interview, Participant 4 highlighted the efficiency of digital tools: “I rely on our intranet for quick access to guidelines. It’s faster and ensures that we’re following current evidence”. The immediate availability of evidence aligns with the directive leadership approach seen in theme 1, where WMs at Site 1 employed structured methods to overcome resource constraints and standardise EBP.

In Site 2, e-learning modules emerged as a practical solution to overcome time and resource limitations. By enabling nurses to complete training during quieter shifts, the e-learning system balances clinical responsibilities with professional development. Document analysis revealed that infection control modules achieved a 40% completion rate within three months of launch, reflecting strong uptake. Participant 8 praised the system, stating, “The e-learning system has been truly effective. It allows staff to complete modules at their own pace without taking them off the ward”. This tailored approach to training fostered ownership and engagement, echoing findings in theme 2, where flexibility and incremental progress supported long-term change.

3.4.2. Barriers to Technological Adoption

Despite its successes, the adoption of technology faced resistance, particularly at Site 1, where IT literacy gaps among senior staff presented challenges. The observational notes documented a senior nurse struggling to navigate the electronic documentation system and expressing reluctance, saying, *“I just don’t trust myself with these systems; I don’t want to mess it up”*. This generational divide in digital skills was further reflected during an interview with Participant 6, who noted, *“It’s hard for some of us who trained before digital systems. We need more hands-on support to use these tools confidently”*.

3.5. Adapting the Implementation Processes

Ward managers at both sites emphasised the importance of adapting evidence-based protocols to align with patient preferences and diverse cultural needs. This patient-centred approach highlights the flexibility required to ensure that EBP remains meaningful, inclusive, and responsive to individual care contexts. By balancing the rigour of evidence with the voices of patients, WMs fostered trust and improved care outcomes.

3.5.1. Integrating Patient Preferences into EBP

Ward managers at Site 2 demonstrated how patient preferences were thoughtfully incorporated into EBP. Participant 2 highlighted the importance of listening to patients while maintaining a foundation of evidence, stating, *“Evidence provides the foundation, but patients’ voices guide us. . . I’ll adjust the protocol if a patient says, ‘This works better for me.’ It’s about improving outcomes without ignoring the individual”*. This commitment to personalised care was observed during a patient review, where Participant 2 engaged a patient in a discussion about pain management alternatives. Recognising the patient’s preference, Participant 2 adapted the protocol while ensuring transparency: *“If you’re more comfortable with this approach, we’ll adjust it. . . but I’ll explain what the evidence says too”*.

This approach exemplified the collaborative leadership style identified in theme 1.1, where shared decision-making was used to foster ownership and trust among stakeholders. By valuing patient input alongside clinical evidence, WMs ensure that an EBP is not only effective but also respectful of individual needs.

3.5.2. Addressing Diverse Patient Populations

Ward managers at Site 2 acknowledged the gaps in existing protocols when addressing the needs of culturally diverse patient populations. Participant 5 reflected on this challenge, stating, *“We realised we were missing out on adapting protocols for different cultural needs. For example, some patients prefer traditional wound healing methods alongside our protocols, so we found ways to integrate both safely”*. This sentiment was illustrated during a dressing change, where Participant 5 guided a nurse in incorporating a patient’s cultural preferences while ensuring clinical safety. Participant 5 explained, *“We’ll use the evidence-backed dressing, but we can add the herbal treatment they’re familiar with as long as it doesn’t interfere”*. By integrating cultural practices sensitively and safely, WMs ensured that EBP remained relevant and meaningful for diverse populations.

4. Discussion

The findings of this study provide critical insights into leadership approaches, organisational barriers, learning networks, and resource management, with the longitudinal design offering a unique perspective on the evolution of these strategies over time. This research contributes both theoretically and practically, offering actionable solutions for overcoming systemic challenges in implementing EBP.

The results demonstrate that WMs adopted a combination of directive and collaborative leadership styles to address organisational challenges. In Site 1, directive leadership was pivotal in navigating acute staffing shortages, with WMs setting clear expectations and launching small-scale pilot projects to ensure engagement. This finding aligns with Aarons et al., [45], who emphasise the necessity of directive leadership in the initial phases of EBP implementation. However, this study extends Aarons et al., [45] by demonstrating the effectiveness of directive leadership in resource-constrained environments, where swift decision-making is essential. In contrast, Site 2 showcased collaborative leadership through participatory decision-making, supporting the findings of Greenhalgh et al., [13], who highlighted the importance of staff engagement in fostering innovation. These findings resonate with Ominyi and Ezeruigbo [46], who reported that hierarchical leadership positions influence EBP uptake, particularly when a clear direction is needed. However, resistance among experienced staff at Site 2 challenges the assumption that collaboration alone suffices. This highlights the need for a hybrid leadership approach that integrates directive strategies with collaborative mechanisms to manage resistance effectively, as also suggested by Tistad et al. [47].

The paradoxical role of experienced staff as both enablers and resisters of EBP emerged as a key finding. While senior nurses were instrumental in mentoring junior staff, their reluctance to adopt new protocols posed significant barriers. This duality challenges the optimism of Kitson et al. [48], who view experienced staff as EBP champions. Similarly, Ominyi et al. [10] highlighted that bureaucratic managerialism often amplifies this dual role, where entrenched practices lead to reluctance in embracing new guidelines. This study adds nuance by showing that visible clinical outcomes and structured accountability mechanisms, such as linking EBP compliance to performance evaluations, are effective in transforming resistance into advocacy.

This research critiques the binary understanding of staffing and financial constraints, arguing that they are inter-related challenges stemming from systemic resource limitations. While Lau et al. [6] identify resource constraints as barriers to EBP, this study deepens the discussion by revealing context-specific manifestations. In Site 1, staffing shortages limit formal EBP activities, requiring WMs to embed learning into existing workflows. Moreover, Site 2 faced financial barriers that hindered access to journals and CPD, which is consistent with Ominyi et al. [49], who noted that access to EBP guidelines remains a challenge in resource-limited settings. These findings underscore the need for context-sensitive interventions, such as shift reorganisation and external partnerships, to address these intertwined barriers effectively.

Small-scale pilot projects, such as the wound care protocol at Site 1, proved effective in building organisational momentum for EBP. This aligns with the findings of May et al. [9], who advocate for piloting interventions to generate initial evidence of success. However, this study extends their work by illustrating how sustained leadership support and visible clinical outcomes facilitate the transition from pilot initiatives to hospital-wide practices. Similar findings were reported by Ominyi and Nwedu [50], who stressed the importance of piloting interventions as a precursor to widespread adoption. The scalability of these successes highlights the need for integrating pilot projects into broader strategies to achieve sustainable, long-term change.

Cultural resistance among experienced nurses has emerged as a significant organisational barrier. Consistent with Dogherty et al. [8], the findings reveal that entrenched practices and scepticism often hinder the adoption of EBP. However, this study demonstrates that resistance can be effectively mitigated through collaborative discussions and the demonstration of tangible benefits. Similarly, Ominyi et al. [10] noted that participatory engagement strategies, alongside education and practical evidence, are critical for overcoming

ing resistance. By addressing both cultural and practical barriers, the findings emphasise the importance of creating an inclusive environment to promote organisational change.

The study highlights the pivotal role of informal and formal learning networks in sustaining EBP initiatives. In Site 1, informal mentorship bridged knowledge gaps in the absence of formal training, supporting Chaghari et al. [14], who emphasised the value of experiential, on-the-job learning. However, reliance on informal networks can lead to inconsistencies, as Ominyi and Agom [51] argued that structured systems are critical for ensuring sustainable outcomes. In contrast, Site 2's peer-sharing sessions provided a systematic approach to knowledge dissemination, validating Weng et al. [15], who advocated for structured learning environments. However, logistical challenges such as scheduling conflicts limit access to formal CPD. This study offers a practical solution through cascading learning models, where attendees of formal training share key insights with colleagues, enhancing knowledge transfer across the organisation.

The external partnerships at Site 2 were instrumental in addressing financial constraints and improving resource access. These collaborations provided CPD opportunities and access to journals, fostering cultural change by bridging academic and clinical practice. This aligns with Powell et al. [11], who highlight the value of cross-sector partnerships. Additionally, Ominyi et al. [10] noted that such partnerships are particularly valuable in settings where local resources are scarce. However, this study critiques the sustainability of partnerships, emphasising the need for long-term organisational investment to ensure continuity and maximise their impact.

The longitudinal design of this study reveals how incremental progress drives long-term organisational change. Small-scale initiatives, such as the wound care pilot at Site 1, evolved into hospital-wide practices, supporting Damschroder et al.'s [52] Consolidated Framework for Implementation Research, which advocates building momentum through early successes. However, this study critiques the framework for underemphasising sustainability, highlighting the need for continued leadership support, resource allocation, and follow-up mechanisms to maintain progress over time.

Accountability mechanisms, such as performance reviews and recognition programmes, play a crucial role in aligning individual goals with organisational priorities. While McCormack et al. [53] advocate for such mechanisms, this study adds a critical perspective by demonstrating that accountability must be paired with sufficient resources and support to avoid staff demotivation. Balancing accountability with empowerment is essential, as suggested by Ominyi and Agom [51], for fostering engagement and sustaining long-term EBP implementation.

4.1. Limitation

While this study offers valuable insights into the implementation of EBP in nursing, several limitations must be acknowledged and clarified.

First, although social desirability bias is a recognised limitation of interview-based data, this concern was tempered by the triangulation of methods, including observations and document analysis. Triangulation strengthened the validity of the findings by cross-referencing reported behaviours with observed actions and documented evidence. However, there were instances where logistical challenges, such as staffing pressures and time constraints, limited the breadth and duration of observational components, preventing further verification of the interview findings.

Second, while the study examined organisational policies and staff roles through internal document analysis and interviews with RNs, these factors were sometimes overshadowed by the dominant themes of leadership and resource constraints. This may have resulted from the prioritisation of leadership strategies within the data analysis process.

Nonetheless, the inclusion of documents and interviews captured broader systemic factors influencing EBP implementation, such as ambiguous guidelines and the absence of formalised protocols at Site 1.

Furthermore, while the longitudinal design was a strength, the limited duration of observational components warrants clarification. Observations were conducted periodically over the study timeline rather than continuously owing to organisational constraints and limited access to clinical settings during busy shifts. This limited the ability to fully capture the evolving nature of EBP practices in real time. However, interviews and document analysis provided complementary data that tracked changes across leadership strategies, resource management, and staff engagement over the study period.

Finally, the study focused primarily on WMs and frontline nurses, which may have constrained insights into higher-level organisational factors. Although internal policies were examined, the perspectives of senior leaders and external stakeholders, such as policymakers, were not included, potentially overlooking key influences on EBP adoption at a systemic level.

Future research addressing these limitations, particularly with continuous observation and broader stakeholder engagement, will provide a deeper understanding of the evolving and multilevel dynamics influencing EBP implementation.

4.2. Implications for Practice

The findings reveal that the interplay between organisational constraints, WM leadership styles, and resulting outcomes in EBP requires targeted, concrete recommendations.

First, hybrid leadership approaches are necessary for addressing EBP implementation challenges within resource-limited environments. WMs should adopt directive leadership when an immediate structure is needed, such as during staffing shortages, while gradually transitioning to collaborative methods to foster staff ownership and engagement. This dual approach helps align staff resistance with organisational goals. For example, linking performance reviews to EBP outcomes, combined with visible clinical improvements, can transform resistance among experienced staff into advocacy [48]. Organisational leaders should formalise leadership development programmes to equip WMs with the skills to adjust their leadership style on the basis of the evolving needs of their teams and resource constraints [49].

Second, addressing organisational constraints requires a deeper integration of EBP into existing workflows. Small-scale pilot projects demonstrated success at Site 1 by aligning EBP with daily clinical tasks, which minimised disruption while generating measurable outcomes. These projects should be systematically scaled across organisations, with leadership support to secure resources and staff buy-in. In addition, partnerships with academic institutions, as seen at Site 2, should be formalised to provide continuous access to CPD opportunities and research resources. Organisations must invest in maintaining these collaborations long-term to ensure sustainability [53].

Finally, interventions at the cultural level are essential for managing change fatigue and resistance. WMs should implement structured mentorship programmes and peer learning models to ensure the consistent dissemination of EBP knowledge. Cascading learning systems, where staff share insights from training during team huddles, can address both cultural resistance and resource constraints. Emotional and psychological support must also be prioritised through recognition programmes, incremental implementation, and clear communication of the benefits of EBP, reinforcing resilience among staff.

These recommendations highlight the need for a multilevel strategy that addresses leadership development, organisational barriers, and cultural resistance while linking these actions to measurable improvements in EB nursing practice. Organisations must recognise

that successful EBP implementation hinges on aligning leadership actions with systemic constraints to create sustainable, evidence-informed care environments.

5. Conclusions

This study provides a comprehensive understanding of the interplay between leadership approaches, organisational constraints, and EBP implementation in nursing, offering critical insights into the strategies WMs employ to address these challenges. The findings demonstrate that a hybrid leadership approach that combines directive strategies to provide structure and collaborative methods to foster ownership plays a pivotal role in overcoming resistance and engaging staff. However, leadership alone is insufficient without addressing systemic barriers, such as staffing shortages, financial constraints, and cultural resistance, which impede EBP integration.

The study further highlights the value of context-specific interventions, such as embedding EBP into existing workflows, leveraging external partnerships for resource access, and implementing small-scale pilot projects to build momentum for broader organisational change. Formal and informal learning networks, including mentorship and peer learning, emerged as essential enablers for bridging knowledge gaps and sustaining EBP initiatives over time.

While technological tools have been shown to enhance EBP access and decision-making, addressing IT literacy challenges, particularly among senior staff, is critical for ensuring consistent adoption. Finally, the findings emphasise the importance of fostering emotional resilience and morale through structured support, recognition, and incremental implementation to manage change fatigue.

This research highlights the need for tailored, multilevel strategies that align leadership actions with organisational priorities to ensure that EBP becomes embedded in practice. By addressing these complexities, healthcare organisations can create sustainable, evidence-informed care environments that improve clinical outcomes and staff engagement.

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Abbreviations

The following abbreviations are used in this manuscript:

EBP	Evidence-based practice
WM	Ward managers
KU	Knowledge utilisation
NICE	National Institute for Health and Care Excellence
NMC	Nursing and Midwifery Council
COREQ	Consolidated Criteria for Reporting Qualitative Research
MSc	Master of Science
BSc	Bachelor of Science
GDPR	General Data Protection Regulation
CPD	Continuous Professional Development
IT	Information technology
ERIC	Expert Recommendations for Implementing Change
PARIHS	Promoting Action on Research Implementation in Health Services

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