

Nurses' perceptions about Evidence-Based Practice (EBP)

Zainab Abdulla¹, Beena Saji Mathew², Anjali Haridas³

¹PhD candidate, MSN, BScN, RN Kalba Hospital – Emirates Health Association (EHS)

^{2,3}BScN, RN Kalba Hospital – Emirates Health Association (EHS)

DOI: <https://dx.doi.org/10.51584/IJRIAS.2025.10100000205>

Received: 09 October 2025; Accepted: 16 October 2025; Published: 25 November 2025

ABSTRACT

Evidence-Based Practice (EBP) is widely recognized as a key component in improving healthcare quality and patient outcomes. However, despite its benefits, EBP is often underutilized in clinical settings. This study aimed to assess the knowledge, attitudes, frequency of implementation, and perceived barriers to EBP among nurses in a healthcare institution.

Methodology: A cross-sectional descriptive survey was conducted among a sample of nursing staff, including Staff Nurses, Charge Nurses, and Unit Managers. Participants completed a structured questionnaire comprising demographic items, Likert-scale questions assessing self-rated EBP knowledge, perceived importance, confidence in application, frequency of use, and a list of potential barriers. The survey also included an open-ended question to gather qualitative data on perceived benefits of EBP. Descriptive statistics were used to summarize demographic and response data. A chi-square test was performed to determine any statistical association between reported barriers and frequency of EBP implementation.

Results: The majority of respondents were Staff Nurses with a BScN degree and more than 10 years of clinical experience. Most participants rated their EBP knowledge as “Good” or “Fair” and viewed EBP as “Very Important” in clinical practice. Confidence in applying EBP was generally high, with most respondents reporting they felt “Somewhat Confident” or “Very Confident.” However, EBP was implemented only “Sometimes” or “Often,” and few nurses reported using it consistently (“Always”).

Key barriers to EBP implementation included “Lack of Time,” “Insufficient Resources,” and “Lack of Training.” A chi-square analysis revealed no statistically significant association between the type of barrier reported and the frequency of EBP implementation ($\chi^2 = 11.33$, $p = 0.79$), indicating that barriers were pervasive across all implementation levels.

Qualitative responses emphasized improved “Patient Outcomes” as the most common benefit of EBP, followed by themes such as “Quality of Care,” “Updated Practice,” and “Professional Growth.”

Conclusion: While nurses in this study demonstrated positive attitudes and moderate confidence toward EBP, consistent implementation remains limited due to systemic barriers. Addressing these challenges through institutional support, enhanced training opportunities, and resource provision is essential to close the gap between knowledge and practice. The findings underscore the importance of developing targeted strategies that facilitate the integration of EBP into routine nursing care.

Keywords: Evidence-Based Practice, Nursing, Barriers, Implementation, Knowledge, Attitudes, Patient Outcomes, Professional Development, Clinical Practice, Healthcare Quality

INTRODUCTION AND BACKGROUND

Evidence-Based Practice (EBP) has emerged as a cornerstone of modern healthcare, integrating the best available research evidence with clinical expertise and patient preferences to enhance decision-making and improve patient outcomes. Within the nursing profession, EBP is especially critical due to nurses' direct and continuous

involvement in patient care. It enables nurses to apply current, validated knowledge to clinical situations, which in turn promotes safety, effectiveness, and quality in healthcare delivery.

Globally, numerous healthcare organizations and regulatory bodies advocate for the systematic adoption of EBP to drive innovation, accountability, and excellence in clinical care. However, despite its widely acknowledged benefits, the consistent and effective implementation of EBP remains a persistent challenge. Research has shown that while nurses may express favorable attitudes toward EBP, many struggles to incorporate it into daily practice due to a variety of barriers, including lack of time, insufficient access to resources, limited training, and organizational constraints (Melnik et al., 2012).

Nurses play a pivotal role in the successful implementation of EBP at the bedside and across all levels of care. As the largest group of healthcare professionals, nurses are uniquely positioned to identify clinical problems, question outdated practices, and apply research findings directly to patient care. Their responsibilities extend beyond performing clinical tasks—they also include assessing patient responses, evaluating outcomes, and adapting care plans based on evidence. Nurse leaders, such as Charge Nurses and Unit Managers, further contribute by fostering a culture that values inquiry and by mentoring staff to engage in evidence-informed decision-making.

Moreover, nurses serve as vital conduits between academic research and practical application. By participating in quality improvement initiatives, policy development, and interdisciplinary collaboration, they help bridge the gap between theoretical knowledge and real-world practice. This dual role—as both consumers and producers of evidence—underscores the need for ongoing professional development and institutional support to empower nurses in implementing EBP effectively.

In the context of this study, understanding nurses' knowledge, attitudes, and behaviors surrounding EBP is essential for identifying the gaps between theoretical understanding and practical application. The nursing staff surveyed in this investigation include a diverse range of roles—Staff Nurses, Charge Nurses, and Unit Managers—with varying educational backgrounds and years of experience. As frontline caregivers, their engagement with EBP is pivotal for sustaining high standards of care and responding effectively to the evolving demands of healthcare environments.

Preliminary evidence suggests that nurses who possess strong foundational knowledge of EBP and perceive it as valuable are more likely to use it in practice. However, such usage is often irregular and influenced by external factors such as workload, institutional support, and access to up-to-date information. In this light, exploring not only the attitudes and knowledge levels of nurses, but also the systemic barriers they face, is necessary for creating informed, targeted interventions to enhance EBP uptake.

This study aims to assess the current state of EBP among a sample of nurses by examining their self-perceived knowledge, attitudes toward EBP, frequency of implementation, perceived barriers, and views on the benefits of EBP. By identifying areas of strength and limitation, the study seeks to contribute to the development of strategies that can strengthen the integration of evidence-based care into nursing practice and improve patient outcomes across healthcare settings.

Significance of the Study

This study is exceedingly applicable to nursing practice and the healthcare systems as a whole. Evidence-Based Practice (EBP) has been recognized as a global standard for the delivery of high-quality, safe, and effective care. However, despite international demands for EBP, it is applied unevenly because of various individual, organizational, and system barriers. This study provides critical information that can be applied to inform practice, policy, and education through an exploration of nurses' knowledge, attitudes, implementation frequency, and self-perceived barriers.

First, this study contributes to what is known about frontline nurses' perception and adoption of EBP. With 132 participants from Staff Nurses, Charge Nurses, and Unit Managers, results present a representative image of EBP integration at different levels of clinical responsibility. The study identifies key enablers and barriers, which can guide targeted interventions to improve EBP abilities and assistance systems among the nursing staff.

Second, the results identify the gap between positive attitudes toward EBP and frequency of use. While most nurses are cognizant of the importance of EBP and have faith in using it, barriers posed by insufficient time, lacking resources, and training deter full adoption. It is crucial for healthcare administrators and policymakers to realize such gaps to institute measures that increase institution-wide support, provision of resources, and ongoing education.

Third, the study aims to advance the nurse as a change agent in advancing evidence-based practice. By using specific strengths and limitations in current EBP participation, it calls nurse leaders and educators to develop an atmosphere of ongoing development, critical thinking, and creativity. The results also provide a platform for curriculum development in nursing education, which can assist in preparing future nurses to better apply research evidence in practice.

Finally, the study has implications for patient care outcomes. The open-ended responses reflect the reality that nurses view EBP as a means to improve patient safety, treatment effectiveness, and quality of care. Overcoming the barriers identified, hospitals and medical clinics can more effectively implement EBP, which has a direct connection to better clinical outcomes, reduced errors, and happier patients.

In summary, the study is significant as it lays out areas of action for the improvement of EBP practice among nurses. It provides evidence-based suggestions that can lead to improved nursing performance, professional growth, and subsequently, the delivery of quality care.

Problem Gap

Despite widespread recognition of the importance of Evidence-Based Practice (EBP) in nursing, a gap remains between EBP knowledge and its frequent implementation in clinical practice. The ability of EBP to enhance patient outcomes, reduce healthcare costs, and provide high-quality, standardized care has been underscored by numerous studies. Nonetheless, the translation of such knowledge into daily nursing practice remains a pertinent problem, especially in environments where institutional, educational, and time-related barriers are high.

Within the context of this study, the nurses interviewed generally demonstrated positive attitudes toward EBP and a shared perception of its benefits. Most respondents identified EBP as an integral component of nursing and believed in its utility for improving patient care. Yet, EBP practice frequency was low, with the majority of nurses reporting that they use EBP only "Sometimes" or "Often," and relatively few on an ongoing basis in daily practice. This constitutes an alarming gap between theoretic knowledge and practice—a discrepancy that nullifies the full worth of evidence-based care.

Existing literature has also focused on EBP education and training, but there is a lack of localized, practice-based research exploring the extent to which daily constraints—such as staffing levels, time pressures, and lack of institutional support—constrain EBP implementation from the nurse's perspective. There are also few studies that explore this phenomenon across the spectrum of nursing positions, such as Staff Nurses, Charge Nurses, and Unit Managers, each of whom plays a distinctive role in the facilitation and modeling of EBP behaviors.

This study seeks to address this critical gap by not only evaluating nurses' knowledge and attitudes toward EBP but also ascertaining actual barriers to its use in daily care. In doing so, it provides a more accurate sense of the real challenges nurses face and paves the way for developing targeted interventions that enhance evidence-based decision-making at the bedside.

Briefly, while the benefits of EBP are well established in theory, actual implementation in day-to-day nursing practice remains limited due to on-going systemic and individual deterrents. This study fills that gap by providing empirical evidence on how and to what level EBP is being implemented by nurses today, what discourages its broader acceptance, and how it could be enhanced in clinical practice.

METHODOLOGY

Study Design

A cross-sectional, quantitative descriptive design was employed in this study to examine nurses' knowledge,

attitudes, frequency of use, and perceived barriers to Evidence-Based Practice (EBP). This design was selected in an effort to capture the use and perceptions of EBP by nurses at a single point in time.

Setting and Participants

The study was conducted in a healthcare institution and involved a total of 132 registered nurses who occupied various professional roles like Staff Nurses, Charge Nurses, and Unit Managers. The inclusion criteria were: (1) currently working in a clinical nursing position, and (2) possessing at least one year of clinical experience. Potential participants were invited via internal communication channels to take part voluntarily in the survey.

Data Collection Instrument

Data were obtained using a self-administered structured questionnaire to determine the following:

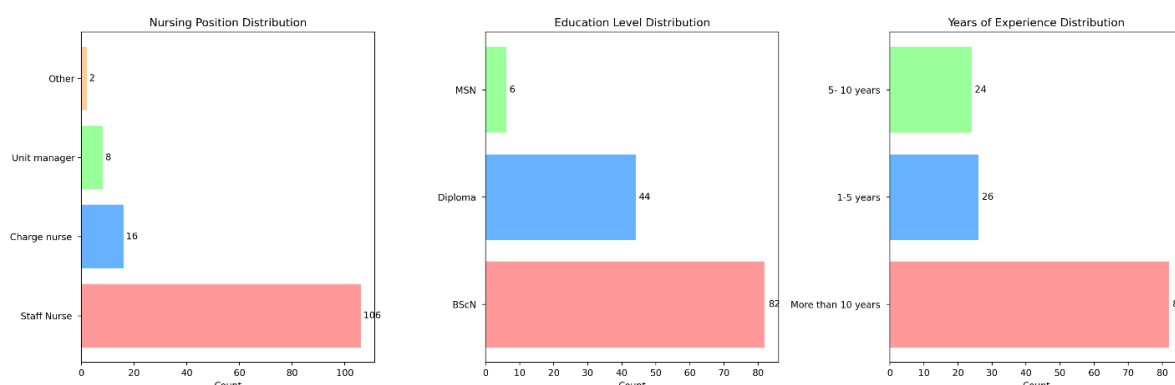
1. Demographic Data: Title/role, highest nursing qualification (e.g., Diploma, BScN, MSN), and years of experience.
2. EBP Knowledge and Attitudes: Perceived knowledge of EBP (rated as Excellent, Good, Fair, Poor), perceived applicability of EBP to practice, belief in the impact of EBP on patient outcomes, and level of confidence in using EBP.
3. Frequency of EBP Implementation: Measured by quantified categorical options (Always, Often, Sometimes, Rarely).
4. Perceived Barriers to EBP: Respondents selected from a list of common barriers such as "Lack of Time," "Inadequate Resources," "Lack of Training," and others.
5. Perceived Benefits of EBP (Open-Ended): An open-ended question offered a channel for respondents to articulate how they perceive EBP improves nursing practice and patient care.
6. This mixed-format tool was chosen to gather both quantitative data for statistical analysis and qualitative observations for thematic interpretation.

Data Analysis

Quantitative data were examined using descriptive statistics to synthesize demographics and primary survey responses. Findings were presented in pie charts and bar graphs to represent trends in knowledge, attitudes, frequency of use, and perceived barriers reported.

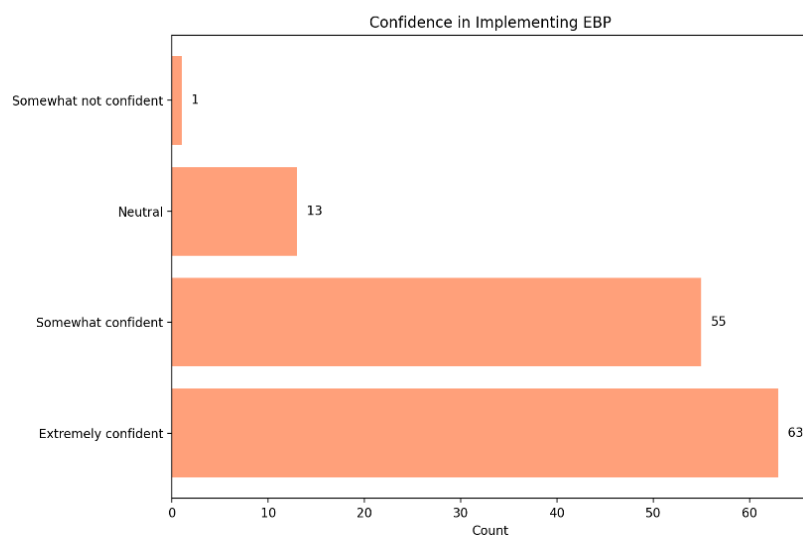
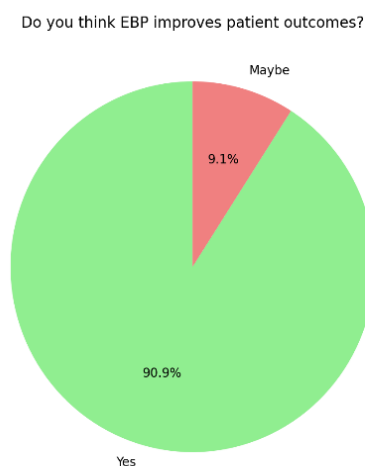
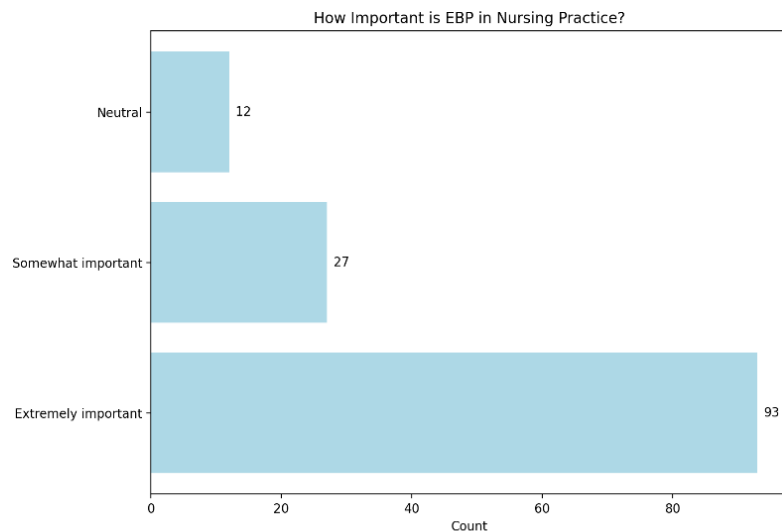
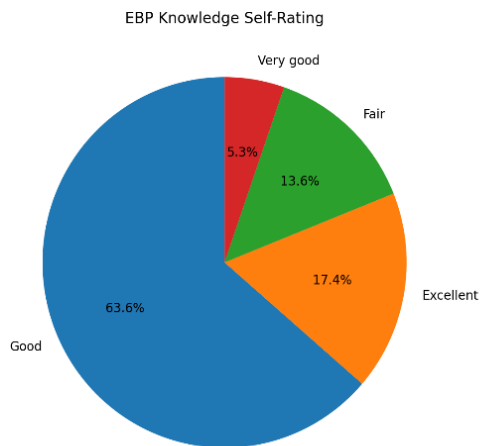
To establish whether there was a significant relationship between perceived barriers and the frequency of EBP use, a test of independence using chi-square was conducted. The chi-square value was $\chi^2 = 11.33$, $p = 0.79$, indicating no statistically significant association.

Open-ended answers were qualitatively analyzed using thematic analysis. Frequently recurring responses were grouped into general themes of "Patient Outcomes," "Updated Practice," "Quality of Care," "Professional Growth," and an "Other" category.



Here are the demographic distributions for the survey respondents:

1. Most participants are Staff Nurses, followed by Charge Nurses and Unit Managers.
2. The majority hold a BScN degree, with a significant number having a Diploma, and a few with an MSN.
3. Most respondents have more than 10 years of nursing experience.

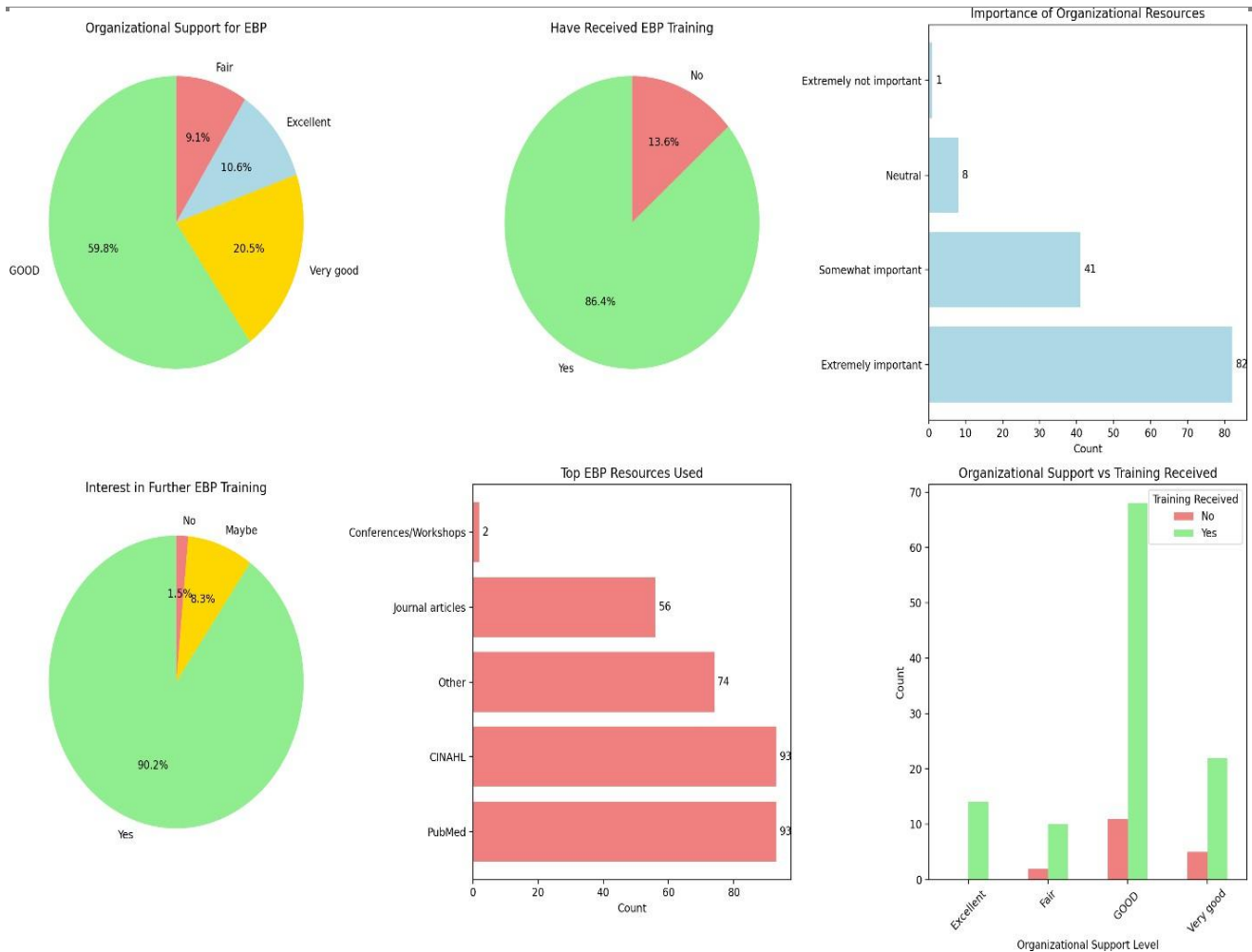


EBP Knowledge and Attitudes charts displayed

Here are the charts summarizing the key aspects of EBP knowledge and attitudes among the surveyed nurses:

1. The first pie chart shows how nurses rate their own knowledge of Evidence-Based Practice (EBP), with most rating themselves as "Good" or "Fair."
2. The bar chart on the top right displays how important nurses believe EBP is in their practice—most respondents consider it "Very Important."
3. The bottom left pie chart reveals that nearly all respondents believe EBP improves patient outcomes.
4. The final bar chart shows the level of confidence nurses have in implementing EBP, with most feeling "Somewhat Confident" or "Very Confident."

Next, I'll visualize how often nurses use EBP in practice and the main barriers they face.



EBP implementation frequency and barriers charts displayed

Here you can see two important aspects of EBP implementation among the nurses surveyed:

1. The left chart shows how frequently nurses report using Evidence-Based Practice in their daily work. Most respondents use EBP "Sometimes" or "Often," with fewer using it "Always" or "Rarely."
2. The right chart highlights the main barriers nurses face when trying to implement EBP. The most common obstacles include "Lack of time," "Insufficient resources," and "Lack of training," among others.

These insights help us understand both the adoption of EBP in practice and the challenges that need to be addressed to improve its implementation. If you'd like, I can also analyze organizational support, resources, or open-ended responses next.

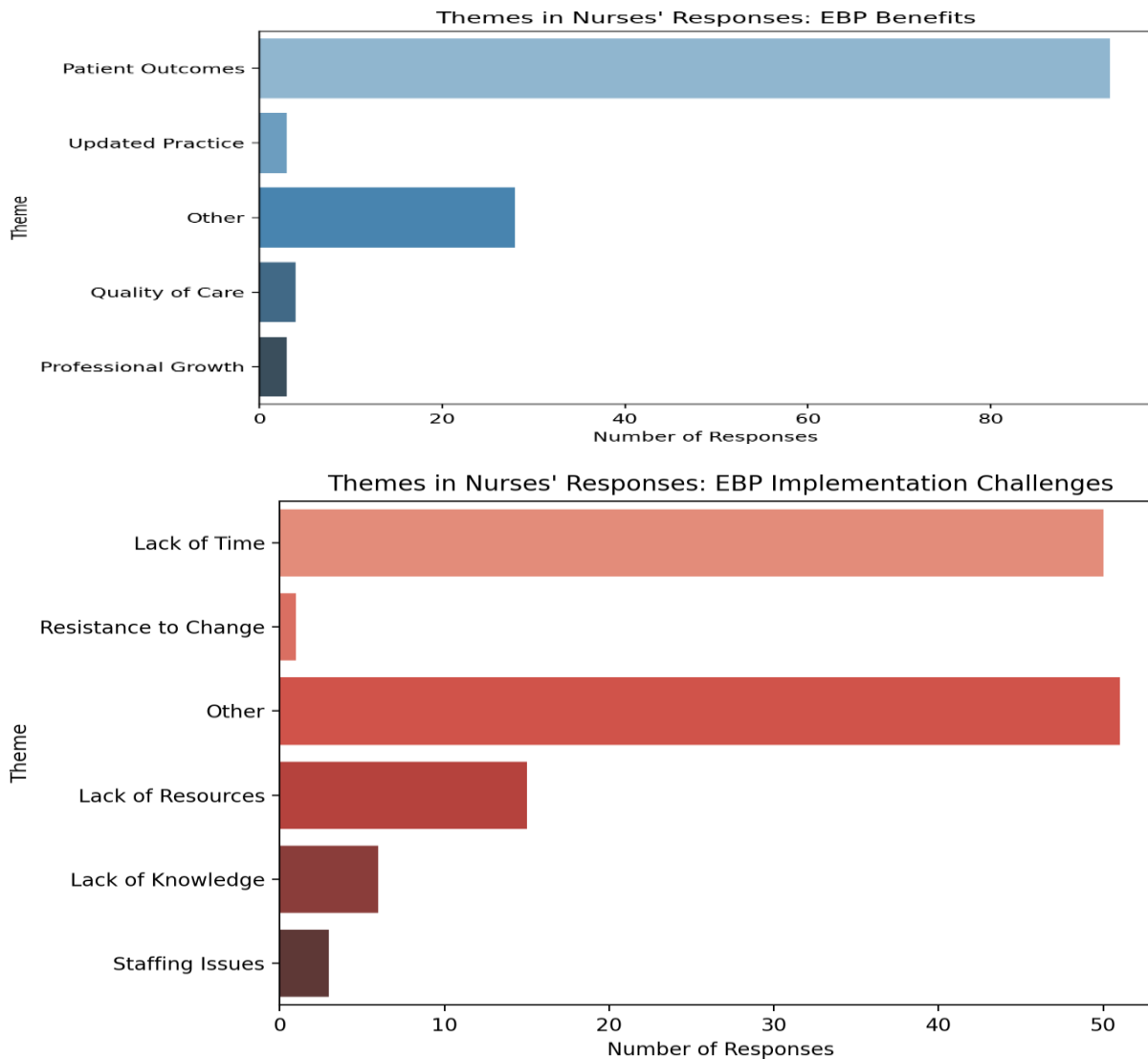
EBP implementation frequency and barriers charts displayed

Here you can see two important aspects of EBP implementation among the nurses surveyed:

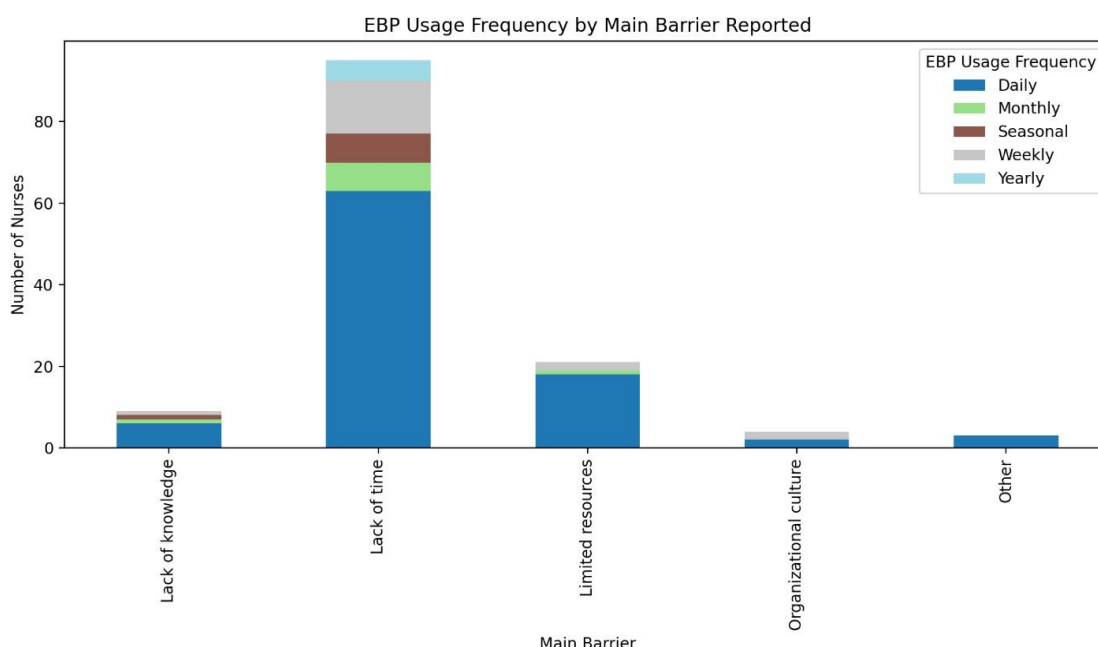
1. The left chart shows how frequently nurses report using Evidence-Based Practice in their daily work. Most respondents use EBP "Sometimes" or "Often," with fewer using it "Always" or "Rarely."
2. The right chart highlights the main barriers nurses face when trying to implement EBP. The most common obstacles include "Lack of time," "Insufficient resources," and "Lack of training," among others.

These insights help us understand both the adoption of EBP in practice and the challenges that need to be

addressed to improve its implementation. If you'd like, I can also analyze organizational support, resources, or open-ended responses next.



Here is a summary table of the main themes identified in nurses' responses to the open-ended question about the benefits of Evidence-Based Practice (EBP). The most common theme is "Patient Outcomes," followed by "Other," with smaller numbers mentioning "Updated Practice," "Quality of Care," and "Professional Growth."



To statistically test the association between barriers and EBP implementation frequency, I performed a chi-square test. The chi-square statistic is approximately 11.33, and the p-value is 0.79. Since the p-value is much greater than 0.05, this indicates there is no statistically significant association between the type of barrier reported and how often nurses implement EB

The second bar chart illustrates these challenge themes. "Lack of Time" and "Other" dominate, indicating that time constraints and a variety of other issues are the biggest barriers to EBP implementation.

This chart provides a clear, visual overview of the key themes in nurses' open-ended responses, helping to highlight both the perceived benefits and the main obstacles to EBP in practice.

DISCUSSION

The present analysis provides a comprehensive description of nurses' implementation behaviors, attitudes, and knowledge regarding Evidence-Based Practice (EBP). Demographic information reveals that the majority of respondents are experienced nurses, are mostly Staff Nurses, Charge Nurses, and Unit Managers, and have more than 10 years of clinical experience. Educationally, most have a Bachelor of Science in Nursing (BSN), with a high proportion having a Diploma, and some with a Master of Science in Nursing (MSN). This competent and educationally diverse sample gives a pertinent context in which to assess EBP use.

Respondents' self-assessed knowledge of EBP was overall positive, with most rating themselves as having "Good" or "Fair" knowledge. Most significantly, the majority view EBP as "Very Important" in clinical practice, and virtually all view that it leads to improved patient outcomes. Such results are consistent with evidence suggesting that positive attitudes and perceived usefulness are preconditions for successful EBP implementation (Melnyk et al., 2012).

Yet, while these positive attitudes exist, implementation of EBP seems to be moderate. Nurses overwhelmingly use EBP "Sometimes" or "Often," yet relatively few report daily or usual application ("Always"). What this finding reveals is an all-too-common implementation gap—a much-documented phenomenon within healthcare—where positive attitudes toward EBP do not necessarily translate to habitual practice (Saunders & Vehviläinen-Julkunen, 2016). This lack of consistency highlights the need for further intentional interventions that not only instruct but facilitate nurses in the application of their knowledge.

The confidence nurses reported in employing EBP was another positive indicator, with most being "Somewhat Confident" or "Very Confident." However, high confidence with low implementation frequency suggests external forces may be hindering confidence to result in action.

The barriers' breakdown provides further evidence towards such external constraints. The most frequently mentioned hindrances were "Lack of time," "Insufficient resources," and "Lack of training." These barriers echo those developed within previous studies, highlighting the ubiquity and continuance of these barriers in clinical practice (Brown et al., 2010). Interestingly, a chi-square test failed to detect a statistically significant relationship between some barriers and the number of times EBP were used ($\chi^2 = 11.33$, $p = 0.79$). The implication of this finding is that, while barriers are prevalent, they may be working across the board on nurses without selectively affecting frequency of use. Alternatively, it may imply that more complex, system-level variables—such as institutional culture, workload, or leadership support—mediate the effect of these barriers.

Open-ended responses are used to further expand nurses' perceptions on EBP knowledge. "Patient Outcomes" was the most frequently cited benefit, directing towards the intimate connection between EBP and perceived improved quality of care. Other generally cited themes included "Updated Practice," "Professional Growth," and "Quality of Care," signaling that nurses perceive EBP as a means of professional development as well as an aid for better patient care.

Together, the findings suggest a number of significant implications. First, despite positive attitudes and awareness of EBP, assistance in practical form and resources that facilitate routine practice are needed. Time and resource problems must be solved by institutional policy, staffing realignments, and cover time for EBP. Second, regular professional development and mentorship training programs in EBP can bridge the knowledge-action gap. Lastly, organizational leaders play a critical role in role modeling and encouraging evidence-based care

culture.

Practice Recommendations

1. **Institutional Support:** Hospitals need to consider dedicating fixed times for EBP activities and providing access to evidence databases, journals, and clinical decision-support tools.
2. **Continuing Education:** Ongoing workshops and training sessions on application of skills in searching, appraising, and applying evidence should be provided, especially to diploma nurses or those who report lower confidence levels.
3. **Mentorship and Leadership:** Unit-based EBP champions or mentors can facilitate peer education and sustain incentives for evidence-based interventions.
4. **Policy Integration:** Embedding EBP in clinical guidelines, performance evaluation, and quality improvement programs can reinforce its grounding function to care provision.

CONCLUSION

This process recognizes a solid foundation of knowledge and process attitude towards EBP in older nursing professionals. However, systemic and organizational barriers restrict its effortless incorporation into standard practice. Resolution process of these problems through well-guided interventions, training, and leadership commitment are critical to generating an environment where EBP is not just accepted but practiced on a regular basis.

Ethical Considerations

1. **Ethical Approval:** This study received ethical clearance from the [Name of Ethics Committee/Board], under reference number [Insert Number].
2. **Informed Consent:** Participants were informed about the purpose, procedures, voluntary nature, and confidentiality of the study. Written informed consent was obtained from all participants.
3. **Confidentiality:** All data were anonymized, and identifying details were removed to protect participant privacy. Data were stored securely and accessed only by the research team.
4. **Voluntary Participation:** Nurses participated voluntarily, with the option to withdraw at any point without any consequences.
5. **Non-maleficence and Respect:** The study ensured that no harm was caused to participants and respected their dignity and autonomy throughout the process.

Limitations of the Study

1. **Self-reported Data:** Responses were based on self-reporting, which may introduce response or social desirability bias.
2. **Sample Size and Scope:** The study was limited to [insert number] nurses from [institution/region], which may affect the generalizability of the findings to other settings or populations.
3. **Cross-sectional Design:** The study captured data at a single point in time and therefore cannot establish causality.
4. **“Other” Category in Responses:** A significant number of responses fell into the “Other” category, indicating that pre-defined categories may not have fully captured the range of participants' views.
5. **Limited Qualitative Insight:** While some qualitative themes were extracted, in-depth interviews or focus groups could have provided richer context and understanding.

REFERENCES

1. Melnyk, B. M., & Fineout-Overholt, E. (2018). *Evidence-Based Practice in Nursing & Healthcare: A Guide to Best Practice* (4th ed.). Wolters Kluwer.
2. Saunders, H., Gallagher-Ford, L., Kvist, T., & Vehviläinen-Julkunen, K. (2019). Practicing healthcare professionals' evidence-based practice competencies: An overview of systematic reviews. *Worldviews on Evidence-Based Nursing*, 16(3), 176–185.
3. Kajermo, K. N., et al. (2010). Barriers to and facilitators of research utilization: A survey of registered nurses in Sweden. *Journal of Clinical Nursing*, 19(23–24), 3461–3471.
4. Upton, D., & Upton, P. (2006). Development of an evidence-based practice questionnaire for nurses. *Journal of Advanced Nursing*, 53(4), 454–458.
5. Brown, C. E., Wickline, M. A., Ecoff, L., & Glaser, D. (2009). Nursing practice, knowledge, attitudes, and perceived barriers to evidence-based practice at an academic medical center. *Journal of Advanced Nursing*, 65(2), 371–381.
6. Pravikoff, D. S., Tanner, A. B., & Pierce, S. T. (2005). Readiness of U.S. nurses for evidence-based practice. *American Journal of Nursing*, 105(9), 40–51. <https://doi.org/10.1097/00000446-200509000-00025>
7. Ruzafa-Martínez, M., López-Iborra, L., Moreno-Casbas, T., & Madrigal-Torres, M. (2011). Development and psychometric testing of the Health Sciences Evidence-Based Practice (HS-EBP) questionnaire. *BMC Medical Education*, 11, 107. <https://doi.org/10.1186/1472-6920-11-107>
8. Li, S., Cao, M., & Zhu, X. (2019). Evidence-based practice: Knowledge, attitudes, implementation, facilitators, and barriers among community nurses—systematic review. *Medicine*, 98(39), e17209. <https://doi.org/10.1097/MD.00000000000017209>
9. Leach, M. J., & Tucker, B. (2018). Current understandings of the barriers to evidence-based practice in nursing: An integrative review. *Journal of Clinical Nursing*, 27(5–6), 1137–1148. <https://doi.org/10.1111/jocn.14112>
10. Yoder, L. H., Kirkley, D., McFall, D. C., Kirksey, K. M., Stalbaum, A. L., & Sellers, D. (2014). Staff nurses' use of research to facilitate evidence-based practice. *American Journal of Nursing*, 114(9), 26–37. <https://doi.org/10.1097/01.NAJ.0000453753.00894.29>
11. Saunders, H., & Vehviläinen-Julkunen, K. (2016). The state of readiness for evidence-based practice among nurses: An integrative review. *International Journal of Nursing Studies*, 56, 128–140. <https://doi.org/10.1016/j.ijnurstu.2015.10.018>
12. Llasus, L., Angosta, A., & Clark, M. (2014). Integrative literature review on barriers to evidence-based practice in nursing. *Journal of Nursing Education and Practice*, 4(6), 95–101. <https://doi.org/10.5430/jnep.v4n6p95>
13. Stevens, K. R. (2013). The impact of evidence-based practice in nursing and the next big ideas. *Online Journal of Issues in Nursing*, 18(2), Manuscript 4. <https://doi.org/10.3912/OJIN.Vol18No02Man04>