

ASSESSMENT OF BARRIERS IN EVIDENCE BASED PRACTICE AMONG NURSES OF MARDAN MEDICAL COMPLEX

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DOI: <https://doi.org/10.5281/zenodo.15826434>

Keywords

Assessment of barriers, evidence based practice, nurses of mardan, medical complex

Article History

Received on 01 June 2025

Accepted on 01 July 2025

Published on 07 July 2025

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Abstract

Evidence-Based Practice (EBP) is recognized globally as a cornerstone for delivering high-quality, patient-centered care. Despite its importance, numerous barriers hinder its adoption among nurses, particularly in developing countries. This descriptive cross-sectional study was conducted at Mardan Medical Complex (MMC), a tertiary care hospital in Pakistan, to assess the barriers nurses face in learning and implementing EBP. A total of 110 registered nurses participated using a validated questionnaire designed to identify challenges related to knowledge, attitude, organizational support, and implementation. The findings revealed that limited access to resources (90.9%), lack of time (81.8%), insufficient authority (79.0%), and inadequate knowledge and training (60%) were among the primary barriers. Additionally, organizational culture, lack of mentorship, and resistance to change further impeded EBP integration. The study highlights the urgent need for institutional strategies, including continuous professional development, organizational support, and policy reform to foster an environment conducive to EBP. Addressing these barriers is crucial to improving clinical decision-making, enhancing patient outcomes, and advancing nursing practice within healthcare systems like MMC.

INTRODUCTION

Evidence-Based Practice integrates three crucial components: up-to-date research evidence, clinical expertise, and patient values and preferences, ensuring informed healthcare decisions. Mardan Medical Complex's commitment to exceptional healthcare necessitates Evidence-Based Practice adoption among nurses, requiring strategic overcoming of research limitations, training deficiencies, and change resistance.

Globally, the nursing profession has increasingly emphasized evidence-based practice (EBP) as a cornerstone of quality care, guiding decision-making and improving patient outcomes. Nurses face ongoing challenges in staying updated with emerging knowledge, technologies, and shifting patient needs,

while effectively integrating research evidence into daily practice. The International Council of Nurses encourages nurses to take an active role in research, driving innovation and excellence in patient care. Strategies promoting evidence-based practice in nursing must be evidence-driven, addressing challenges and leveraging supports to ensure successful implementation. Effective implementation of evidence-based practice is impeded by multiple barriers, including time limitations, knowledge deficits, resource scarcity, negative perceptions, and financial restrictions.

EBP has been implemented in diverse healthcare settings, including primary, secondary, rehabilitation, education, and management. Researchers have

extensively examined barriers to EBP adoption. This study aimed to systematically review and conduct content analysis to identify barriers to Evidence-Based Practice (EBP) implementation across multiple healthcare sectors, including primary care, hospitals, rehabilitation care, medical education, management decision-making, and guideline utilization. Evidence-Based Practice adoption faces: ambiguous barriers, as studies yield conflicting results. Nurses tend to rely on established practices, experience and social networks, underutilizing research evidence.

This research aims to assess the specific barriers to Evidence-Based Practice among nurses at Mardan Medical Complex. By identifying and analyzing these challenges, the study seeks to provide actionable insights that can guide interventions to promote the adoption of EBP, ultimately leading to better patient outcomes and a more efficient healthcare system.

1.2 Background:

Numerous studies have highlighted various factors influencing evidence-based practice adoption in nursing, categorizing them: Challenges limiting nurses' ability to adopt EBP, Factors promoting EBP adoption. Numerous studies have consistently identified several key obstacles hindering the adoption of evidence-based practice (EBP) in nursing: Insufficient time for researching, implementing and evaluating EBP, Lack of authority to modify existing practices, Organizational Culture: Routine-focused cultures discouraging innovation, Misconceptions: Misunderstandings about EBP's purpose, scope and benefits, Inadequate backing from hospital administration, Lack of experienced mentors guiding EBP implementation, Inadequate access to essential resources, Poor understanding of statistical analysis and critical appraisal. Inadequate EBP education and training, Limited access to technology for research and implementation. These barriers underscore the need for targeted strategies to overcome obstacles and foster a supportive environment for EBP adoption. Several key elements have been identified as promoting nurses' intentions to integrate research into practice: Collaborative leadership encouraging nurse participation, Academic degrees and specialized training, Ongoing education and professional development, Availability of relevant, applicable studies, dedicated time for research and

implementation, Favorable perceptions toward evidence-based practice, Guidance from experienced professionals, encouraging environment fostering innovation.

These facilitators enhance nurses' willingness to adopt evidence-based practice, improving patient care and outcomes.

1.3. Statement of purpose

Exploring Barriers to Evidence-Based Practice Learning Among Nurses in MMC Hospital. Investigate perceived barriers to EBP learning among MMC Hospital nurses.

1.4 Aim of Study:

To investigate and identify the barriers to learning evidence-based practice (EBP) among nurses in MMC Hospital, and to develop strategies to overcome these barriers, thereby enhancing nurses' EBP knowledge, skills, and adoption.

1.5. Rationale:

These facilitators enhance nurses' willingness to adopt evidence-based practice, improving patient care and outcomes.

1.6. Research question:

What are the primary barriers to evidence-based practice learning among MMC nurses?

1.7. OBJECTIVES:

The research will have the following objectives. To assess the barriers among nurses regarding evidence base practice.

1.8 OPERATIONAL DEFINITIONS:

1. Evidence-Based Practice (EBP): Evidence-Based Practice refers to a systematic approach to decision-making in professional practice, particularly in healthcare, education, and social work, that integrates the best available research evidence, clinical expertise, and patient or client preferences. It involves continuously evaluating and applying the most relevant and valid information to guide interventions, treatments, or policies to achieve the desired outcomes.

2. Barriers: Barriers are factors, obstacles, or challenges that may include lack of access to research,

insufficient training or knowledge, resistance to change, organizational constraints, or limited resources. These barriers can be internal (e.g., individual attitudes) or external (e.g.,

1.9. Significance of study:

- 1: Optimizes Patient Care: Enhances patient outcomes, quality of life, and overall well-being by ensuring nurses implement evidence-based interventions.
2. Professional Development: Augments nurses' knowledge, skills, and competence in evidence-based practice, fostering expertise and professionalism.
3. Improved Health Outcomes: Contributes to reduced morbidity, mortality, and hospital readmission rates.
4. Enhanced Patient Safety: Encourages adherence to established guidelines and protocols.

1.10. Outline of the thesis:

The complete thesis is divided into five chapter. The chapter first introduction, Introduction, Background, Statement of purpose, Aim of Study, Rationale, Research question, Objectives: Operational Definition, Significance of Study, Outline of the thesis, Summary all are included in first chapter. the chapter two Review of Literature which provides analysis of earlier research on the subject of the study. Chapter three are methodology, Study design Study setting, Study population, Sampling technique, Sample selection, Inclusion criteria, Exclusion criteria, Sample Size, Sampling procedure, Data collection tool, Ethical consideration all are study methods and instrument are included in chapter three. chapter four of my thesis provides a detailed analysis of the study's variables as they appear in the form of findings and results. The last chapter five summary and bibliography offers a detailed comparison of the results of my investigation with those of earlier studies.

1.11: summary:

The study's topic is introduced in the first chapter introduction, followed by an overview of the study's background data. This chapter's middle section includes a "statement of purpose" that describes the chapter's goals, objectives, and research question. Important research parameters, such as operational definitions, the study's importance, and thesis

summaries, are listed at the conclusion of each chapter.

Literature review

2.1 INTRODUCTION

In this chapter an overview of existing literature on the assessment of barriers in evidence base practice among nurses the integration of evidence-based practice (EBP) among nurses is hindered by various barriers including ignorance lack of knowledge about EBP time constraints resource scarcity organizational culture characterized by resistance to change inadequate research skills information overload and insufficient autonomy Additionally impediments such as workload pressures staffing ratios and lack of recognition or incentives for EBP adoption also obstruct evidence-based care. These barriers prevent nurses from utilizing the best available evidence clinical expertise and patient values to inform decision-making ultimately compromising patient outcomes and quality of care Ignorance lack of knowledge or information Time constraints limitations on the amount of time available. Resource scarcity insufficient availability of resources. Organizational culture values beliefs and practices governing behavior Resistance to change opposition to modification or innovation Research skills abilities required to conduct systematic investigation Information overload excessive amount of data Autonomy: independence or self-governance Evidence-based practice (EBP) refers to the conscientious and judicious use of current best evidence in making decisions about the care of individual patients, integrating clinical expertise and patient values with the best available research information EBP involves a systematic approach to decision-making considering factors such as clinical experience patient preferences and external evidence from systematic research critically evaluating and applying relevant research findings to inform healthcare decisions This approach aims to optimize patient outcomes, reduce variability in care and promote cost-effective interventions. Key components of EBP include formulating answerable questions systematically searching and appraising relevant literature evaluating study quality and integrating evidence with clinical expertise and patient values Effective EBP implementation requires healthcare

professionals to stay abreast of emerging research critically evaluate evidence and adapt practice accordingly fostering a culture of lifelong learning and continuous quality improvement. Evidence-based: based on or derived from evidence especially as part of a systematic review - Clinical expertise: expertise in the care of patients Patient values preferences, concerns and expectations of patients Research information information derived from systematic investigation Systematic review comprehensive, transparent, and systematic method of identifying evaluating and synthesizing relevant studies. Retsas's (2017) study highlights the significance of evidence-based practice (EBP) in nursing despite persistent barriers The findings indicate that lack of knowledge, insufficient time, limited resources, and organizational culture hinder EBP adoption. Conversely supportive organizational culture access to resources, continuing education leadership support and collaboration facilitate its implementation. Notably the majority of nurses recognize EBP's benefits in improving patient outcomes enhancing professional development, and increasing job satisfaction.

2.2 LITERATURE REVIEW.

The researcher identified key terms and variables in this case assessment of barriers in evidence base practice among nurses. to perform a literature review. Electronic databases such as PubMed was used to search for relevant articles and journals to perform a literature review. Textbooks as well as online articles were used to perform a literature review.

2.3 Evidence-Based Practice

Evidence-Based Practice (EBP) integrates clinical expertise with the most current and reliable research evidence to inform healthcare decisions. While EBP has gained widespread acceptance a significant gap persists between research evidence and its practical application in healthcare settings Implementing Evidence-Based Practice (EBP) requires a systematic and collaborative approach driven by institutional will interdisciplinary teamwork hindered and individual commitment. To succeed, EBP must be a collective goal fostering a win-win scenario for nurse's clinicians and healthcare organizations alike. By prioritizing EBP healthcare providers can enhance patient

outcomes, improve safety and reduce costs while organizations benefit from increased efficiency credibility and staff satisfaction, ultimately culminating in high-quality, patient-centered care (Shah Jahan Shayan 2019)

Despite the growing emphasis on evidence-based practice (EBP) in nursing, research has primarily focused on Western settings, leaving a significant knowledge gap regarding its implementation in China. This study bridges this gap by investigating the barriers and facilitators influencing EBP in Hunan Province, a less developed region in China. The findings will contribute to a deeper understanding of the contextual factors impacting EBP adoption in China, informing tailored strategies to improve healthcare quality and accessibility in this region. Patient-related barriers to Evidence-Based Practice (EBP) included financial constraints and trust issues. Healthcare providers reported that patient's inability to afford recommended treatments limited EBP implementation. Furthermore, patient's skepticism towards unfamiliar approaches particularly among the elderly posed significant challenges. Communication difficulties and generational cultural gaps contributed to mistrust, with nurses noting that older patients often resisted changes to traditional care hindering EBP adoption (Wendy Gifford 2018)

According (Abbas Heydari 2014) to Evidence-Based Practice (EBP) is crucial for delivering high-quality patient care and fostering professional growth among nurses, midwives, and healthcare providers. By integrating best practices into clinical decision-making EBP enhances patient outcomes, improves safety and promotes effective resource allocation. As a cornerstone of modern healthcare EBP enables nurses and midwives to stay updated on the latest research develop critical thinking skills and advance their expertise. Consequently, it is essential for all healthcare stakeholders to prioritize EBP implementation, ensuring informed decision-making and optimal care delivery. While clinical nurses and midwives utilize Evidence-Based Practice (EBP) in healthcare settings ongoing development of their knowledge skills and practice is crucial. This study's findings offer valuable insights for educational planner's managers, and authorities to enhance EBP implementation quality and consistency. By informing evidence-based education and training

these results can bridge gaps in EBP adoption ultimately improving patient care. Furthermore, this research lays the groundwork for future studies providing a foundation to advance EBP knowledge inform policy developments, and foster a culture of excellence in healthcare.

This study aims to investigate the implementation of Evidence-Based Practice (EBP) in Saudi Arabia, with a focus on identifying the key facilitators and barriers that influence its successful integration into healthcare settings Evidence-based practice (EBP) is a cornerstone of quality healthcare yet international studies reveal a significant disparity between EBP adoption and recommended standards. In Saudi Arabia, the implementation of EBP remains inadequate highlighting a critical need for research, policy development and education to bridge this gap and improve patient outcomes To enhance clinical practice healthcare organizations and nursing leadership should develop and implement a multifaceted strategy to engage staff nurses in Evidence-Based Practice (EBP) This can be achieved by providing ongoing education and mentoring programs focused on EBP empowering nurses to integrate best practices into their daily care. By investing in nurse's professional development, organizations can foster a culture of excellence improve patient outcomes and bridge the gap between research and practice (Naji Alqahtani 2020)

According to (Munirah Alatawi, 2020) Evidence-based practice (EBP) is crucial for enhancing patient care quality, advancing nursing practice, and informing confident decision-making. By integrating rigorous evidence with patient preferences, assessments, and healthcare expertise EBP addresses clinical issues effectively. However, nurses face significant barriers in implementing EBP. This review investigates these obstacles, aiming to identify key challenges hindering EBP adoption among nurses. By understanding these barriers, healthcare systems can develop targeted solutions to overcome them, ensuring seamless EBP integration among healthcare providers and optimizing patient outcomes Research identifies four primary individual barriers hindering Evidence-Based Practice (EBP) implementation among nurses: 1. EBP literacy: Insufficient knowledge, skills, and awareness. 2. Professional attributes: Limited critical thinking, autonomy, and decision-

making. 3. Attitude and experience: Negative perceptions, inadequate experience, and resistance. 4. Language obstacles: Barriers in accessing and understanding EBP resources.

2.4 Lack of Professional Characteristics

Individual barriers to Evidence-Based Practice (EBP) implementation in nursing include lack of professional characteristics and inadequate knowledge, skills, and awareness. Studies by Johnston et al. (2016) in the UK and DeBruyn et al. (2014) in Colombia identified limited professional autonomy and restrictive choice in EBP tools as significant barriers. Additionally, nine studies revealed that nurses' lack of awareness knowledge and skills in EBP hindered its adoption. These knowledge gaps encompassed understanding of research design critical thinking, and information literacy underscoring the need for targeted education and training to empower nurses in EBP implementation.

2.5 Lack of Awareness, Knowledge, and Skills

Nine studies identified lack of knowledge as a significant barrier to Evidence-Based Practice (EBP) implementation among nurses. For instance, Khammarnia et al.'s (2015) cross-sectional study in Iran found that 54.4% of nurses cited knowledge gaps as a common obstacle. Similarly, Gifford et al.'s (2018) qualitative study in China's Hunan province revealed that only 46% of nurses were familiar with EBP. Kc et al.'s (2016) cross-sectional study in Nepal also highlighted knowledge-related barriers, including isolation from knowledgeable colleagues (47.6%) inability to evaluate research quality (37.6%), and perceived minimal benefits of changing practice (40.2%). These findings underscore the need for targeted education, training, and resources to enhance nurses EBP knowledge and skills.

2.6 Organizational Barriers

Review of the literature revealed four primary organizational barriers hindering Evidence-Based Practice (EBP) implementation: lack of support and supervision inadequate training and education, limited resources, and time constraints. These barriers underscore the need for healthcare organizations to prioritize EBP enablement through effective leadership, sufficient staffing and allocation of

necessary resources, including time funding and infrastructure.

2.7 Limited Organization Resources

Organizational barriers to Evidence-Based Practice (EBP) implementation include technology access limitations, with 66% of nurses reporting inadequate computer access and 49% citing slow or poor research access in critical care. Khammarnia et al.'s (2015) study found similar barriers with 72.2% lacking internet, 70% facing workload issues, and 78.3% citing staffing shortages. Moreover, nurses identified lack of research incentives, institutional rewards, and opportunities for skill development as significant organizational obstacles to EBP integration.

2.8 Lack of Support and Supervision

Hospital administrators' lack of knowledge direction, support and leadership skills hinder Evidence-Based Practice (EBP) implementation, compounded by inadequate nurse manager backing (27%) and insufficient institutional support from administrators head nurses, and colleagues. Notably, 91% of nurses emphasize the need for EBP mentors/champions in ICU, while 58% cite lack of authority to change practice as a significant barrier. Furthermore, studies reveal that limited support from healthcare team members (54.2%) and lack of autonomy (34% agreement, 23% strong agreement) restrict nurses' ability to implement EBP. Overall, 71.6% of nurses identify additional barriers, underscoring the need for targeted leadership development institutional support and collaborative environments to facilitate EBP adoption.

2.9 Lack of Time

Time constraints significantly hinder Evidence-Based Practice (EBP) implementation, as consistently reported in multiple studies. Specifically, nurses lack time to read research (Azmoude et al., 2018; mean = 2.70), with 83.7% citing this as a primary barrier (Khammarnia et al., 2015). Additional studies reveal insufficient time for implementing EBP-related changes (Jordan et al., 2016, staying updated with research evidence (Johnston et al., 2016), and developing evidence-based guidelines (Kalaldehy et al., 2014). Nurses also perceive EBP as extra work, fitting into already limited scheduled hours (15), and find implementing evidence-based interventions time-

consuming (Sidani et al., 2016). Lack of time is further emphasized as a challenge by Renolen and Hjälmhult (2015) and DeBruyn et al. (2014), underscoring the need for strategies to optimize nurses' workload and prioritize EBP integration.

2.10 Lack of Training and Education

Inadequate training and education emerge as significant barriers to Evidence-Based Practice (EBP) implementation, according to three studies [8, 10, 12]. Johnston et al. (2016) found that lack of training hindered research translation into practice, with nurses lacking confidence in applying EBP despite acceptable training standards. Renolen and Hjälmhult (2015) noted that managers often prioritized educational opportunities for EBP inadequately. Conversely, Bowers (2014) and other studies [10] highlighted potential solutions, including in-service education on EBP (50% agreement) EBP mentors in critical care units (47% agreement), and in-service training (50% agreement) to promote understanding and adherence to evidence-based practices. Additionally, 50% of participants strongly agreed that best-practice guidelines could facilitate EBP adoption, emphasizing the need for targeted education and training initiatives. (Munirah Alatawi, 2020)

The healthcare community recognizes Evidence-Based Practice (EBP) as the benchmark for exceptional patient care. This research investigates nurses' knowledge, behaviors, and attitudes towards EBP examining their familiarity with EBP concepts, application in clinical settings, and perceptions of challenges and enablers, to inform initiatives promoting EBP integration and optimal care delivery. The integration of Evidence-Based Practice (EBP) in Polish clinical settings faces objective challenges, necessitating systemic reforms in nursing care. However, these obstacles can be overcome through lifelong learning and professional development. Participating in postgraduate education programs can significantly enhance nurses' knowledge, behaviors, and attitudes towards EBP fostering a positive EBP culture. By prioritizing continuous education and updating skills nurses can bridge the gap between research and practice, ultimately improving patient outcomes and advancing the Polish nursing profession. (Jarosława Belowska 2020)

Improving healthcare quality relies heavily on promoting Evidence-Based Practice (EBP) among nurses. However to date, no comprehensive analysis has explored the factors impacting nurses' EBP knowledge and skills. Addressing this knowledge gap is vital to inform targeted strategies, enhance nurses EBP competencies, and facilitate successful implementation, ultimately leading to better patient outcomes and elevated healthcare standards. Our review highlighted educational level, participation in EBP education, experience conducting research, and resources and organizational support for EBP as important factors that are associated with the knowledge and skills of EBP in nurses worldwide. Focusing on these factors may help improve nurses' understanding of EBP and facilitate the implementation of EBP. (Hideaki Furuki 2023)

Upon entering healthcare facilities, patients frequently experience intense anxiety, fear, and distress, impacting their interactions with healthcare providers. Unfortunately, research indicates a global shortage of effective therapeutic nurse-patient communication, with sub-Saharan Africa facing a particularly severe deficit. This critical gap hinders care satisfaction and quality, underscoring the necessity for focused education, training, and support to foster empathetic, patient-centered interactions among nurses and healthcare professionals. (Evans Osei Appiah2023)

organizational support for Evidence-Based Practice (EBP) empowers nurses as change agents, positively impacting patient outcomes. However, numerous barriers impede EBP implementation, evaluation, and dissemination, including time constraints inadequate staffing, limited resource access insufficient education, technological limitations, and inadequate fiscal support. These obstacles, coupled with additional disenfranchising factors hinder nurses' ability to fully integrate EBP and drive practice changes within their organizations underscoring the need for targeted strategies to address these challenges and foster a culture conducive to EBP adoption. (Cecelia L Crawford, 2023)

According to (BROWN C.E.2009) Evidence-based practice is the gold standard in healthcare, yet its adoption in nursing faces challenges. Researchers have identified key barriers and facilitators. To provide high-quality care, healthcare organizations

must foster an environment that prioritizes evidence-informed decision-making over traditional practices. Research revealed that organizational barriers, specifically lack of time and limited nursing autonomy, were the primary obstacles to evidence-based practice (EBP) adoption. Conversely, facilitators included access to learning opportunities, a supportive organizational culture, and readily available, user-friendly resources. Notably, statistical analysis showed significant correlations between these barriers and nurses' practice, knowledge, and attitudes towards EBP, underscoring the critical role of addressing organizational hurdles and fostering a conducive environment to promote EBP integration. The integration of evidence-based practice (EBP) is essential for optimal healthcare delivery. Advanced practice nurses are pivotal in promoting EBP. However, numerous hospital systems globally, including those in the US, have yet to adopt an EBP framework. This study employed a focus group design to investigate nurses' perceptions regarding EBP adoption in a rural Midwestern US community hospital, aiming to elucidate facilitators and barriers to inform strategic improvements. (Tacia, L 2015)

The healthcare discipline is characterized by rapid growth and evolution, facilitated by substantial annual investments in research and development. This yields a proliferation of healthcare literature, leading to advancements in pharmacological interventions, medical devices, and procedural techniques. Consequently, healthcare practitioners are increasingly adopting evidence-based practices, integrating traditional expertise with research-informed innovations to provide high-quality patient care. (G. Hadgu, S. 2015)

2.11 Knowledge and practice assessment of barrier evidence based practice among nurses

Evidence-based practice (EBP) is vital for delivering high-quality patient care, but its adoption among nurses is hindered by knowledge and practice barriers. Melnyk and Fineout-Overholt (2019) identify key obstacles, including lack of understanding of EBP concepts, inadequate awareness of evidence-based guidelines, limited education and training, time constraints, resistance to change, limited autonomy, poor communication, and organizational culture issues. To overcome these barriers, the authors

recommend regular EBP education and training, developing EBP guidelines and protocols, fostering a culture of quality improvement, and encouraging interdisciplinary collaboration. Addressing these barriers enables nurses to provide evidence-based care, improving patient outcomes by integrating best evidence, clinical expertise, and patient values, as outlined in Melnyk and Fineout-Overholt's (2019) comprehensive textbook on EBP in nursing and healthcare.

Evidence-based practice (EBP) is essential for delivering high-quality patient care, yet nurses face significant knowledge and practice barriers, including lack of understanding of EBP principles, inadequate awareness of evidence-based guidelines, and limited education and training, which hinder their ability to implement EBP, while practice barriers such as time constraints, resistance to change, and limited autonomy also impede EBP adoption. Additionally, Hughes (2024) identifies inadequate communication and collaboration among healthcare teams, organizational culture, and lack of resources as contributing factors to EBP barriers. To overcome these obstacles, Hughes recommends regular EBP education and training, developing EBP guidelines and protocols, fostering a culture of quality improvement, and encouraging interdisciplinary collaboration, ultimately enabling nurses to integrate best evidence, clinical expertise, and patient values into practice and improve patient outcomes through effective EBP implementation. Hughes, R. G. (2024) Evidence-based practice (EBP) is crucial for delivering high-quality patient care, yet nurses face significant barriers, including lack of understanding of EBP principles, inadequate awareness of evidence-based guidelines, limited education and training, time constraints, resistance to change, limited autonomy, poor communication, and organizational culture issues (Ignatavicius & Workman, 2020). To overcome these obstacles, regular EBP education and training, developing EBP guidelines and protocols, fostering a culture of quality improvement, and encouraging interdisciplinary collaboration are recommended (Ignatavicius & Workman, 2020). Addressing these knowledge and practice barriers enables nurses to integrate best evidence, clinical expertise, and patient values into practice, ultimately improving patient

outcomes. Ignatavicius, D. D., & Workman, M. L. (2020)

2.12 Studies in Pakistan

According to Ali et al.'s study identified barriers to evidence-based practice among Pakistani nurses, including knowledge gaps, inadequate education/training, limited research access, unfavorable organizational culture, time constraints, limited autonomy, communication barriers, lack of leadership support, and insufficient technology. Nurses also cited skepticism towards research, fear of change, and inadequate resources as obstacles. The authors recommend targeted interventions: EBP education/training, developing EBP guidelines/protocols, and fostering a quality improvement culture. (Ali, S., et al 2022)

A cross-sectional study by Hussain et al. in Karachi, Pakistan, found significant barriers to evidence-based practice (EBP) adoption among nurses, including lack of knowledge, inadequate education/training, limited access to research resources, unfavorable organizational culture, time constraints, limited autonomy, communication barriers, lack of leadership support, and insufficient technology. However, nurses with higher education and longer work experience were more likely to adopt EBP. To address these challenges, the authors recommend targeted interventions, .(Hussain, S., et al 2019)

According to Javed et al.'s study explored perceptions and barriers to evidence-based practice (EBP) among Pakistani nurses, revealing numerous challenges, including knowledge gaps, inadequate education/training, limited research access, unfavorable organizational culture, time constraints, limited autonomy, communication barriers, lack of leadership support, and insufficient technology. Nurses also cited skepticism towards research, fear of change, and inadequate resources as obstacles. To address these, the authors recommend targeted interventions: EBP education/training, developing EBP guidelines/protocols, and fostering a quality improvement culture. (Javed, S., et al. 2020)

Khan et al.'s study identified numerous barriers to evidence-based practice (EBP) among Pakistani nurses, including knowledge gaps, inadequate education/training, limited research access, unfavorable organizational culture, time constraints,

limited autonomy, communication barriers, lack of leadership support, and insufficient technology. Nurses also cited skepticism towards research, fear of change, and inadequate resources as significant obstacles. The authors recommend targeted interventions: (Khan, A., et al.2019)

2.13 Gaps in the literature

Despite existing research, significant gaps persist in the literature on barriers to evidence-based practice (EBP) among nurses, particularly in specific healthcare settings like pediatrics, gerontology, and critical care, and regarding cultural and socio-economic influences on EBP adoption. The role of technology in facilitating EBP, effective strategies for overcoming barriers in resource-constrained settings, and longitudinal studies on EBP intervention sustainability are understudied. Further research is needed on interdisciplinary collaboration, nurse empowerment, EBP's impact on patient outcomes and healthcare quality, and nurse educators' and leaders' roles in promoting EBP. Qualitative and mixed-methods studies are necessary to deeply understand EBP barriers. Addressing these gaps will provide valuable insights for improving EBP adoption among nurses and enhancing healthcare outcomes.

Limited setting-specific studies (e.g., pediatric, gerontological, critical care), minimal exploration of cultural and socio-economic influences on EBP adoption, and insufficient investigation into technology's role (e.g., mobile apps, electronic health records). Additionally, effective strategies for overcoming EBP barriers in resource-constrained settings, nurse empowerment's impact on EBP, and longitudinal studies on EBP intervention sustainability are understudied. Furthermore, interdisciplinary collaboration, nurse educators' and leaders' roles, and EBP's impact on patient outcomes and healthcare quality require more exploration. Finally, qualitative and mixed-methods studies are needed to provide in-depth understanding of EBP barriers.

Gaps in literature on barriers to evidence-based practice among nurses include:

- Setting-specific studies (pediatric, gerontological, critical care)
- Cultural and socio-economic influences

- Technology's role (mobile apps, electronic health records)
- Overcoming EBP barriers in resource-constrained settings
- Nurse empowerment's impact
- Longitudinal studies on sustainability
- Interdisciplinary collaboration
- Nurse educators' and leaders' roles
- EBP's impact on patient outcomes
- Qualitative and mixed-methods studies for in-depth understanding.

2.14 SUMMARY

The available literature review suggests Evidence-Based Practice (EBP) in nursing faces numerous barriers, including lack of knowledge, time constraints, resource scarcity, organizational culture resistant to change, inadequate research skills, information overload, and insufficient autonomy, which hinder its integration into clinical practice, and studies have identified individual barriers such as EBP literacy, professional attributes, attitude and experience, and language obstacles, as well as organizational barriers like lack of support and supervision, inadequate training and education, limited resources, and time constraints, however, despite these challenges EBP remains crucial for delivering high-quality patient care fostering professional growth and informing decision-making through the integration of best available evidence, clinical expertise and patient values. Furthermore, facilitators of EBP include supportive organizational culture access to resources continuing education, leadership support, and collaboration, and research emphasizes the need for targeted education training and resources to enhance nurses EBP knowledge and skills, as well as organizational support and leadership development to foster a culture conducive to EBP adoption ultimately improving patient outcomes advancing healthcare quality, and promoting a culture of excellence in nursing practice.

2.15 CONCLUSION

In this chapter, an overview of literature Evidence-based practice (EBP) is crucial for delivering high-quality patient care, fostering professional growth and informing decision-making in nursing. Despite its

importance various barriers hinder EBP adoption, including lack of knowledge, time constraints, resource scarcity, organizational culture resistant to change, inadequate research skills, information overload, and insufficient autonomy. Research identifies individual and organizational barriers, such as EBP literacy, professional attributes, attitude experience, language obstacles lack of support, supervision, training, education, limited resources, and time constraints. To overcome these challenges, healthcare organizations must prioritize EBP enablement through effective leadership, sufficient staffing, allocation of resources, and targeted education and training. Facilitators of EBP include supportive organizational culture, access to resources, continuing education, leadership support, and collaboration. Ultimately, promoting EBP requires a systematic and collaborative approach, driven by institutional will, interdisciplinary teamwork, and individual commitment to improve patient outcomes, enhance safety, and reduce costs, culminating in high-quality, patient-centered care.

METHODOLOGY

3.1 Introduction:

In the methodology section of research thesis its include study design, study setting, study population, sampling technique and selection criteria the sample size, sampling procedure ,data collection tools, and eithcal consideration.

3.2 STUDY SETTING

the research will be conducted at mardan medical complex, tertiary healthcare facility located in mardan,Khyber Pakhtunkhwa Pakistan. This hospital is a world renowned integrated healthcare system providing comprehensive care to patient with complex condition, making it an ideal setting to assess the barrier in learning evidence base practice .the focus will be on register nurse from different department such as surgical icu ,medical icu ,coronary care unit neurosurgery , orthopedic ward . including nurses from different department will provide a comprehensive view about barrier in evidence base practice across various clinical setting.

3.3 STUDY POPULATION

stuy participant was recruited from tertiary care hospital with total number of 110, located in shiekh malton ,mardan .aminging to maximize perspective and views,including nursing staff with advance practice .

3.4 STUDY DESIGN

a descriptive cross sectional study design is used a questionnaire was developed base on possible item and previously developed questionnaire that was applicable for target population. the design aims to provide snapshot of the situation. the study utilizes mixed method approach combining quantative data from EBP questionnaire allowing exploration of barrier in evidence base practice.

Sample size 110 nurses were taken for quantitative study by using nonrandom sampling technique such as convince sampling. the sample size was determining to balance the need for sufficient data with the practicalities of conducting the study.

3.5 SAMPLING TACHNIQUE

a convenience sampling is used to select participant based on easy to access, availability, and willingness to participate

3.6 DATA COLLECTION TOOLS AND PROCEDURE

the study employed a validated questionnaire that was adapted from a previous study on assessment of barriers. quantitative study tool ware divided into 35sections.the first section contains demographic information. The second section include barrier to evidence base practice. The third section focus on attitude toward evidence base practice. The fourth section focus on barriers of implementing. And the last section fifth contains organizational support toward evidence base practice .2section ware constructed on 5. Likert scale. That range from strongly disagree to strongly agree same was for implementing of barriers. there were 7 statement in barrier to evidence base practice score could range between yes or no the date collection process took place in month of September during which the researcher distributed the questionnaire ns provide assistance to participant as needed.

3.7 STUDY DURATION

the study takes approximately 3 month July august September. The first month is preparation phase we make the proposal and finalizing the questionnaire obtaining ethical approval are conducting a pilot study second month which is data collection phase where questionnaire are distributed and collected from the participant .in the last month which is data analysis phase were collected data is analyzed using statistical software SPSS followed by interpretation of result.

Selection criteria

3.8 INCLUSION CRITERIA

all 2-year diploma nurses were included in the study who actively involved in patient care.

3.9 EXCLUSION CRITERIA

nurses on maternity leave, having personal issue, or unwilling to participate excluded from the study

3.10 DATA ANALYSIS

the collected data was exported to SPSS version 21 for analysis data analysis include descriptive statistic such as mean, frequency, percentage to summaries participant information such as age, sex, profession etc. data was compared between 5 groups. Responses are classified according to mean. nurse who have score equal or above the mean consider to have good knowledge regarding EBP, conversely who have score below the mean consider poor knowledge regarding EB

DATA ANALYSIS

4.1 Demographic Characteristics of Participant

4.1.1 AGE

The research comprised 110 nurses, with 100% response rate. of the sample , (60.9%) (67) were between the age of 20-30y, and (32.7%) (36) were between the age of 31-40y and just (6.36%)(7) nurses were the age between 41-50.

The mean of age 36.67 with standard deviation 30.02 the smallest age participant was 20 and highest age participant was 50.

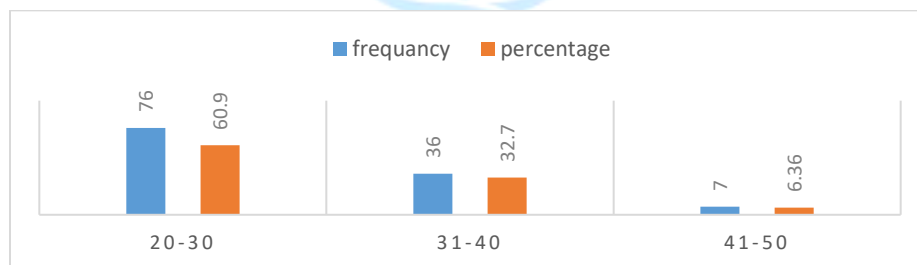


Table 4.1

Age		
Ranges	Frequency	Percent %
20-30	67	60.9
31-40	36	32.7
41-50	7	6.36

4.1.2 Gender

51 were male nurses and 59 were female.

Gender		
Ranges	Frequency	Percentage %
Male	51	46.36
Female	59	53.63

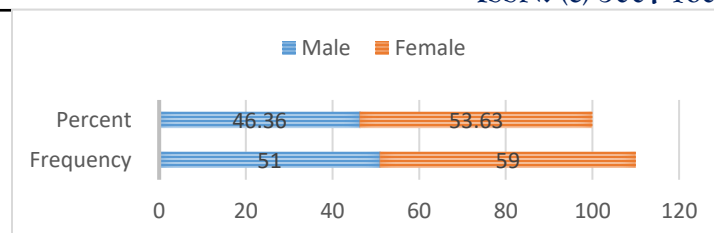


Figure 4.2

4.1.3 Year of nursing experience

Regarding experience of working, 41 nurses experience ranges from 0-5y, 28 nurses have 6-10 year of experience, 5 nurses have 11-15 year of experience,

and 4 nurses have 16-20 year of experience and 32 nurses have more than 21 years of experience. moreover, the mean working experience was.

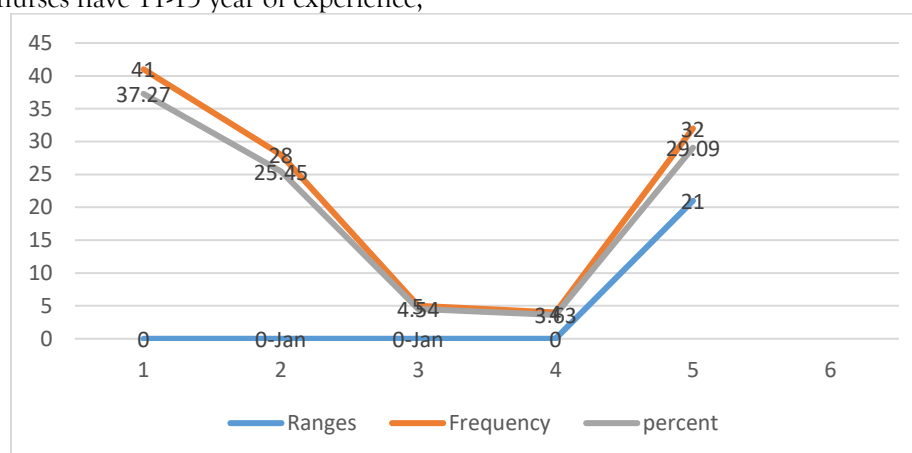


Figure 4.3

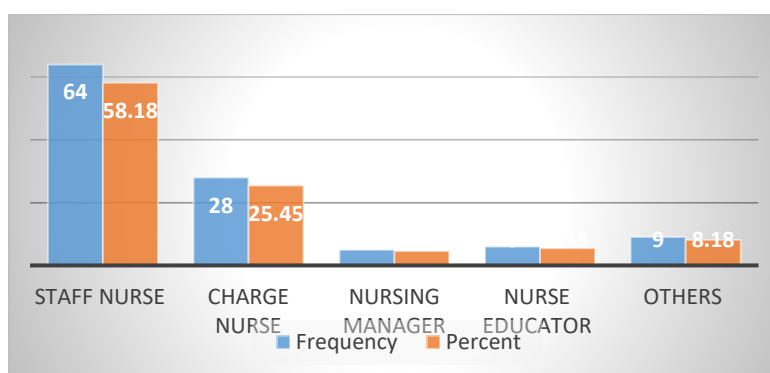
4.1.4 current position

Regarding current position of nurses, (58.18%) (64) were staff nurse, (25.45%) (28) were charge nurse, and

(4.54%) (5) were nurse manger, and (5.45%) (6) were nurse educator, and only (8.18%) (9) were others.

Table 4.4

Year of nursing experience		
Ranges	Frequency	Percent %
0-5	41	37.27
6-10	28	25.45
11-15	5	4.54
16-20	4	3.63
21	32	29.09



4.1.5 Highest Level of Education

More than half of nurse were BSN qualified I.e., (81.81% /90/), associative degree (5.45%/6/), and master degree was (12.72% /14/).

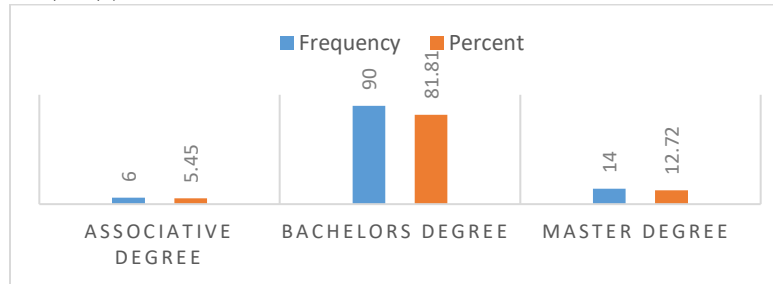


Table 4.5

Education level		
Ranges	Frequency	Percent %
Associative degree	6	5.45
Bachelor's degree	90	81.81
Master degree	14	12.72

4.1.6 Barriers to evidence base practice

40% response to no question that there are no barriers to evidence base practice. (90.9%) response as yes barriers to evidence base practice.

Table 4.6

Questions	Yes		No	
Lack of time	90	81.81	20	18.18
Limited access to resources	100	90.90	10	9.09
Insufficient knowledge or skills	66	60	44	40
Resistance to changes	77	70	33	30
Difficulty applying research evidence	76	69.09	34	30.90
Limited availability of research evidence	85	77.27	25	22.72
Lack of authority to implement changes	87	79.09	23	20.90

Research finding tells that (90.9%) nurses chose barriers to evidence base practice on the basis of limited access to resources, while 81.1 % nurse's response about lack of time, (79.0%) believed that lack of authority to implement changes is also barrier to evidence base practice. Majority of the participant nurses 77.2% tells about limited availability of research evidence. Whereas, (22.72%) thought that there is no limited availability to evidence .69.09% nurses tell that there is difficulty applying research to practice.

60% nurses have no sufficient knowledge about evidence base practice .70% nurses tall about resistance to change .75.4 thought that evidence base

practice is opportunity for professional development ,feedback on evidence base practice implementation ,according to 74.5 respondents, 71.8% nurses tells that different organizations support evidence base practice ,while evidence base practice related quality improvement project are start according to 67.2% of respondents, while 20.9 are disagree, 65.4% that organization support evidence base practice , while 64.5% state that evidence base practice incorporate into performance evaluation , 65.4% are evidence base practice mentors , approximately 55.4% said how to content for evidence base practice support, while interdisciplinary team working are preferred by 53.6%

of participant ,finally, 52.72% nurses are agree evidence base practice related policies.

Table 4.7

Questions	Yes		No	
Organization support EBP	79	71.8	31	28.18
EBP champions or mentors	72	65.4	38	35.4
Opportunity for professional development	83	75.4	27	24.54
EBP incorporate into performance evaluation	71	64.5	39	35.45
Feedback on EBP implementation	82	74.5	26	23.6
Interdisciplinary EBP team	59	53.6	51	46.36
Support by organization for EBP	72	65.4	38	35.4
EBP related policy	58	52.72	52	47.27
Know how to contact for EBP support	61	55.45	49	44.54
EBP related quality improvement project	74	67.27	36	32.72

4.1.8 attitude toward evidence base practice

4.1.8 attitude question analysis

According to the finding of this study,38.18% of nurses agree that EBP is essential to improving patient outcomes, 37.27 strongly agree to improve patient outcomes, 12.72% neutral toward EBP to improve patient outcomes, while 10% strongly disagree to this .47.27% nurses are agree about limited access to research findings while 26.36% are neutral that there

is limited access to research findings ,6.36% nurses disagree toward limited access to research findings, and 12.27% strongly agree about limited access, and 7.27% strongly disagree to this. For lack of confidence evaluating research evidence ,43.63% of nurses agree, 22.72 % neutral ,17.27% disagree, 9.09% strongly agree.

Question	Strongly disagree	disagree	Neutral	agree	Strongly agree
EBP is essential for improving patient outcomes.	11	2	14	42	41
	10%	1.81%	12.72%	38.18%	37.27%
Limited access to research findings.	8	7	29	52	14
	7.27%	6.36%	26.36%	47.27%	12.72%
lack of confidence evaluating research evidence.	8	19	25	48	10
	7.27%	17.27%	22.72%	43.63%	9.09%

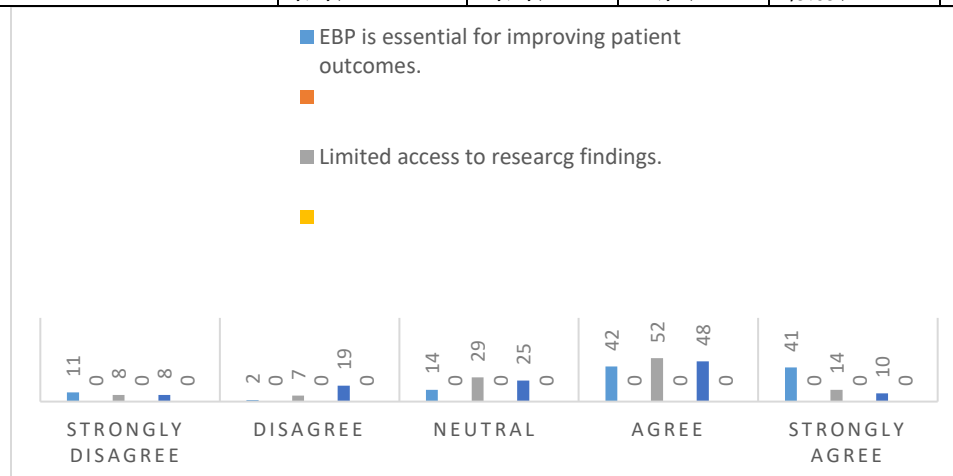


Figure 4.8

4.1.9 EBP implementation:

11.81% of nurses agree to critically appraise research studies, 38.18% disagree to critically appraise research studies, 37.27% neutral to this, while 8.18% strongly disagree to critically appraise the research studies, and just 4.5% nurses strongly agree to critically appraise the research study. The %age of nurses who neutral to implement changes in their practice is 42.72%, only 28.09% agree to implement changes in their practice, and 21.81% disagree to implement changes in

practice, while 4.54% strongly agree to this and only 1.81% strongly disagree to implement changes in their practice. 30.9% agree it's easy to implement EBP changes while 27.27% neutral to implement EBP changes easily, and 17.27% nurses disagree to easily implement changes, while 11.8% strongly agree to easily implement changes in practice, and just 4.54% nurses strongly disagree to implement changes easily in their practice.

Questions	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean/ Strongly Disagree
How often do you critically appraise research studies	9	8.18%	42	38.18 %	41	37.27%	13	11.81 %	5	4.5%	22/18.03
How often do you implement EBP changes in your practice.	2	1.81	24	21.81	47	42.72	32	28.09	5	4.54	22/18.85
How easy is it for you to implement EBP changes	5	4.54	19	17.27	30	27.27	43	30.90	13	11.81	22/14.87

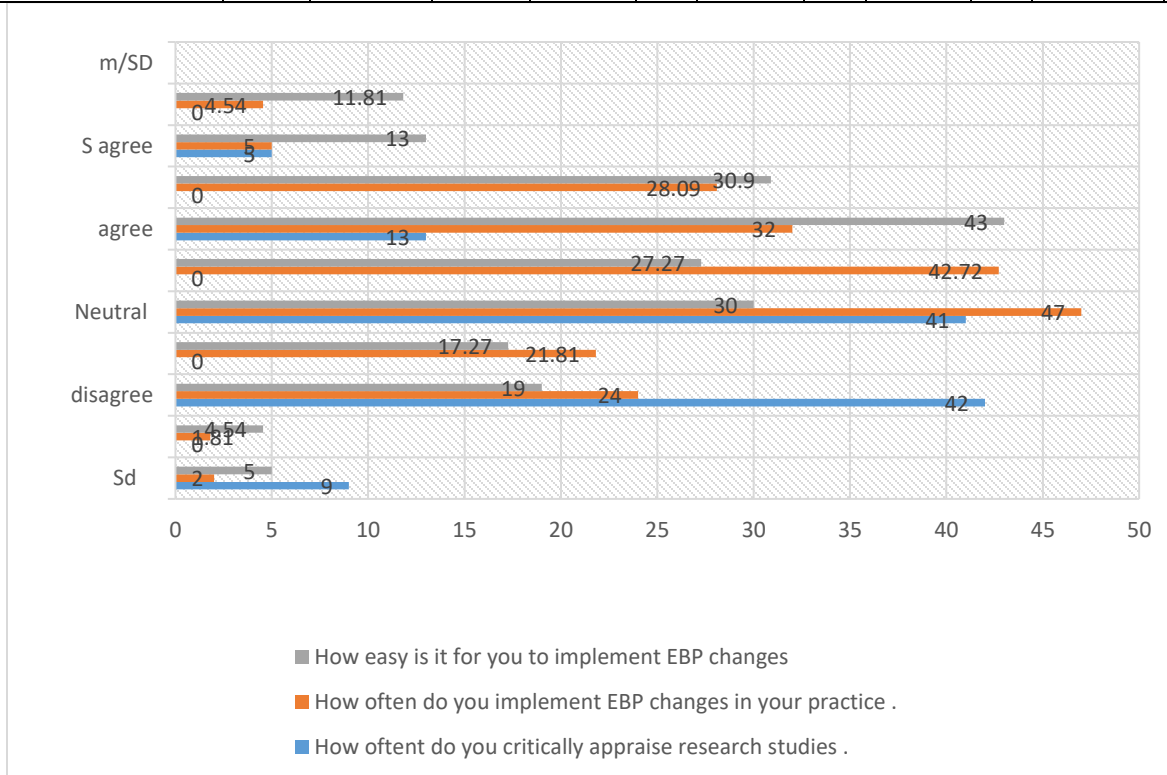


Figure 4.9

Discussion:

A range of factors inhibiting the use of EBP was revealed by the research conducted at MMC. These barriers include structural, organizational as well as those extended to the individual level as part of the health care institution setting. Organizational structure was established as one of the major systemic antecedents in the study based on the ability of

structural characteristics to act as enable or inhibit the integration of new knowledge into practice. Moreover, three major barriers were identified as the ones affecting BMC utilization in shifting evidence-based practices in staff nurse practice environment; those include a constraint of resources, time and priorities. (Baldacchino, 2006)

Furthermore, the study revealed the concepts that concern people's perceptions, attitudes, and tolerance to change as critical factors that define nurses' openness to the opportunity to adopt EBP initiatives. Internet use, organizational policies which may also include personal biases, and other researchers' productions which may not be up to date with the recent findings were noted to be some of the barriers that act as a can minimize the chances of putting the evidence into practice.(Cockell & Mcsherry, 2012)

The consequences of such barriers are all-encompassing, affecting both, the quality of care that patients receive from these nurses and the personal development and job satisfaction of the nurses themselves. To overcome these barriers will require a sustained effort of changing organizational cultures, facilitating cross disciplinary cooperation, ensuring that the community receives on-going education/training and creating a supportive culture that celebrate novel, valuable ideas and decision-making practices that rely on evidence.

In view of the details postulated above, it can now be seen that the elimination of these barriers is a complex issue that needs to be addressed from a system perspective, including all players in the care delivery system. Through leading timely discussions, incipient strategies, as well as supporting learning environments focused on the future of practice, MMC will contribute to a future of practice based on research.(Cavendish et al., n.d.)

In a search conducted in Elborn college, London by Barbara the result was as follow Overall, the level of satisfaction with the items most of the items related to program level outcome monitoring was positive. Certain barriers included were related with the practice environment and EBI, however clinicians' competencies, knowledge and attitude were not barriers to practice change. In individual vulnerability testing, the following barriers were observed in all the areas in the Ottawa Model of Research. In contrast, our results are quite opposite to this indication and truly divorced towards other factors and indicator.(Harrad et al., 2019a)

Another research similar to this one done in Ethiopia, Addis Ababa hospital and the result caste the following data. Slightly more than 90% of the participants had a positive sector perception, and 73.8 percent had a positive attitude. Out of 210 nurses,

121 of them (57.6%) practice EBP in clinical work, as brought out through the survey conducted among the samples. Out of the 120 clients 19 (15.7%) reported practicing EBP consistently. Knowledge (AOR = 3.2, 95%CI 1.5-7.0), skills (AOR = 2.4, 95%CI 1.1-5.4), availability of free time (AOR= 7.9, 95%CI 3.5-17.6) and support from nursing managers (AOR 5, 95%CI 1. Surprisingly, the years of experience, and perception were not found to be related to EBP implementation by the study. Quite identical to our research process, it shows results satisfying to our research objectives.

Another research led by Caroline e Brown on the topic of barrier in nursing practices show that In the work reported in the research, the main barriers found were related to the organizational factors, namely the perceived barriers of time and scope of practice by nurses. On the other hand, enablers that were advanced as contributing to enhancement of integration of EBPS included learning opportunities, development of culture as well as availability of easy to access and easy to use resources.(Balboni et al., 2013) The authors pointed out that many of these identified barriers had strong statistical correlations with certain features of EBP implementation regarding actual practice, knowledge, and attitude toward EBP. This highlights the intimate relationship between the barriers perceived by the nurses and their application of knowledge and research in practice, and the essential import of the organizational factors in considering the implementation of EBP in clinical settings.(Boateng et al., 2018)

Understanding that barriers like, time constraint, and limited control in healthcare organizations, institutions can develop plans of creating a favorable environment to EBP implementation. Continuing education, promoting the use of research in practice, and having ready access and high utility to tools are hallmarks that can greatly reduce barriers and facilitate the integration of EBP in nursing practice.(Harrad et al., 2019b)

Consequently, these research findings highlight the need for implementation targeted efforts with a focus on managing the organization barriers to the support of more involvement of nurses in the use of evidence-based methodologies while at the same time taking advantage of the enhancing elements. Taking all these factors into consideration better facilitates healthcare

organizations to foster an environment where EBPs are established increasing patient benefits as well as raising the caliber of the services delivered by nursing practitioners.

Moreover, the study conducted by Katherine Harding shows the following stats: The study enrolled 50 clinicians and 10 managers across seven specialties in allied health field. The survey results shown below revealed that clinicians had positive attitude towards the Implementation of EBP but poor practice of it. More qualitative findings showed that clinicians and managers interviewed perceived EBP as not being highly valued nor as a core component for delivering patient care with tasks related more to patient throughput given priority. Other barriers that included; inexperience; more so lack of requisite skills and resources not to mention the common challenges of how to put into practice what has been found in the literature to be effective meant that, FotDest was faced with various levels of impediments to the effective implementation of EBP within the healthcare context. Its quite similar to our study nurse practitioner are quite vulnerable to many similar issues.(Cooper et al., 2020)

A study conducted in University of Nicosia show that the first difficulty in the use of EBP is the availability of time by the nurses, as they cannot spend considerable time searching for research and reading articles. These time constraints are specifically equal to a reduction in their ability to successfully introduce and implement such evidence-based practices into the everyday patient care paradigm. Furthermore, besides time perceived as indispensable, many other similar factors that influence the process of applying research evidence to practice in nursing were identified. These factors which are different across the studies are very influential in defining how the nurses apply the research evidence in practice. Overcoming time barriers and perceiving the range of factors that might affect its application are the important tasks on the way to improve the utilization of evidence-based practice in nursing that would contribute to patients' outcomes and strengthening the quality of healthcare services.(Baldacchino, 2006)

Research conducted at University of Ulster, Ulster, UK shows that the authors' literature review reveals that general practitioners (GPs) and community nurses have different perceptions of barriers to EB

adaptive implementation. The main barriers by which GPs were more aware included the perceived irrelevance of the research to their practice, the constant changing of primary care environment and the ability to search and locate evidence-based information pars [[0165]]. On the other hand, community nurses identified poor computer facilities, patient compliance problems, and challenges of bringing changes within the primary care as major challenges. These differences in perceived barriers indicate that possibly intervention strategies employed to classify them should also be different. In this way, it will be possible to help GPs and community nurses manage the differences in these challenges and integrate the best evidence-based practices into the actual clinical practice.(Cockell & Mcsherry, 2012)

Conclusion:

From the sooner analysis of the barriers to EBP among the nurses of the MMC (hypothetical institution), we can realize that there are lots of barriers, and none of them can be treated simple or single-handedly disregarded. The studies reveal the array of challenges that create a barrier to the integration of research in the practice of nursing at MMC; such challenges present in other countries as well; therefore, the study contributes to the global theme about the healthcare sector.

Among the main challenges faced by the nurses at MMC one of them is the lack of time spent on the actual search for research and the time spent on reviewing materials related to the issue in question. This constraint does not only affect the ability to access the latest evidence, but it also affects their ability to apply results of research at the patient care setting. Brief time for conducting single purpose activities points to a worrisome system reality that requires systematic solutions to bring about lifestyle change that will support implementing evidence-based practice for patient care.

Said difference also indicates that the means of dealing with barriers are also different which shows that in system with as many subgroups in healthcare employees like general practitioners and community nurses barrier solutions may have to be different. GPs have concern based on priorities such as relevance of research and the update on change in primary care, nevertheless community NVs describe more

infrastructure concerns, patient compliance and enabling change in primary care environment. This is important when developing differential programs of change to address needs and challenges that are characteristic of various types of nursing practice at MMC.

The identified barriers not only impede the optimisation of EBP but also highlight key broken systems that affect the standard and quality of patient care delivery processes. It is apparent that such barriers call for a systemic response that cuts across organisational support, education and training, resources and culture change to embrace EBP in clinical practice.

Therefore, understanding the challenges to the implementation of EBP among nurses at MMC show that the practice of bringing about research evidence in to nursing practice is not a smooth process, and is restrained by a number of factors. When MMC addresses these issues and comes up with unique ways to deal with the challenges effecting change based on research evidence, MMC stands to benefit by being a model health care institution which has a positive impact on the patient's plaza, elevating the standard of care and availing professional growth opportunities to their nurses.

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