

Barriers And Facilitators Yo Evidence-Based Practice Among Nurses And Midwives In Saudi Arabia

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Abstract

Introduction: Evidence-Based Practice (EBP) is the universally accepted standard of providing quality, safe, and affordable healthcare services. The systematic integration is a fundamental requirement of the Saudi Commission of Health Specialties (SCFHS) and is fundamental to the realization of the national goals of the Healthcare Transformation Program by Vision 2030. Although such a strong regulatory support is in place, the published literature still reflects a gap in the policies that necessitate EBP functioning and their ongoing operationalization in Saudi Arabian clinical contexts.

Study Objective: The overall goal of this systematic review is to find out and discuss the barriers and facilitators affecting the adoption and implementation of evidence-based practice (EBP) in Saudi Arabia among nurses and midwives.

Methodology: The systematic review method was used and followed the PRISMA guidelines. The systematic review included the original research articles of 2013 and 2023, most of which were obtained through databases such as Scopus, Medline, and Google Scholar. The synthesis was also aimed at determining thematic patterns that were repeated in terms of time, resources, leadership support, knowledge gaps, and organizational culture impact on professional practice and autonomy.

Conclusion: The review validates that structural and organizational barriers are the main barriers to the adoption of EBP. The lack of resources and organizational support, as well as the inadequacy of time and excessive workloads are the most perilous obstacles that are mentioned by the practitioners. The presence of these resource constraints is greatly enhanced by a hierarchical organizational culture where professional autonomy is discouraged, the spirit of inquiry is suppressed and evidence-based change to the routine practice is hindered. Although there are individual gaps in knowledge (mostly in critical appraisal skills) most gaps are dependent on structural support to achieve successful implementation.

Key words: Evidence-based practice, Nurses, Midwives, Saudi Arabia.

Introduction and Background

Evidence-Based Practice (EBP) has been widely recognized all over the world as the indispensable cornerstone of providing high-quality, holistic clinical care. This methodological procedure requires that the practitioners make their decisions using the most up-to-date and confirmed research evidence and professional knowledge deliberately discarding the usage of traditional practices, anecdotal recommendations of their peers, or convictions. EBP is officially accepted as a structured, evidence-based, problem solving, approach that tries to implement the new knowledge to the new clinical, administrative and educational practices in a cohesive way. [1], [3]

The application of EBP consists of the fact that nurses and midwives gather, process, and use research knowledge, and thus extend the range of their knowledge on the domain as well as advance their level of professionalism. The adoption of EBP is relevant all over the world as a major factor of transformation in healthcare. [7] Its advantages are well-reported and include such items as the best patient outcomes, the decrease in the variability of the quality of care, the decrease in healthcare spending, and the workforce impacts, including increased job satisfaction and reduced turnover rates. EBP operationalization is based on systematic models, including the widely used five-step process (Ask, Acquire, Appraise, Apply, Assess), or seven-step elaborate models. The critical assessment of evidence is part and parcel of this process as it is well known that there are different levels of reliability. An example is that level A evidence is based on randomized, controlled trials (RCT) which is the most reliable, as compared to level C evidence, which is based on consensus opinions or expert opinion in case of unavailability of strong data. [5], [8]

Saudi Arabia Strategic Context

There is no compromise when it comes to the integration of EBP as part of the national strategic direction of Saudi Arabia (KSA). The Ministry of Health (MoH) is one of the ministries tasked with the provision of the Healthcare Transformation Program (HTP) under the umbrella of the Vision 2030, which clearly spells the requirement to integrate EBP in the process of clinical and policy decision-making processes within all health clusters. [4], [12] This requirement forms the basis of achieving the strategic goals of increasing standards of service and providing improved value in medical care. The Saudi Commission for Health Specialties (SCFHS) is the major regulatory organization, and it institutionalizes EBP by creating educational and professional mandates. SCFHS requires that the research and evidence-based practice should be included in the domains of the curricula in postgraduate programs. The official document of the Scope of Nursing and Midwifery Practice also supports this trend, stating the significance of an ongoing professional growth, self-practice assessment, as well as the need to incorporate research and advanced theory into oneself, in case he or she is interested in extended or advanced practice. [13]

In KSA, profession classification usually demands the nurses to possess a Bachelor of Science in Nursing (BSN). The competence levels that are required according to SCFHS are advanced clinical skills, skills of evaluation and analysis in the preparation of care plans, and the competent use of electronic resources and information technology to provide high-quality care. [6], [8] The strategic regulatory emphasis on hiring nurses with advanced degrees and research experience is an indication of a good realization that the proper implementation of EBP is closely intertwined with the raising of the academic level and the basis of knowledge of the nursing workforce, and especially in such aspects as the research methodology and critical appraisal.[17]

Although a well-established, compulsory regulatory framework that makes it clear that EBP is an inseparable professional demand exists, many systematic reviews and primary studies still demonstrate that practitioners experience moderate to high rates of certain implementation obstacles. [11], [12] This policy-to-practice gap goes a long way to insinuate that on the one hand, there is a clear strategic intent but on the other hand, there are systemic, resource and culture issues found within individual healthcare organizations (HCOs).

Although the EBP is widely accepted worldwide as the basis of quality assurance, the literature shows that there is a gap on the contextual, specific barriers to nurses in Saudi Arabia. The national desire to implement and use EBP needs specific understanding of such implementation problems. The proposed systematic review will synthesize all available empirical data on EBP adoption barriers and facilitators among Saudi Arabia professional nursing and midwifery professionals workforce. It is hoped that the synthesized results will be used by policy analysts and administrators as evidence base which will allow

the development of specific, systemic interventions required to succeed EBP integration and finally align the clinical practice to the national strategic healthcare objectives.[9], [15]

Evidence-based practice (EBP) is a core concept in healthcare that integrates clinical judgment, patient values, and both the most recent and high-quality research evidence to make clinical decisions and positively influence patient outcomes. Implementation of EBP in the nursing and midwifery practice is essential in the delivery of safe, effective, and efficient care. The nurses and midwives in Saudi Arabia represent a large percentage of the total health care workforce and play a fundamental role in offering frontline care in various healthcare facilities. Even though the advantages of EBP have been acknowledged, its adoption in Saudi healthcare facilities is inconsistent and is often constrained by a number of factors. [21]

The implementation of EBP is subject to success which requires various factors both at the individual level, organizational level, and systemic level. [17], [18] Some of the barriers that nurses and midwives may encounter are the lack of access to research resources, inadequate training on research appraisal, cultural resistance to change, and excessive workloads that demand little time to conduct evidence-based activities. On the other hand, the uptake of EBP can be increased through facilitators such as supportive leadership, continuous professional development, and collaborative working environment. [13]

This is a systematic review that seeks to thoroughly analyze all the literature that is available on the barriers and facilitators that affect EBP among Saudi Arabian nurses and midwives. Through evidences of current studies, this review aims at identifying the most significant reasons that inhibit or facilitate implementation of EBP, with the aim of informing how the gap between research and practice can be closed. The comprehension of such dynamics will help healthcare policymakers, educators, and administrators to create specific interventions that can engender the culture of evidence-based care and eventually enhance patient outcomes and quality of healthcare in the Saudi environment.

Objective of Study

The overall goal of this systematic review is to find out and discuss the barriers and facilitators affecting the adoption and implementation of evidence-based practice (EBP) in Saudi Arabia among nurses and midwives. This review intends to offer an in-depth idea of the mechanisms that deter or facilitate the adoption of EBP in the Saudi health care environment by integrating the results of the recent empirical research.

Research Methodology

The research questions of the current study are:

Q1. What do you consider are the main obstacles impeding the use and application of evidence-based practice (EBP) in Saudi Arabia by nurses and midwives?

Q2. Which facilitators allow or encourage the successful introduction of EBP into nursing and midwifery practice in the Saudi healthcare setting?

Q3. What are the effects of organizational, individual and cultural factors on EBP adoption among Saudi Arabia nurses and midwives?

Research Design

To guarantee reliability and consistency, this systematic review had a rigorous methodology that followed the Preferred Reporting Items of Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The extensive literature search was done in various electronic databases such as PubMed, CINAHL, Scopus and other related regional journals to ensure the inclusion of diverse studies related to the evidence-based practice within the Saudi Arabian nursing and midwife fields. To identify barriers and facilitators to EBP implementation among the target population, inclusion criteria were created to only include empirical studies that were published in 2015 to 2025, and had to deal with the need to determine the barriers and facilitators of EBP. The ones that were not published in English or did not provide enough methodology were not included in studies.

Search Strategy

A broad search methodology was used to find the pertinent literature that explores barriers and facilitators of evidence-based practice in Saudi Arabia among nurses and midwives. Systematic search of multiple electronic databases which included PubMed, CINAHL, Scopus, and local healthcare journals was carried out. The limit of the search was restricted to the research published by 2015 to 2025 to reflect the new and topical evidence. Also, hand-searching was carried out to select more relevant studies in reference list of included articles. This strict search strategy was to broadly capture the scope of the literature that covers the factors that affect adoption of EBP in the Saudi healthcare setting.

Types of Studies Included

The range of study designs incorporated in this systematic review was very wide in order to have a clear picture of the barriers and facilitators to evidence-based practice among Saudi Arabian nurses and midwives. Quantitative and qualitative studies were all taken into account, such as cross-sectional surveys, descriptive studies, mixed-methods studies, and qualitative interviews or focus groups. The use of mixed-method studies enabled a deeper insight into the integration of quantitative data and detailed views of the contextual and cultural forces that affected the adoption of EBP. The studies were chosen according to their interest to Saudi healthcare setting and attention to nursing and midwifery professionals. This inclusive strategy guaranteed a wide range of evidence base, which allowed making a subtle synthesis of the complex issues and facilitators that affect the implementation of EBP.

Keywords

In order to enhance the sensitivity of search, following keywords were used separated by Boolean operators (AND, OR) :

"Evidence-based practice" AND "Nurses" OR "Midwives") AND "Saudi Arabia" AND "Barriers" OR "Facilitators" OR "Challenges" OR "Enablers".

Data Management

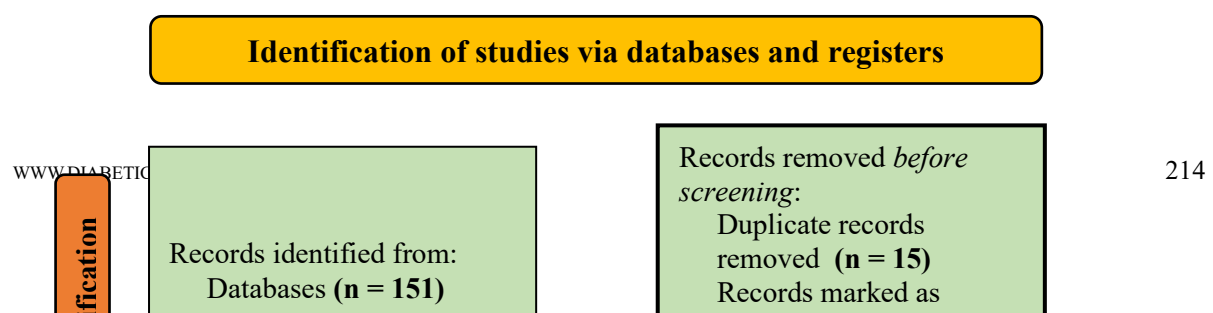
The management of data in this systematic review was done through a structured and rigorous process to make sure that extracted data is accurate, consistent and reliable. To start with, the relevant studies were identified by performing extensive searches in databases and filtered under the predetermined inclusion and exclusion criteria. Two reviewers independently collected data with help of a standardized form to document the main features of the studies, demographics of participants, barriers and facilitators cited by the researchers, and the quality indicators of the methods documented by the researchers.

Results

A total of 151 research studies and one report was identified, the studies were collected considering the components related to barriers and facilitators to evidence-based practice among nurses and midwives in Saudi Arabia. Out of these identified studies, 15 were removed because of duplication of records, references and location and 20 studies were marked as ineligible, as not including the above stated concept and 17 for some other unavoidable conditions.

Further 99 records were saved for screening, then in the screening process 51 records were further removed on the basis of exclusion criteria. Total studies finalized for review were 48. Two reports were also included in the study.

In Saudi Arabia, some barriers and facilitators to evidence-based practice (EBP) among midwives and nurses have been found based on the previous studies. Limited institutional backing, staffing, and access to research databases are all barriers that are widely cited as impediments to the adoption of EBP in an organization. [6] There are also knowledge and skills gaps, such as the lack of proper training in EBP methods and critical appraisal skills, which also create an obstacle to successful implementation. [19]



Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71
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Attitudinal and cultural issues as resistance to change, dependency on the old way of doing things and the hierarchical nature of decision making processes are also very important in inhibiting the adoption of EBP. [15], [17] These problems are aggravated by time constraints occasioned by great workloads and inadequate time allocated to conduct research. On the other hand, facilitators that facilitate the implementation of EBP are good leadership by the nursing administrators and hospital management, which promote evidence-based care culture.

Ongoing professional development courses, workshops, and inclusion of the principles of EBP in the curricula of nursing and midwifery practices improve practitioner competencies and motivation. Better access to online databases, journals and institutional subscriptions offer vital access to evidence retrieval. Moreover, an interdisciplinary teamwork and mentorship approach with a culture of collaboration creates knowledge exchange and enables EBP integration. These results highlight the complexity of barriers and facilitators, which cut across an organizational, individual, and cultural level. It is important that these factors are addressed with specific interventions to enhance the EBP among Saudi Arabian nurses and midwives and that will eventually translate into better patient outcomes and quality of healthcare. [17], [3], [11]

Discussion

Obstacles to EBP Implementation

The barriers to systematic EBP implementation in nurses and midwives in Saudi Arabia are multidimensional and multivariate, and can be grouped into organizational/systemic barriers, cultural/hierarchical barriers, and knowledge/skill gaps in the individuals. Organizational factors are always the most important and most mentioned barriers to effective implementation of EBP. Several researches have emphasized that nurses had a moderate to high level of operational barriers. The organizational subscale tends to have the most overall mean score of the perceived barriers. [15], [4], [8] Time constraints and the lack of organizational support are highly acute and always highlighted as the most remarkable barriers to adopting EBP. EBP process is time consuming in nature. The intensity of workload and shortage of staff mean that nurses are under a lot of pressure, which makes them deliberately neglect the implementation of EBP principles in favor of the fulfillment of their immediate, time-related tasks. This staffing shortage coupled with unsecured time is an active suspension of implemented EBP. [12]

The overall lack of organizational support is not time specific and includes the lack of financial resources as well as the lack of access to documented knowledge and necessary resources. Moreover, the breakdown in the communication within the organization is a major impediment to the process; the absence of a structured flow of information and research of EBP throughout the organization is identified as one of the barriers in allowing practitioners to adopt the new knowledge. Far deeper than the issue of resource constraints lies a hidden set of cultural and relational factors which prevent the requisite spirit of inquiry needed to get EBP started. These are those factors that determine the environment of operation and affect the professional agency of personnel. [16]

Adoption Facilitators of EBP

The effective implementation of EBP must be followed with the commitment to the establishment of the enabling environment that would support and empower practitioners, in the first place, through structural reinforcement and effective leadership and competency development. Organizational policies that support EBP are demonstrated to play a major role in the adoption of EBP. [21], [22] It is also found that sufficient organizational support and resources are essential facilitators, which are usually represented by the training required by hospitals. The availability of EBP champions and Advanced Nurse Practitioners (ANPs) as EBP mentors are part of the successful and sustainable implementation. Good EBP mentors offer the necessary education and intensive support especially when the education is given at the point of care. [23]

This systematic use of mentorship assists in breaking the first obstacle of time shortage as the effort and time spent to search and evaluate evidence by an individual nurse are lowered and thus enhances knowledge and practice. Effective leadership by people with high pedagogical, clinical, and research competencies is one of the determinants of these programs. The reports of the staff nurses have always been positive on whether the nursing leadership encouraged them to attend EBP trainings or not. [24], [25] A positive consequence of effective EBP initiatives also includes promoting interprofessional collaboration as a way of quality improvement. Enhancing the educational aspects of research in academic programs and focusing on the lifelong learning process are quite useful solutions.

The application of the structured methodologies including PEACE framework is also consistent with the objectives of the Healthcare Transformation Program (HTP) as it leads the nurses through the formation of evidence appraisal and practice evaluation. [18], [2] Moreover, the most viable and common approaches to the distribution and implementation of the EBP approach entail educational interventions as well as the official introduction of clinical practice guidelines and protocols.

Organizational Culture

The evidence shows that even though such individual factors as positive knowledge and attitude have a positive correlation with EBP implementation, they have less impact than perceived support by nursing leadership and working environment does. [16] This rather important finding hints that culture acts as the gatekeeper: once organizational environment is characterized by hierarchies, distance, and passive obedience, even the best skilled nurses will not be able to transfer their knowledge to practice-level changes. The presence of a significant impediment to implementation exists between the requirement of EBP to inquire and change and the enforcement of conformity by the culture. [5]

To enhance EBP, successful change must consider cultural and relational change practices cultural safety and promoting professional agency as an essential condition prior to making changes, and not only a technical ability acquisition. The evidence confirms the existence of powerful relationship, as the investment in advanced education and specialized training of nurses leads to their increase in professional autonomy, which subsequently positively affects the environment oriented on EBP adoption. Thus, higher education (e.g. BSN, MSc) and the development of professionals must be regarded as the means of cultural reform and empowerment as the background to conquer well-established hierarchical obstacles. [4], [13], [14]

Multifaceted Intervention Needs

The study points heavily to the fact that the implementation needs multifaceted approaches to be effective, which is why the percentage of variation in the intentions to implement is substantial (27%). This is a policy that should focus on a more coordinated approach in the future. Policy change (requiring designated time and resource allocation); Cultural change (enhancing individualism and decreasing rank); and Technical development (specialty-specific mentorship and improved training in critical appraisal). [15], [23] Nursing's focus should include building the internal data management systems and Quality Improvement (QI) Processes which allow nurses to utilize their "internal evidence" to evaluate the effectiveness of their clinical questions while evaluating outcomes from the implementation of Evidence Based Practices (EBPs) within the nursing profession.[26]

Conclusion

This EBP barrier and facilitator systematic review among nurses and midwives in Saudi Arabia proves that the main impediments are structural and cultural, but not necessarily educational. The time scarcity and the absence of organizational support are the most eminent barriers that are intensified by hierarchical norms and inconsistent involvement of leaders in leadership significantly. Appraisal skills among specialized groups are also critical skills deficient areas that require specific educational reform. Effective execution can be successful using coordinated multifaceted strategies, making an emphasis on leadership, formalized mentorship, and structural support. In order to effectively operationalize EBP to meet the objectives of the Vision 2030, the designed interventions must be systemic and targeted. The recommendations as described below are an evidence-based roadmap to the stakeholders.

Future Scope of Study

The prospective of the evidence-based practice (EBP) among nurses and midwives in Saudi Arabia is bright and multidimensional. The longitudinal and intervention-based research is of the greatest necessity as the healthcare environment undergoes changes, and it is necessary to determine how effective the strategies to overcome the identified barriers and improve the facilitators can be. The application of digital health technologies and decision-support systems to facilitate the use of EBP in clinical facilities should be investigated in the future.

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