

Enhancing Evidence-Based Practice Implementation in Acute Care: A Qualitative Case Study of Nurses' Roles, Interprofessional Collaboration, and Professional Development

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Abstract

Background and Purpose: Evidence-based practice (EBP) is essential for improving patient outcomes and healthcare quality. However, its implementation in acute care remains inconsistent due to organisational hierarchies, professional silos, and limited access to continuous professional development (CPD). Nurses play a key role in translating research into practice but often encounter barriers that limit their ability to lead EBP initiatives. Interprofessional collaboration and CPD are recognised enablers of EBP, yet their impact in acute care requires further investigation. This study explores how interprofessional collaboration, nurse-led initiatives, and CPD influence EBP adoption.

Methods and Procedures: A collective qualitative case study was conducted across two acute care hospitals in the East Midlands, England. Data collection included 25 semi-structured interviews, nonparticipant observations, and document analysis over six years, with an intensive fieldwork phase in 2022. Thematic analysis was used to identify key patterns related to EBP adoption, interprofessional collaboration, and nurse-led knowledge implementation.

Results: Nurses actively advocated for EBP integration but often worked independently due to the absence of formal collaboration structures. Interprofessional collaboration facilitated knowledge-sharing and decision-making, yet hierarchical constraints limited nurses' influence in clinical governance. CPD enhanced nurses' confidence and ability to challenge outdated practices, but disparities in access led to inconsistent EBP engagement across nursing teams.

Conclusion: Structured CPD, interdisciplinary collaboration, and inclusive decision-making are essential for EBP adoption. Addressing hierarchical constraints and resource limitations is crucial for sustaining evidence-driven care. Future research should explore the long-term sustainability of EBP implementation.

Keywords

Evidence-based practice, nursing, acute care, interprofessional collaboration, continuous professional development, organisational barriers

Background and Purpose

Knowledge implementation is essential for advancing healthcare by improving patient outcomes and care quality (Aiken et al., 2020; Melnyk et al., 2022). Evidence-based practice (EBP) in nursing integrates clinical expertise, patient values, and research evidence to inform decision-making (Schaffer et al., 2021). This approach enhances patient care effectiveness and supports nurses' professional development by grounding practice in evidence (Hoffman et al., 2019). Despite its significance, EBP implementation remains inconsistent in acute care settings due to persistent barriers (Brown et al., 2021; Melnyk & Fineout-Overholt, 2022).

Globally, organisations such as the National Institute for Health and Care Excellence (NICE) and the Nursing and Midwifery Council advocate for EBP to enhance patient safety and clinical outcomes (NICE, 2023). However,

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numerous organisational, cultural, and resource-related obstacles hinder EBP application in hospital settings (Taylor et al., 2020). Key barriers include professional silos, hierarchical structures, and limited access to continuous professional development (CPD), particularly in high-pressure acute care environments (Ajani & Moez, 2019; Gerrish et al., 2021).

Interprofessional collaboration is recognised as a critical enabler of EBP adoption, fostering knowledge exchange and improving clinical decision-making (Reeves et al., 2021). Healthcare environments that encourage interdisciplinary teamwork demonstrate higher EBP uptake, as collaboration integrates diverse professional insights (Zwarenstein et al., 2019). However, rigid professional hierarchies often limit nurses' contributions to decision-making, resulting in fragmented care (Greenhalgh et al., 2020). Reeves et al. (2021) found that hospital silos hinder knowledge sharing and slow EBP adoption, particularly when nurses' input is overshadowed by physician-led care models. Addressing these divides is crucial for fostering integrated knowledge implementation.

Nurses are well-positioned to identify care gaps and drive EBP due to their direct patient interactions (Aiken et al., 2020). Research suggests that when nurses have autonomy and access to CPD, they act as change agents, advocating for and implementing EBP (Kitson et al., 2018; Melnyk & Fineout-Overholt, 2022). Successful nurse-led EBP initiatives in infection control, wound care, and patient safety demonstrate their ability to improve healthcare outcomes (White et al., 2019). However, systemic constraints such as workload pressures, staffing shortages, and insufficient organisational support often limit nurses' engagement in EBP (Taylor et al., 2020).

Continuous professional development is essential for equipping nurses with the skills and confidence to challenge outdated practices and promote evidence-based care (Straus et al., 2021). Structured CPD significantly enhances nurses' ability to critically appraise and apply evidence (McCormack et al., 2022). However, disparities in CPD access persist, particularly in resource-limited settings (Dawes et al., 2020). Research highlights the need for further studies on CPD's long-term impact on nurse-led knowledge implementation and patient outcomes (Melnik et al., 2022). Addressing these gaps, this study examines interprofessional collaboration, nurse-led initiatives, and CPD as facilitators and barriers to EBP implementation in acute care settings.

Aims and Objectives

This qualitative case study explores how interprofessional collaboration, nurse-led initiatives, and CPD influence EBP adoption in acute care. Specifically, it aims to: (1) Investigate how organisational structures, leadership approaches, and interdisciplinary relationships shape EBP adoption among nurse managers; (2) explore the role of interprofessional collaboration in facilitating or hindering EBP integration within nursing

practice; (3) examine the impact of nurse-led initiatives in driving evidence-based changes in patient care and organisational practices; (4) assess how CPD access influences nurse managers' ability to implement and advocate for EBP.

The research team includes experienced nurses with expertise in nursing education, leadership, and qualitative inquiry. Their diverse backgrounds facilitate an in-depth analysis of institutional structures, professional development, and knowledge translation in acute care settings, contributing to sustainable healthcare improvements.

Methods and Procedure

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 (2019) and Yin (2020), 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 (Braun & Clarke, 2021; Creswell & Poth, 2018).

This design supports an interpretative lens, recognising that EBP adoption is influenced by cultural and contextual factors unique to each organisation (Greenhalgh et al., 2020; Kitson et al., 2019). By treating EBP as a context-dependent phenomenon, the approach allowed for a nuanced analysis of how leadership practices and resource availability shaped implementation processes.

The study integrated multiple data sources, including interviews, observations, and document analysis, ensuring triangulation to enhance validity and reliability (Nowell et al., 2017; Silverman, 2020). This methodological rigour is particularly valuable in healthcare research, where understanding the interplay between leadership, organisational culture, and outcomes requires in-depth contextual analysis (McCormack et al., 2022; Taylor et al., 2021). Adhering to the Standards for Reporting Qualitative Research checklist (see reporting guideline) ensures transparency and methodological robustness in reporting results (O'Brien et al., 2019).

Study Setting

This study was conducted in two acute care hospitals that 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

(Taylor et al., 2021). 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 (Greenhalgh et al., 2020). Accessibility and willingness to participate enabled prolonged engagement, which is critical for qualitative inquiry (O'Brien et al., 2019).

Participants and Sample Size

A total of 25 healthcare professionals participated in this study, including 15 staff nurses (SNs), 6 nurse managers (NMs), and 4 physicians. Participants were drawn from two acute care hospitals and were selected based on their roles in overseeing nursing practice and contributing to EBP implementation. Given the pivotal role of NMs in leading nursing teams and influencing evidence-based changes in clinical settings, their insights were central to understanding the study objectives.

The inclusion criteria for participation were: (1) Holding a leadership or managerial nursing role within the hospital; (2) Having a minimum of two years of experience in acute care settings; (3) Willingness to participate and provide informed consent.

Participants who withdrew due to work-related constraints or health reasons were excluded from the final sample.

Table 1. Participants' Demography (Site 1).

Participant ID	Experience (Year)	Interviewed/ Observed	Role
SI-NM01	27	Interviewed	Nurse Manager
SI-PH01	22	Interviewed, Observed	Physician
SI-NM02	27	Interviewed, Observed	Nurse Manager
SI-SN01	28	Interviewed, Observed	Staff Nurse
SI-SN02	22	Interviewed, Observed	Staff Nurse
SI-NM03	26	Interviewed	Nurse Manager
SI-SN03	14	Interviewed	Staff Nurse
SI-SN04	17	Interviewed, Observed	Staff Nurse
SI-SN05	27	Interviewed	Staff Nurse
SI-SN06	28	Interviewed, Observed	Staff Nurse
SI-SN07	26	Interviewed, Observed	Staff Nurse
SI-PH02	26	Interviewed, Observed	Physician
SI-NM04	29	Interviewed, Observed	Nurse Manager

Tables 1 and 2 outline the demographics of participants across the two hospital sites. The participants' qualifications ranged from BSc to PhD, with experience levels spanning 13 to 32 years. The sample included NMs with postgraduate qualifications (MSc, PhD) as well as those with undergraduate nursing degrees (BSc). The sample also included four physicians (MBBS), reflecting the interdisciplinary focus of the study.

Given the significant years of experience among participants, variability in formal education and training in EBP is expected. While NMs are expected to demonstrate clinical expertise and leadership skills, their exposure to structured EBP training varies due to historical differences in nursing education curricula (Melnik & Fineout-Overholt, 2022). As EBP became formally integrated into nursing education approximately 20–25 years ago, some NMs may not have received structured EBP training during their initial qualification but may have developed these competencies through postgraduate education, workplace learning, or mentorship (Kitson et al., 2019; McCormack et al., 2022). The study findings reflect these diverse pathways of professional development and their impact on EBP adoption.

Data Collection

This study employed a structured, multi-phase data collection process spanning six years (2017–2023), with an eight-month intensive fieldwork phase conducted from January to August 2022. The extended timeline facilitated relationship-building, site engagement, and iterative refinement of data collection tools (Creswell & Poth, 2018;

Table 2. Participants' Demography (Site 2).

Participant ID	Experience (Year)	Interviewed/ Observed	Role
S2-NM01	22	Interviewed, Observed	Nurse Manager
S2-SN01	32	Interviewed	Staff Nurse
S2-SN02	20	Interviewed, Observed	Staff Nurse
S2-SN03	24	Interviewed, Observed	Staff Nurse
S2-SN04	21	Interviewed, Observed	Staff Nurse
S2-SN05	27	Interviewed	Staff Nurse
S2-SN06	13	Interviewed	Staff Nurse
S2-NM02	25	Interviewed, Observed	Nurse Manager
S2-SN07	18	Interviewed, Observed	Staff Nurse
S2-PH01	24	Interviewed, Observed	Physician
S2-PH02	28	Interviewed	Physician
S2-SN08	27	Interviewed, Observed	Staff Nurse

Melnik & Fineout-Overholt, 2022), while the intensive phase enabled focused and in-depth data collection.

During the intensive fieldwork period, three complementary data collection methods were used to ensure triangulation and enhance credibility (McCormack et al., 2022; Nowell et al., 2017). First, semi-structured interviews ($n = 25$) were conducted using a guide that was initially developed and later refined for clarity and alignment with the study's themes. Flexibility in questioning allowed for an in-depth exploration of participants' experiences while maintaining focus on the study's objectives (Braun & Clarke, 2021). Interviews, which lasted between 60 and 120 min, were all conducted by the lead researcher to maintain consistency and minimise variability in interpretation (O'Brien et al., 2019). The interview guide prompted participants with an opening question - "*Can you describe your experiences with implementing EBP in your clinical setting?*" - and then guided the conversation with several follow-up prompts. Participants were encouraged to elaborate on how they collaborate with other healthcare professionals to support EBP implementation, describe the knowledge-sharing practices in place within their teams and how these practices contribute to EBP integration, and discuss any challenges encountered during the implementation process. Further, the guide sought insights into the influence of professional development, including training or workshops, on their capacity to implement and advocate for EBP, and requested examples of nurse-led EBP initiatives that had impacted patient outcomes and nursing practices. This integrated approach not only ensured a comprehensive exploration of the subject matter but also maintained consistency with the study's core objectives (Greenhalgh et al., 2020).

Second, nonparticipant observations were conducted to examine the leadership practices of senior nurses (SNs) and nurse managers (NMs), their interactions with physicians, and the broader implementation of EBP (Kitson et al., 2019; Reeves et al., 2021). The observational component encompassed activities such as staff meetings, ward rounds, mentoring sessions, decision-making processes, and clinical practice reviews. Observing participants in real-time offered valuable insights into leadership behaviours and interprofessional collaboration that might not have been fully captured during interviews (Taylor et al., 2021). The observations were deliberately extended to include interactions among NMs, SNs, and physicians, thereby acknowledging their collective role in facilitating EBP (Greenhalgh et al., 2020).

Third, document analysis was undertaken to examine relevant hospital documents, including clinical guidelines, organisational protocols, EBP policies, and internal audits (Straus et al., 2021). This method provided a critical lens for understanding the formal structures that either support or limit EBP adoption. By contextualising the interview and observational data, the document analysis allowed for comprehensive triangulation of findings (Melnik et al., 2022).

Although the study's primary focus was the eight-month intensive data collection phase, a follow-up observation was conducted at the eight-month mark to assess the continuity and sustainability of leadership strategies in EBP implementation. This phase involved targeted observations of a subset of the original participants ($n = 8$) and included structured observations of leadership practices in selected wards. The follow-up observations were designed to determine whether the initial strategies had been sustained, adapted, or discontinued and to explore potential barriers or enablers influencing long-term implementation (McCormack et al., 2022).

In addition, a brief intervention was introduced during this follow-up phase. Participants were provided with summarised findings from the initial study and engaged in reflective discussions about their leadership experiences. This iterative feedback mechanism facilitated the identification of emerging challenges and adaptive strategies, thereby offering insights into the evolving nature of EBP leadership over time (Taylor et al., 2021). These follow-up insights were subsequently integrated into the final analysis, providing a more comprehensive understanding of the long-term impact of various leadership approaches.

Data Analysis

Thematic analysis, as outlined by Braun and Clarke (2021), was employed to systematically analyse and organise findings. This flexible framework enables researchers to use both inductive and deductive approaches to identify, analyse, and report patterns within qualitative data (Braun & Clarke, 2021; Nowell et al., 2017). It is particularly effective in exploring complex healthcare phenomena such as EBP implementation while ensuring rigour and transparency (Greenhalgh et al., 2020).

The analysis followed Braun and Clarke's six-phase framework (Braun & Clarke, 2021). First, the researchers familiarised themselves with the data by repeatedly reading interview transcripts, observation notes, and documents. This process allowed for an in-depth understanding of participant experiences, with initial impressions recorded to ensure key insights were captured.

Next, initial codes were generated systematically using NVivo software. Coding was conducted inductively to reflect participant experiences related to EBP implementation, interprofessional collaboration, and leadership strategies. This iterative process ensured comprehensive categorisation of relevant data.

Following coding, broader patterns were identified, grouping related codes into thematic categories such as 'Facilitators and Barriers to Knowledge Implementation' and 'Empowerment through Professional Development.' Subthemes, including 'shared decision-making' and 'mentorship,' were also developed to highlight key aspects within each theme.

Themes were then reviewed for coherence, distinctiveness, and alignment with the dataset. The thematic map was assessed to ensure themes represented significant insights while maintaining uniqueness. Cross-referencing within and across datasets further validated the findings, enhancing study credibility.

Refinement and contextualisation of themes followed, ensuring alignment with study objectives. For instance, 'Nurses as Drivers of Knowledge Implementation' was linked to examples of nurse-led initiatives improving patient outcomes. Clear definitions were developed to articulate how each theme contributed to understanding EBP adoption in acute care settings.

Finally, the findings were reported in a structured manner, supported by verbatim participant quotes to enhance credibility and authenticity. Cross-site comparisons were conducted to identify commonalities and differences in EBP implementation strategies, preserving site-specific nuances (O'Brien et al., 2019). This structured approach ensured systematic interpretation, offering valuable insights into leadership, professional development, and interprofessional collaboration in EBP adoption.

Ethical Considerations

This study was conducted according to ethical research principles (The Health Research Authority, United Kingdom, 2017) and approved by the University of Bedfordshire's Research Ethics Committee and (Ethical Clearance Reference Number: UoB/00183) on January 10, 2017, and the Health Research Authority (Reference ID: HRA/2017/00567), ensuring compliance with UK national regulations, on February 17, 2017. Informed consent was obtained from all participants before enrolment. Participant information sheets and consent forms were provided in advance via email, allowing participants sufficient time to review the study details. Prior to each observation session and interview, verbal consent was reconfirmed to ensure ongoing ethical compliance and participant understanding. To protect participant confidentiality and anonymity, all data were securely stored, and any identifiable information was removed during transcription and analysis.

Rigour

Rigour was ensured through a systematic and transparent approach to data collection, analysis, and reflexivity. Multiple methods, including semi-structured interviews, non-participant observations, and document analysis, provided a comprehensive understanding of EBP implementation. Repeated observations during ward rounds, staff meetings, and mentoring sessions captured variations over time and across different settings. Observing nurses' behaviours in natural contexts offered insights into practices that participants may not have explicitly articulated in interviews,

complementing self-reported data and enhancing study credibility (Braun & Clarke, 2021; Greenhalgh et al., 2020).

Member checking was conducted after thematic analysis to strengthen credibility. Preliminary findings and summarised transcripts were shared with selected participants to validate interpretations and invite clarifications. This ensured that findings accurately reflected participants' lived experiences while allowing for additional insights (O'Brien et al., 2019).

Triangulation was achieved by integrating data from different sources. Leadership challenges described in interviews were corroborated through observational data, including discussions at team meetings and mentoring sessions. Document analysis of clinical guidelines, protocols, and hospital policies provided additional context by identifying structural enablers and barriers to EBP adoption (McCormack et al., 2022). This methodological integration ensured a robust, comprehensive, and trustworthy representation of EBP implementation in acute care settings.

Data saturation was achieved iteratively throughout data collection and analysis. The research team continuously reviewed and analysed data during the initial eight-month fieldwork phase, identifying thematic redundancy across interviews, observations, and document reviews. This approach ensured data richness and completeness to effectively address study objectives (Melnik & Fineout-Overholt, 2022).

Reflexivity

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 documenting preconceptions, emerging insights, and potential biases during data collection and analysis. This facilitated continuous critical reflection, ensuring a balanced interpretation of findings (Nowell et al., 2017).

The study was grounded in a constructivist philosophical framework, recognising that knowledge is co-constructed by researchers and participants within specific social and cultural contexts. This approach was particularly relevant for exploring the complex, context-dependent nature of EBP implementation in acute care settings. Reflexive practices and iterative analysis ensured that findings were deeply rooted in participants' perspectives and reflective of the organisational environment (Braun & Clarke, 2021).

Results

The findings of this study highlight the complexities of EBP implementation in acute care settings, shaped by a dynamic interplay between facilitators, barriers, and nurse-led initiatives. The key themes identified include interprofessional collaboration, leadership in EBP promotion, and the transformative impact of professional development. However,

hierarchical constraints and resource limitations remain significant challenges.

Table 3 summarises these key themes, illustrating how nurses actively advocate for EBP integration, often working independently to drive practice changes when formal collaboration structures are insufficient. The table also presents examples of facilitators and barriers, reflecting the nuanced nature of EBP adoption in acute care settings.

To further conceptualise these findings, Figure 1 presents a framework for EBP implementation, outlining the facilitators, barriers, and processes that shape knowledge utilisation. The framework visually represents the intersections between nurse-led initiatives, organisational constraints, and the overall impact on patient outcomes, reinforcing the need for structured support mechanisms to optimise EBP adoption.

Together, these findings offer insights into how healthcare organisations can strengthen EBP adoption by enhancing interprofessional collaboration, addressing systemic barriers, and investing in nurse-driven leadership. The following sections provide a detailed thematic analysis, further illustrating how these elements influence clinical practice and decision-making.

Facilitators and Barriers to Knowledge Implementation

Knowledge Sharing Through Collaboration

Interprofessional collaboration emerged as a crucial enabler of EBP adoption, fostering knowledge exchange and collective decision-making. Nurses and physicians who engaged in joint protocol development reported more streamlined patient care and improved adherence to best practices. When nurses had structured opportunities to discuss evidence with their colleagues, they felt empowered to contribute meaningfully to clinical decisions. However, collaboration was not always systematic, often relying on individual relationships rather than institutionalised processes. This inconsistency resulted in varied experiences of EBP integration.

“We worked with the doctors on a new pain management protocol, and by discussing the evidence together, we were able to agree on a more effective approach. It felt like real teamwork” (S1-SN01, Interview).

Despite such positive examples, observations indicated that while some teams embraced collaborative decision-making, others continued to work in fragmented silos, with limited interdisciplinary engagement. Inconsistent access to research discussions meant that some nurses were more equipped than others to integrate EBP into practice.

“A senior nurse raised concerns about inconsistencies in wound care protocols across different wards. There was

consensus on the need for clearer guidelines, but no formal action plan was established” (Documented Meeting Minutes, S2).

Barriers Created by Professional Silos

Hierarchical structures within acute care settings often resulted in the marginalisation of nurses in clinical decision-making. While nurses were well-positioned to implement evidence-based interventions, their input was frequently undervalued, leading to frustration and delays in adopting best practices. The study found that, in many cases, senior medical staff had the final authority on practice changes, often overlooking the experiential knowledge of nursing staff.

“We had solid evidence for a change in wound care practice, but we weren’t involved in the initial discussions. It took weeks for the doctors to acknowledge our input, which delayed everything” (S1-SN04, Interview).

Observations further demonstrated how these hierarchical structures impacted practice, as nurses’ recommendations were often validated only when endorsed by a physician. This reliance on top-down decision-making created bottlenecks in EBP implementation, reducing the responsiveness of care teams.

“During the morning ward round, a nurse suggested adjusting a catheter protocol due to high infection rates. The consultant listened but deferred the discussion to a later meeting, creating a delay in implementation” (Observation, S1-SN06).

Nurses as Drivers of Knowledge Implementation

Leveraging Clinical Expertise to Advocate for Change

Despite structural barriers, nurses demonstrated agency in implementing practice improvements by identifying care gaps and proactively advocating for evidence-based changes. The ability to observe trends in patient outcomes positioned nurses as key figures in EBP integration, often making small but significant modifications to enhance patient care.

“I noticed that our pressure ulcer incidence was increasing, so I introduced a new prevention strategy. The doctors were hesitant at first, but we showed results quickly, and it became standard practice” (S2-SN03, Interview).

However, advocacy for change was not always met with immediate acceptance. Documented resistance from some senior medical professionals meant that nurses often had to persistently push for practice changes, leveraging data and patient outcomes to strengthen their case.

Table 3. Summary of Themes, Subthemes, and Raw Quotes.

Themes	Subthemes	Subcategories	Raw quotes
Facilitators and barriers to knowledge implementation	Knowledge sharing through collaboration	Co-development of new protocols, clear communication pathways	<i>We worked with the doctors on a new pain management protocol, and by discussing the evidence together, we were able to agree on a more effective approach. It felt like real teamwork. (Senior Nurse, S1)</i>
	Barriers created by professional silos	Exclusion from decision-making, frustration due to delayed implementation	<i>We had solid evidence for a change in wound care practice, but we weren't involved in the initial discussions. It took weeks for the doctors to acknowledge our input, which delayed everything. (Senior Nurse, S1)</i>
Nurses as drivers of knowledge implementation	Leveraging clinical expertise to advocate for change	Identifying care gaps, initiating small-scale interventions	<i>I noticed that our pressure ulcer incidence was increasing, so I introduced a new prevention strategy. The doctors were hesitant at first, but we showed results quickly, and it became standard practice. (Ward Nurse, S1)</i>
	Integrating EBP into routine care	Routine adaptations to improve patient care, informal evidence integration	<i>During rounds, a nurse adjusted a patient's medication schedule to align with the latest evidence on pain management, even though the consultant had not yet approved the change. It made a noticeable difference in the patient's comfort. (Observation, Ward Rounds, S1)</i>
Enhancing collaboration and knowledge sharing	Formal and informal collaboration	Regular meetings, team discussions on new research	<i>We've started having weekly meetings where the whole team, including nurses, discusses new research. It's really improved our teamwork and made it easier to agree on new practices. (Physician, S1)</i>
	Creating interdisciplinary knowledge networks	Interdisciplinary groups for continuous knowledge exchange	<i>We set up a group where nurses and doctors present the latest evidence guidelines they've come across. It's helped bridge the gap between our roles and encouraged us to adopt new practices quicker. (Senior Nurse, S1)</i>
Empowerment through continuous professional development	Education as a driver of confidence	Workshops, EBP training to boost confidence in practice	<i>After attending regular workshops on EBP, I feel much more confident bringing new ideas to the table. It's made a huge difference in how we approach care. (Nurse Manager, S1)</i>
	Building advocacy through education	Empowering nurses to challenge outdated practices	<i>The EBP training gave me the tools I needed to confidently push for changes in the ward. Now, I'm not afraid to challenge practices that don't align with the evidence. (Nurse, S1)</i>
Transformative impact of nurse-led knowledge implementation	Improved patient outcomes	Success in infection control, reduced complications	<i>Since we introduced the new infection control guidelines, we've seen a dramatic reduction in hospital-acquired infections. It's been one of our biggest successes. (Infection Control Nurse, S1)</i>
	Transforming nursing practices	Increased respect, shift to evidence-driven care roles	<i>We're no longer just following orders. We're part of the decision-making process, and it's changed how we see ourselves as professionals. (Senior Nurse, S2)</i>

EBP: Evidence-based practice.

“The nurse manager led a focused training session on infection control, reinforcing key evidence-based guidelines. Within a month, compliance rates on the ward improved, leading to a measurable decline in infections” (Observation, S2-NM02).

Integrating EBP into Routine Care

Nurses frequently integrated EBP informally into their daily routines, often without waiting for formal policy changes. This organic approach to EBP demonstrated their commitment to improving patient outcomes but also

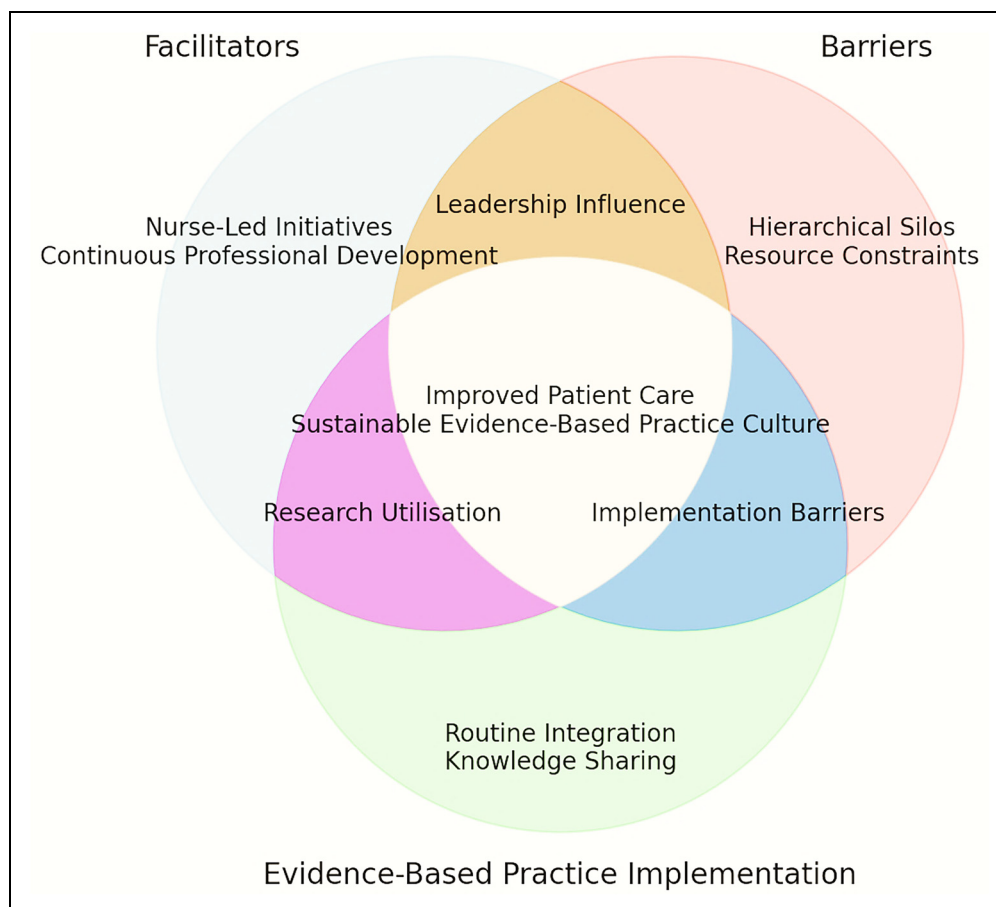


Figure 1. Conceptual Framework for Evidence Based Practice Implementation in Acute Care.

Footnote: Facilitators: Interprofessional Collaboration, Nurse-led Initiatives, and Professional Development; Barriers: Hierarchical Silos, Limited Decision-Making Power for Nurses, and Resource Constraints; EBP Implementation Process: Knowledge Sharing, Routine Integration, and Transformative Practice; Outcomes: Improved Patient Care and the Development of a Sustainable EBP Culture. EBP: Evidence-based practice.

highlighted gaps in institutional support for rapid implementation.

“During rounds, a nurse adjusted a patient’s medication schedule to align with the latest evidence on pain management, even though the consultant had not yet approved the change. It made a noticeable difference in the patient’s comfort” (Observation, S1-SN06).

These adaptations were often made out of necessity, especially when bureaucratic processes slowed down formal approvals. Some nurses relied on mentorship and peer discussions to validate changes before official guidelines were updated.

“A group of nurses revised patient nutrition plans to align with updated guidelines. The change was initially undocumented but was later recognised and formally adopted following improved patient recovery rates” (Documented Care Report, S1).

Enhancing Collaboration and Knowledge Sharing

Formal and Informal Collaboration

While formal interdisciplinary meetings provided essential opportunities for knowledge exchange, informal collaboration also played a crucial role in EBP adoption. Many nurses described impromptu discussions with colleagues as critical moments for learning and practice improvement.

“We’ve started having weekly meetings where the whole team, including nurses, discusses new research. It’s really improved our teamwork and made it easier to agree on new practices” (S1-PH01, Interview).

Despite the benefits, inconsistencies in meeting attendance and engagement created disparities in access to new knowledge. Documented meeting records revealed that some

wards had well-attended EBP discussions, while others struggled to maintain regular participation.

“Meeting records show fluctuating attendance in interdisciplinary EBP discussions. Some wards sustain these practices regularly, while others struggle to maintain engagement” (Documented Meeting Notes, S2).

Creating Interdisciplinary Knowledge Networks

In some settings, proactive nurses established interdisciplinary knowledge-sharing networks, helping bridge the gap between professions. These networks provided an informal yet effective way to ensure that the latest research findings were disseminated and integrated into practice.

“We set up a group where nurses and doctors present the latest evidence guidelines they’ve come across. It’s helped bridge the gap between our roles and encouraged us to adopt new practices quicker” (S2-NM02, Interview).

Observations showed that these networks played a critical role in fostering mutual respect between nursing and medical staff, allowing for more seamless implementation of evidence-based changes.

“An interdisciplinary knowledge-sharing group was instrumental in the rapid adoption of a new sepsis protocol. Staff reported feeling more informed and prepared in managing sepsis cases” (Observation, S1)

Empowerment Through Continuous Professional Development

Education as a Driver of Confidence

Professional development was a key factor in empowering nurses to drive EBP implementation. Those who engaged in EBP training and workshops reported increased confidence in questioning outdated practices and advocating for improvements.

“After attending regular workshops on EBP, I feel much more confident bringing new ideas to the table. It’s made a huge difference in how we approach care” (S1-NM01, Interview).

Building Advocacy Through Education

Beyond skill acquisition, education provided nurses with a sense of authority, equipping them with the tools to challenge ineffective care practices. Those who had undergone EBP training felt more empowered to participate in decision-making processes.

“The EBP training gave me the tools I needed to confidently push for changes in the ward. Now, I’m not afraid to challenge practices that don’t align with the evidence” (S2-SN04, Interview).

These findings highlight the crucial role of nurses in navigating complex healthcare environments to facilitate EBP adoption. Strengthening institutional support, fostering interdisciplinary collaboration, and investing in professional development remain essential to sustaining evidence-driven care.

Discussion

This study provides key insights into EBP implementation in acute care, identifying facilitators and barriers to knowledge translation. Nurses play a central role in driving practice change despite systemic constraints. The findings contribute to the existing literature by highlighting the impact of organisational structures, professional hierarchies, and collaboration on EBP adoption.

A significant contribution of this study is the evidence that nurses often take on leadership roles in EBP implementation, particularly in environments where formal structures for knowledge integration are inadequate. The study aligns with existing literature, which emphasises the role of front-line nurses in identifying care gaps and initiating practice changes (Ominyi & Ezeruigbo, 2019). Findings demonstrated that nurses not only implement evidence-based interventions but also advocate for structural changes to support sustainable EBP integration. This challenges traditional hierarchical models of healthcare decision-making, which often marginalise nursing input (Melnik & Fineout-Overholt, 2022; Ominyi, 2019).

Moreover, the study revealed that informal collaboration among nurses and interdisciplinary teams facilitated knowledge sharing and adoption of EBP, reinforcing findings from previous research on the importance of social networks in knowledge translation (Nowell et al., 2017). However, while some nurses were able to leverage clinical expertise to drive change, others encountered professional silos that restricted their contributions. This reflects the persistent power imbalances in healthcare settings, which continue to hinder effective interprofessional collaboration (Ominyi & Agom, 2020; Taylor et al., 2021).

The study identifies professional hierarchies as a major barrier to EBP adoption, particularly where decision-making authority is concentrated among senior medical staff. Similar challenges have been documented in prior research, where nurses struggle to influence practice despite possessing substantial clinical expertise (O’Brien et al., 2019). Findings from the present study further highlight that hierarchical constraints not only delay implementation but also discourage nurses from proactively engaging in EBP discussions.

Furthermore, the research underscores that limited institutional support, including inadequate access to continuing

professional development and EBP training, exacerbates these barriers. Literature suggests that ongoing education is critical in empowering nurses to engage confidently in evidence-based decision-making (McCormack et al., 2022). Therefore, addressing these structural deficiencies through targeted educational initiatives and policies that promote shared decision-making is essential for improving EBP adoption in acute care settings.

The findings reinforce the importance of interprofessional collaboration in overcoming barriers to EBP implementation. Nurses who participated in structured interdisciplinary meetings reported greater success in integrating evidence-based interventions, supporting existing research that highlights team-based approaches as enablers of EBP adoption (Greenhalgh et al., 2020; Ominyi & Alabi, 2025). However, inconsistencies in the frequency and effectiveness of such meetings suggest that collaboration must be embedded more systematically within healthcare organisations.

One novel insight from this study is the role of informal knowledge-sharing networks in bridging gaps between formal EBP initiatives and real-world practice. Participants described instances where ad hoc discussions led to meaningful practice changes, demonstrating the value of bottom-up approaches to knowledge translation. This aligns with theories of social learning, which posit that practice changes are often catalysed by peer interactions rather than top-down mandates (Melnyk & Fineout-Overholt, 2022; Nowell et al., 2017; Ominyi & Agom, 2020).

Findings from this study highlight the crucial role of organisational support in facilitating or hindering EBP integration. Hospitals and healthcare organisations that prioritise EBP-friendly policies and create structured mechanisms for knowledge dissemination tend to report higher rates of EBP adoption (McCormack et al., 2022). However, this study identified a lack of institutional mechanisms that support sustained engagement with EBP, echoing previous research that found that organisational inertia can be a major impediment to practice change (Ominyi, 2019; Taylor et al., 2021).

One important factor is the presence of EBP mentors or champions within healthcare settings. Studies have shown that having dedicated facilitators significantly improves nurses' confidence in translating research into practice (Melnyk & Fineout-Overholt, 2022). The absence of such roles in many acute care settings examined in this study suggests a missed opportunity for sustained EBP integration.

A key implication of this research is the need for improved education and professional development opportunities to enhance nurses' ability to implement EBP effectively. This study confirms previous findings that nurses who receive ongoing EBP training are more confident in challenging outdated practices and advocating for patient-centred, evidence-based interventions (Ominyi & Ezerugbo, 2019).

However, a lack of access to structured training and CPD opportunities remains a critical barrier. Recent research has highlighted that limited CPD resources disproportionately affect nursing staff, further widening the gap between policy and practice (O'Brien et al., 2019). Addressing this gap requires sustained investment in professional development initiatives that equip nurses with the necessary skills to interpret, apply, and advocate for evidence-based interventions (Ominyi & Alabi, 2025).

Findings from this study suggest that fostering a sustainable culture of EBP requires a multi-faceted approach that includes enhancing organisational infrastructure, addressing hierarchical constraints, and providing ongoing professional development. Strategies such as embedding EBP into daily workflows, ensuring equal participation in decision-making, and establishing structured mentorship programmes have all been shown to facilitate EBP integration in healthcare (Nowell et al., 2017; Ominyi & Agom, 2020).

Moreover, this study underscores the necessity of leadership commitment to supporting nurses in their EBP endeavours. Leaders in healthcare organisations must recognise the invaluable role of nurses in shaping patient care and work towards breaking down barriers that limit their involvement in clinical decision-making (McCormack et al., 2022; Ominyi & Alabi, 2025).

Strengths and Limitations

This study's key strength lies in its comprehensive examination of EBP from multiple professional perspectives, including nurses, NMs, and physicians. The qualitative approach captures nuanced experiences often overlooked in quantitative studies, providing deeper insights. Triangulation through interviews, observations, and document analysis enhances the reliability and validity of findings.

Another strength is its real-world applicability. The findings inform healthcare policy by addressing interdisciplinary collaboration and hierarchical constraints that hinder EBP adoption. The research highlights informal collaboration and mentorship, contributing to literature on knowledge translation and professional development in nursing.

However, limitations exist. The study's focus on specific acute care settings limits generalisability to primary care or community health. Additionally, the cross-sectional design captures EBP implementation at a single time point rather than its long-term sustainability. A longitudinal approach would provide greater insights into EBP adoption over time.

Social desirability bias may have influenced participant responses, though observational data helped mitigate this. Future studies should explore anonymous reporting methods. The study also lacks direct assessment of patient outcomes related to EBP, an area for future research. Despite these limitations, the study contributes valuable insights, underscoring the need for training, leadership support, and policy reforms to sustain EBP integration.

Recommendations

To enhance EBP adoption, healthcare organisations should invest in structured professional development programmes that equip nurses with the skills and confidence to integrate research into practice. Strengthening interdisciplinary collaboration through regular EBP-focused meetings and mentorship programmes can help reduce professional silos. Hospital leadership should foster a culture that empowers nurses by embedding EBP champions within clinical teams and ensuring inclusive decision-making structures. Policies should prioritise resource allocation for EBP initiatives and provide protected time for staff to engage in research and training.

Conclusion

This study highlights the critical role of nurses in driving EBP implementation, despite systemic challenges such as hierarchical constraints and resource limitations. Findings underscore the need for strategic interventions that bridge the gap between evidence generation and practice, ensuring research is effectively translated into meaningful improvements in patient care.

EBP adoption is not merely a technical process but a cultural shift requiring sustained institutional commitment. Healthcare leaders must create an environment where nurses feel empowered to engage with evidence and challenge outdated practices. This includes structured training, open interprofessional dialogue, and integrating EBP into routine decision-making frameworks.

Targeted policies that enhance professional development opportunities are essential. Investing in CPD programmes, mentorship initiatives, and protected research time can significantly improve EBP uptake among nurses. Without these systemic supports, the risk of practice stagnation and suboptimal patient outcomes remains high.

Future research should explore longitudinal approaches to assess the sustainability of EBP integration. Comparative studies across healthcare settings can further illuminate the role of organisational culture. Incorporating patient-centred metrics will provide a more comprehensive evaluation of how EBP influences clinical outcomes and patient experiences.

Strengthening organisational support structures and fostering a culture of shared decision-making will be critical in embedding EBP into daily clinical practice. By addressing the identified barriers and leveraging insights from this study, healthcare institutions can move towards a more evidence-driven, patient-centred approach to care delivery.

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Authorship Contribution Statement

Jude Ominyi: Conceptualisation, methodology, investigation, data curation, formal analysis, writing - original draft, resources, supervision; Adewale Alabi: methodology, writing - review & editing, formal analysis.

Consent to Participate

All participants provided written informed consent prior to participating in the study.

Consent to Publish

All participants provided written informed consent for study results to be published during data collection.

Data Availability

Data for this study is available from the corresponding author upon reasonable request.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Approval

The study was approved by the University of Bedfordshire's Research Ethics Committee and (Ethical Clearance Reference Number: UoB/00183) on January 10, 2017, and the Health Research Authority (Reference ID: HRA/2017/00567), ensuring compliance with UK national regulations, on February 17, 2017.

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