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The reason why Evidence-Based Practice is important in Nursing

Nada Ahmed Assiri [(1)] , Samar Nasser Alshahrani [(1)] , Noura Saad Aldosari [(2)] , Sarah Ali Abutayrah [(2)] , Reem Mohammed Alrshoodi [(2)] , Maha Dham Alshammari , Abeer Abdulrahman Bin Qasim [(3)] , Maryam Saud Aldhafeeri [(2)] , Monirah ajab Almutairy , Shemah Ali Mahdi Alyami [(2)] , Reem Saud Aldhafeeri [(4)] , Huda Abdulaziz Hamad ALmliki [(5)] , Laila Hassan Omar Jibran [(6)] , Razan Hassan Mohammed Al Majdou [(7)] , Afnan Obaid Hadi Aldhafeeri [(8)]

(1) DIriyah hospital (quality), Ministry of Health, Saudi Arabia,
(2) DIriyah hospital, Ministry of Health, Saudi Arabia,
(3) Dlriyah hospital, Ministry of Health, Saudi Arabia,
(4) Primary health care (PHC) Abu Muse Alshari-Hafar Al-Batin, Ministry of Health, Saudi Arabia,
(5) Al-Nada PHC- Riyadh, Ministry of Health, Saudi Arabia,
(6) First District (Western Tuwaiq Health Center) , Ministry of Health, Saudi Arabia,
(7) Al Mansak Health Center Abha , Ministry of Health, Saudi Arabia,
(8) King Khalid Hospital, Ministry of Health, Saudi Arabia

Abstract

Evidence-Based Practice (EBP) is a universal concept of current nursing that is based on the most recent evidence of the available research, clinical expertise, and patient values to inform the clinical decision-making process. This paper will discuss the historical evolution of EBP, its principles as well as its primary elements, its importance to improving patient outcomes, safety and the overall quality of care. It emphasizes the importance of clinical expertise and patient-centered care as a key requirement when applying the findings of research. The study also looks at the positive outcomes of EBP to patients and nursing professionals such as better clinical outcomes, professional competence, job satisfaction and organizational efficiency. The obstacles to the adoption of EBP, including the scarcity of resources, time, and skills, and organizational resistance, are addressed, and the methods to defeat the challenges are proposed based on education, leadership assistance, technology adoption, and interprofessional collaboration. Cases of successful implementation of EBP and future perspectives such as digital technologies and individual care are introduced.

Keywords: Evidence-Based Practice (EBP), Nursing, Clinical Expertise, Patient-Centered Care, Healthcare Quality, Patient Safety, Professional Development, Research Utilization

1. Introduction

Nursing is a dynamic and changing career which needs scientific evidence to be incorporated in the clinical practice. Evidence-Based Practice (EBP) has become a paradigm of modern nursing and helped nurses to make informed choices that increase the patient outcomes, promote safety and quality of care. EBP integrates the most promising research, clinical experience, and patient choices in order to provide scientifically valid and personalized care. The EBP adoption process is a change in the culture of care that was based on tradition and intuition to the systematic, research-informed care.[1] The study examines the importance of EBP in nursing, its historical background, main principles, and miscellaneous applications. Also, it focuses on the advantages of EBP to patients and nurses, barriers to its use, and ways of addressing them. The paper also provides the examples of successful implementation of EBP in the clinical environment and takes the future trends into consideration that will influence the nursing practice. This paper highlights the essence of EBP in enhancing the nursing profession and the high quality of healthcare provision by highlighting the significance of lifelong learning, leadership, and technological innovation.[2]

Introduction on Evidence-Based Nursing Practice

Evidence-Based Nursing Practice (EBP) refers to a methodical process of clinical decision-making that incorporates the most appropriate scientific evidence with clinical decision-making by nurses and patients. It is a resource of patient outcomes improvement, quality of care, and patient nursing interventions grounded on proven effectiveness rather than tradition and routine. Nowadays, EBP is viewed as one of the key elements of professional nursing practice in the healthcare setting, fostering the culture of inquiry and constant improvement.[3] The idea of evidence-based

*Corresponding author e-mail Naaassiri@moh.gov.sa (Nada Ahmed Assiri).

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practice in medicine started in the 1990s and slowly extended to nursing and other health professions. In nursing, EBP focuses on the application of available research evidence to inform clinical practice, which implies that nurses can provide care that is efficient and effective. It is also a method of strengthening the nursing judgment and closing the gap between the research and practice by turning the theoretical knowledge into the practical bedside applications.[4] EBP implementation in nursing requires a number of steps, which are formulation of clinical questions, searching and appraisal of relevant research, and application of the findings to patient care. Nurses should be motivated to critically assess the studies and conclude whether they can be trusted and applied in certain clinical practices. In addition, EBP enhances collaboration of healthcare professionals since it involves communication, reflection, and commitment to lifelong learning.[5] Altogether, evidence-based nursing practice plays a critical role in the development of the profession, patient satisfaction, and high-quality and safe healthcare provision. It enables nurses to make evidence-based decisions based on scientific evidence, increases the accountability, and decreases clinical practice variability. Through the adoption of EBP, nurses will play a role in the more effective healthcare system and fulfill their duty to deliver care based on the available evidence. [6,7]

The Evidence of the Development of Evidence-Based Practice in Nursing

The historical process of Evidence-Based Practice (EBP) in nursing is the reflection of the way of the evolution of the nursing profession into a scientific and research-based field. EBP traces its roots to the efforts of Florence Nightingale in the middle of the 19th century who applied systematic observation and data collection in order to enhance patient outcomes in the Crimean War. Her works on using statistical data to purposeful work in nursing care have laid the groundwork of the early evidence-based nursing.[8] In the early 20 th century, nursing education started to evolve out of the hospital-based apprenticeship paradigms into a university-based paradigm, where critical thinking and scientific inquiry were the paramount frameworks. Nevertheless, the modern concept of evidence-based practice was not introduced into medicine until the 1990s when Dr. David Sackett and others at McMaster University first introduced it. Their model of Evidence-Based Medicine (EBM) had a great impact on the nursing field, encouraging the use of evidence-based practices in all healthcare professions.[9] To address this, nursing leaders and educators started incorporating EBP into curricular, clinical and professional standards. Such organizations like the American Nurses Association (ANA) and the Sigma Theta Tau International Honor Society of Nursing have been very instrumental in advocating EBP through the use of research, quality enhancement and lifelong learning. The end of the 20 th and the beginning of the 21 st century witnessed a surge in the growth of nursing research journals, online databases, and continuing education courses to increase the research literacy and critical appraisal skills of nurses.[10] Nowadays, EBP is one of the foundations of nursing professionalism worldwide. It does not only enhance the clinical outcomes but also provides the nursing profession with new credibility as a scientific field. The evolutionary history of EBP illustrates the way that nursing has advanced past informal care into a high-quality, evidence-based practice that is developing due to research, innovation, and international cooperation.[11]

Definition and Major Principles of Evidence-Based Practice

The concept of Evidence-Based Practice (EBP) as applied to nursing can be defined as the careful, clear, and responsible application of the most appropriate existing evidence to carry out the judgments concerning the patient care. It entails a combination of three vital components, which include the most suitable available research evidence, clinical judgment of the nurse and the values and preferences of the patient. This three prong makes sure that clinical choices are scientifically based as well as personalized, so they result in better healthcare results and patient happiness.[12] It also focuses on the idea that nursing practice does not simply obey tradition, intuition, or authority but on a systematically evaluated evidence. In this respect, EBP is an ongoing questioning, searching, appraising, and implementing evidence in clinical practices. Nurses have an important role to play in this process since they would identify clinical problems, examine the appropriate literature and apply interventions that have been targeted through rigorous research and found to be effective.[13] Evidence-based nursing follows a number of fundamental principles. The first principle is the critical appraisal which is assessing the quality, validity and relevance of research results and using them to practice. Second is the principle of clinical expertise, which includes the knowledge, skills, and the experience that a nurse has in dealing with patients. The third principle is patient-centered care, whereby the patient and his or her personal needs, values, and culture are considered in the process of making clinical decisions. Continuous learning is the other critical value because in EBP, professionals should constantly develop and be ready to accept new evidence.[14,15] Conclusively, EBP aims at enhancing the quality and uniformity of nursing care by fulfilling the discontinuity between research and practice. It grants nurses the authority to make informed and powerful decisions and promotes responsibility in the healthcare system. Following the major principles of EBP, nurses make their profession more convincing and help to promote the entire healthcare delivery.[16]

Connection between research and nursing practice

Research and nursing practice relationship is central in development of the nursing profession and better patient care. Research forms the basis on which the evidence based nursing is supported and it offers the scientific information and knowledge on which the clinical decisions are made. In the absence of research, nursing would be dependent in large part upon tradition or experience, and that does not necessarily lead to the best results. Research can be used to establish the effective methods of intervention, to improve existing practices, and to make sure that nursing care is safe, effective, and current through systematic inquiry. Nursing research is very essential in the translation of scientific evidence into practice. It also makes the nurses know not only what works, but also why, in which circumstances, and on which populations of patients. Such a relationship between theory and practice can help nurses apply evidence-based methods in patient evaluation, diagnosis, treatment, and evaluation. To provide an example, research can inform best practices in such areas as wound care, pain management, infection prevention, and patient education.[17] In addition, the incorporation of research in the nursing practice supports the culture of inquiry in healthcare organizations. Nurses should be urged to challenge the current practices, detect the gaps in knowledge, and engage in the research process that would help in the continuous process of improvement. This is the cooperation of researchers and clinicians that increases both the credibility and the scientific basis of the nursing profession.[18,19] Research literacy is also highlighted as a tool in the education system and professional bodies to equip nurses. Knowledge of the methods of finding, decoding, and utilizing research results will enable nurses to deliver evidence-based and personalized care. Nursing research and practice in a nutshell are mutually related: the practice is based upon research and new research questions are generated by clinical experiences. This is a dynamic relationship which causes nursing to be improved as science and technology develop and eventually result into the improvement of patient care standards.[20]

Elementary Pillars of Evidence-Based practice

Evidence-Based Practice (EBP) in nursing has three critical elements that collaborate to inform clinical practice and enhance patient outcomes. The combination of these three elements best available research evidence, clinical expertise, and patient values and preferences is the cornerstone of contemporary nursing care and it ensures that clinical decisions made are scientifically sound as well as person centered. The knowledge and incorporation of these factors can enable nurses to provide effective, ethical and personalized care across diverse clinical environments.[21] The initial one is the optimal available research evidence which involves well-designed studies, clinical trials, systematic reviews, and meta-analyses. This evidence gives credible information regarding the effectiveness, safety and efficiency of the nursing interventions. It is expected of the nurses to be aware of recent research and use the validated results to enhance the quality of care and patient safety.[22] The second element is clinical expertise which is the knowledge, judgment and skills that are acquired by a nurse during his education and professional experience. The clinical expertise will enable nurses to apply research to the context of each individual patient scenario. It entails capacity to identify instances where conventional evidence might have to be altered depending on the conditions or clinical complexities of the patients.[23] The third element is patient values and preferences. Evidence-based nursing acknowledges patients as the main stakeholders in their care. This implies taking into account the cultural beliefs, personal values, expectations, and desired health results of a patient into the process of decision making. Nurses can make care compassionate and relevant by assuming that the patient knows what is most important to him or her.[24,25] These three elements are related to each other and make a balanced approach to nursing practice. Together they can be used to encourage critical thinking, improve the quality of care and improve the relationship between the nurse and the patient. The main aspects of EBP in the end enable nurses to make scientifically and ethically sound decisions, which positively affect outcomes and patient satisfaction.[26]

The Evidence-Based Practice of Clinical Expertise

The main factor of Evidence-Based Practice (EBP) implementation in nursing is clinical expertise. It is the transition of theoretical research results to the reality of patient care. Although scientific evidence is offered in research regarding the most suitable available interventions, it is the clinical experience of the nurse that decides how, when and with whom such interventions are applied. This is a professional judgment acquired through education, practice, and reflection, which will guarantee that evidence is applied in practice effectively and ethically in clinical practice.[27] The clinical expertise could take a broad spectrum of skills such as the assessment, diagnostic reasoning, decision-making, and technical proficiency. These abilities have been practised by experienced nurses to decipher complicated data of the patient, detect subtle shifts in the condition and customise interventions to suit specific requirements. As an example, a study may propose a consensus standard of wound management, but a clinical experience of a nurse enables him to modify the treatment depending on patient age, comorbidities, and treatment response.[28,29]In addition, clinical experience is required in the cases where evidence is scarce, contradictory, or otherwise not relevant to a certain scenario. When that happens, nurses are guided by their judgment of the profession, and their experience to make decisions. Such flexibility emphasizes the necessity to balance evidence and

practice in such a way that patient care should be evidence-based and context-sensitive.[30,31]

Good interprofessional communication and teamwork between healthcare professionals are also achieved with clinical acumen. Seasoned nurses have been known to play a mentoring role whereby they guide their less experienced counterparts on how to incorporate research findings in practice. Reflective practice helps them keep on improving their skills, appraise the results and change their attitude towards changing evidence.[32] the human component of EBP is clinical expertise- it brings a transformation between abstract research and caring about individuals. Nurses can use scientific evidence along with practical experience and empathy to make sure that the care given to patients is effective and person-centered.[33]

Patient Values and Preferences as a part of Decision-Making

Patient values and preferences should be incorporated as an essential element of Evidence-Based Practice (EBP) in nursing. It makes sure that the decisions readied about care are not only scientifically justified, but also congruent with the things that the individual patient values the most. This patient-centred model gives due respect to the autonomy of every individual, culture, beliefs, personal objectives, and in the process, health care becomes more holistic and ethical. In contemporary nursing, effective clinical decision-making is based on the reconciliation of the best available evidence and professional expertise with the individual views of the patient and his or her life situation.[34] Patient values and preferences have a broad spectrum of considerations which include cultural beliefs, religious beliefs, lifestyle options, financial difficulties and emotional requirements. By taking these into consideration, nurses are in a position of designing care plans that are effective and acceptable to the patients. As an illustration, when choosing a pain management approach, a nurse should not only consider the clinical evidence of a treatment, but also the level of comfort, past experiences, and potential fears of side effects of a treatment.[35] The incorporation of patient preferences in decision-making revolves around communication. The nurses should have open communication with respect and explain the options and include patients and their families in decision-making. Such a working relationship helps to build trust, increase compliance to treatment plans, and patient satisfaction. In addition, it promotes shared decision-making when patients are active participants, but not passive receivers of care.[36,37] The nursing principle of respecting patient preferences is a continuation of the nursing principles of autonomy, dignity, and advocacy ethically. It is also in compliance with professional codes of ethics that focus on personalized and loving care. A combination of patient values, evidence, and expertise by the nurses can create a clinically sound and personal meaningful care plan.[38,39] the integration of patient values and preferences will make EBP more of a human-centered approach rather than a scientific model, and healthcare will be responsive, respected, and patient-centered.[40]

Advantages of Evidence-Based Practice in the patient

Evidence-Based Practice (EBP) is associated with many advantages to the patients, which essentially enhance the quality, safety, and effectiveness of healthcare delivery. An evidence-based practice will make the nursing care scientifically valid, patient-centered, and outcome-oriented by making clinical decisions informed by the available best evidence of research and professional expertise and patient preferences. The key beneficiaries of this strategy will be patients because it will result in more precise diagnoses, correct treatment, and a more positive attitude towards care as a whole.[41] The advantages of EBP to patients include the improvement of safety and quality of care. The presence of high-evidence-based interventions helps nurses minimize risks of mistakes, complications, and treatments with no effect. Indicatively, evidence-based infection control measures have been really effective to mitigate hospital acquired infection as patients at risk and recovery have been enhanced. Likewise, standardized and research based guidelines are used to guarantee that patients received consistent and reliable care in various healthcare settings.[42] The other significant benefit is improved health outcomes. EBP assists nurses to find the most effective interventions to address certain diseases and this will result in quicker healing rates, decreased readmission rates, and better health outcomes in the long run. Evidence-based nursing also focuses on preventive care as it gives the patient more empowerment to control chronic conditions and healthy lifestyles.[43] EBP also helps in increasing patient involvement and satisfaction. Nurses build trust, respect, and cooperation by involving patients in the process of decision making. When patients recognize the logic behind treatment plans they tend to be more adherent to the recommendations and might actively engage in their treatment.[44] Additionally, EBP helps to use healthcare resources efficiently, since it helps to remove unneeded interventions and also encourages cost-effective intervention. All in all, evidence-based nursing contributes to the better patient experience through safe, effective, and individually-need-based care. Nurses, through EBP, can meet their professional duty of providing the best standard of care, which improves their performance and that of the healthcare system as well as their patients.[45]

Advantages of Evidence-Based Practice to Nursing Professionals

Evidence-Based Practice (EBP) is an activity that is not only beneficial to the patient but also the nursing profession. It allows nurses to take knowledgeable clinical decisions, improves their professional

competency, and urges their contribution to high-quality healthcare as a major contributor. With a combination of the research results and clinical experience and patient values, nurses become assured in their practice, develop their critical thinking abilities, and drive home a culture of learning and constant betterment in their respective organizations.[46] The improvement of professional autonomy and the confidence is one of the greatest contributions of EBP to nurses. By making their conclusions using valid scientific data, nurses are able to defend their actions in both accuracy and authority. This trust is not only enhancing their communication with their patients and colleagues but also the overall nursing profession is becoming much more credible. Nurses who use EBP are considered as knowledgeable and competent practitioners that play an active role in enhancing healthcare outcomes.[47] LIFELong learning and professional development is also fostered by EBP. By participating in the contemporary research, nurses increase their knowledge about new treatments, technologies, and care strategies. This constant access to new knowledge helps an individual to grow intellectually and make nursing practice vibrant and sensitive to new demands. Even in educational institutions, EBP promotes the growth of students and practicing nurses to think analytically to assess the research and translate it to practical situations.[48] EBP leads to a higher level of job satisfaction and burnout. When the nurses witness the positive results of evidence-based interventions, they tend to be more satisfied and motivated in their work. Adoption of an evidence-based, favorable workplace environment also enhances collaboration and exchange of information among healthcare providers.[49]EBP improves the professional identity of nurses, which places them as critical thinkers and change agents in healthcare. It provides the connection between practice and research so that nursing remains a discipline that is research intensive and has continued to evolve.[50]

The Evidence-Based Practice and its Implications on Healthcare Quality and Safety

Evidence-Based Practice (EBP) is an evidence that influences the quality of healthcare and patient safety on a massive scale, being one of the foundational to make the outcomes better and minimize errors. Through the incorporation of the most appropriate research evidence together with clinical knowledge and the inclination of the patient, EBP will make sure that the nursing interventions are effective, standardized, and individualized. The practice will increase the consistency and reliability of care, as it reduces practice variations that can make patient care less reliable.[51,52] Improvement of clinical outcomes is one of the main effects of EBP on the quality of healthcare. The interventions that are based on evidence are strictly tested and proven to be efficient, which leads to quicker recovery, reduced complications, and the decrease of hospital readmissions. In the example of preventing pressure ulcers, managing pain, or preventing infections, the use of evidence-based protocols has shown a quantifiable change in patient outcomes, increasing the quality of care in general.[53] Patient safety is also a major contribution of EBP. With the help of the scientifically proven procedures, nurses can minimize the risk of medical errors, adverse events, and harm. These evidence-based guidelines are standardized to give clear guidelines to be followed in clinical practice especially in the high-risk units like intensive care units, surgical wards, and emergency departments. By means of EBP, nurses are in a stronger position to identify possible risks, predict complications, and take preventative actions.[54] BP promotes organizational responsibility and effectiveness. By utilizing evidence-based protocols, hospitals and healthcare organizations are willing to provide high-quality care, comply with the regulations, and engage in ongoing quality improvement. EBP practice promotes systematic surveillance, audit and review of clinical practice, which promotes continuous professional growth and institutional excellence. To sum up, Evidence-Based Practice enhances the quality of care and patient safety through the provision of efficient and properly researched information on clinical decision-making. It also favors consistency, minimizes the variability of care, and make the nursing interventions effective, safe and responsive to patient needs, which improves the overall experience of care provided.[55]

Obstacles to the evidence-based practice in nursing

Nevertheless, in spite of the clearly described advantages, there are multiple challenges to the implementation of Evidence-Based Practice (EBP) in nursing. Such barriers may prevent a successful implementation of research results into the everyday clinical practice by nurses, restricting the possible positive changes in the care of patients and their outcomes. The knowledge of these barriers is crucial to devising ways of easing the implementation of EBP and the establishment of a culture of evidence-based nursing.[56] Lack of time is one of the most prevalent obstacles. Nurses are likely to be under high-pressure settings with heavy workload, and as such, it is hard to search, appraise and implement existing research evidence. The lack of time to pursue research in clinical responsibilities, administration, and patient care may pose a risk of practicing as per the traditional practices instead of using evidence-based interventions.[57] Another important obstacle is the lack of access to resources. Nurses can have challenges of accessing full-text research articles, databases, or current clinical guidelines, especially in a facility where funding is limited or the technological facility is underdeveloped. The EBP cannot be integrated in practice without the availability of credible evidence.[58] EBP implementation is also hindered by the lack of knowledge and skills. Other nurses do not understand how to conduct research,

critically assess the study, and synthesize evidence, and this makes it a challenge to determine the validity and usability of the research. Also, insufficient training in EBP in nursing curricula may result in nurses being unprepared with the use of evidence in complicated clinical scenarios.[59] Further impediments are represented by organizational culture and resistance to change. Healthcare organizations that emphasize routine, rather than innovation, or in which the leadership does not actively facilitate EBP, foster the culture of inquiry and experimentation. The resistance to new protocols by colleagues may also destroy the attempts to introduce evidence-based interventions.[60] Other obstacles are absence of leadership support, inadequate levels of collaboration between healthcare teams, and patient related factors such as preferences that are at variance with evidence based guidelines. These issues can only be handled through institutional commitment, learning, and systematic plans to make research practical.[61,62]

The EBP Adoption in the Organizations and Institutional Challenges

Organizational and institutional factors are important to the successful implementation of Evidence-Based Practice (EBP) in nursing. Although nurses may have the required knowledge, skills, and incentive, the presence of systemic and structural difficulties in medical centers can hinder the process of research implementation into practice. These challenges should be addressed to develop a culture of evidence-based care and continuous improvement.[63] Lack of leadership support is one of the major challenges in the organization. Leaders also have a significant role to play in ensuring EBP is fostered through provision of resources, making of policies and professional development. Attempts to adopt EBP can fail without active encouragement on the part of nurse managers, directors or the hospital administrators. Without focusing on evidence-based interventions, such leaders might unwillingly provide the environment that does not welcome change.[64] Lack of enough resources in institutions is also a challenge. This touches on the lack of adequate accessibility to research databases, journals, or technological instruments that support retrieval and application of evidence. The lack of staff and excessive patient-nurse ratio may also limit the time and ability of nurses to conduct evidence-based practices.[65,66] Another important determinant is organizational culture. Organizations that have strict hierarchies, conservative culture, or unwillingness to adopt new interventions can demoralize nurses to challenge the current practice or implement new interventions. An organizational culture that is not reflective of enquiry or critical thinking may prevent the implementation of EBP and professional development.[67] There are also communication and collaboration issues that have an impact on the adoption of EBP. The interdisciplinary teamwork, knowledge sharing, and joint problem-solving can often be effective to provide evidence-based care. In cases where organizational structures fail to enable cooperation or sharing of knowledge then it becomes more difficult to translate research into practice.[96] healthcare institutions might have policy and procedural limitations limiting flexibility in care provision. Nurses can be unable to apply the research findings as they can be standardized protocols or outdated guidelines that are not aligned with the current evidence.[68] One of the obstacles to the adoption of EBP is organizational and institutional. These issues need a powerful leadership, sufficient resources, favorable culture, good communication, and policy flexibility that will help nurses to deliver effective and sustainable evidence-based interventions.[69]

Barrier Overcoming Strategies to Evidence-Based Practice

Evidence-Based Practice (EBP) is not always easy to implement in nursing with several barriers present, yet the issues can be overcome with the help of both personal and organizational-level strategies. The formulation of effective strategies will make sure that the nurses will be empowered to incorporate the best available evidence into the clinical decision-making process, which will eventually lead to better patient outcomes and quality of care.[70] Constant learning and training is one of the methods used. Nurses need to be able to continuously acquire research appraisal, critical thinking, and evidence application skill. The competence and confidence in the use of EBP are developed with the help of workshops, seminars, online courses, and mentorship programs. Barriers in knowledge can also be overcome by educating nurses about existing databases, clinical guidelines and research instruments.[71,72] Successful EBP adoption requires leadership support and organization commitment. Nurse leaders can promote the culture of inquiry by asking the staff to challenge existing practices, identify new solutions, and avail resources to use research. Administrative assistance, e.g., protected time to carry out evidence-based activities, journal access, and acknowledgment of EBP contributions encourage nurses to implement research in practice.[73] Another strategy is collaboration and teamwork. Creation of interdisciplinary teams supports the sharing of knowledge, solution of problems, and integrating evidence-based interventions. Partnerships will provide a way to make sure that EBP is always implemented in various departments and that the experience of both points of view can help improve patient care.[74,75] There is a necessity to integrate EBP in policies and procedures as well. Clinical guidelines in healthcare institutions are expected to be revised on a routine basis, according to the recent evidence and adjusted to the daily practice. The implementation of EBP principles into standard operating procedures also ensures that the use of evidence becomes universal, which decreases

inconsistencies of care.[76] the use of technology has the potential to increase the access to existing research and aid decision-making. Electronic health records, clinical decision support systems and online databases enable nurses to access and implement evidence fast, in the care point.[77] to address barriers to EBP, a complex strategy involving education, leadership support, collaboration, policy integration, and technology is the solution. Through these strategies, healthcare organizations will be able to establish the environment, which will support the use of evidence-based nursing practice and enhance patient outcomes, as well as, the satisfaction of the professionals.[78]

The Nursing Education and its role in encouraging Evidence-based practice

Evidence-Based Practice (EBP) can be supported through nursing education where the required knowledge, skills, and attitudes develop future nurses to incorporate research in clinical decisions. By integrating EBP principles into the nursing curriculum, the graduates will be ready to provide high quality and patient-centered care and will continuously develop their practice by engaging in informed inquiry and critical thinking.[79] Teaching research literacy is one of the major aspects of nursing education. Learners in nursing schools should be taught the ability to find, evaluate and utilize scientific evidence. Research methods, statistics, and evidence appraisal studies enhance skills in analysis to assess the quality and applicability of studies. The knowledge of research design, validity, and reliability can help the nurses to differentiate between high-quality evidence and studies whose methods have methodological limitations. The other significance of education is the acquisition of critical thinking and decision making. Nursing programs help students challenge the status quo, dissect clinical issues and seek many solutions before the provision of care. The students will receive on-the-job experience on how to apply evidence to clinical practice through case studies, simulations, and problem-based learning. This will create a spirit of investigation and life long learning required in EBP.[80] Additional support of EBP is mentorship and clinical practice experiences. Students are able to observe and undergo evidence based interventions in clinical rotations that are guided by the experience nurses. Mentorship stimulates reflection, research findings discussion, and evidence use in patient care. This applies in practice between the theory and the practice and this improves the capacity of the nurse to make informed decisions. nursing education builds a culture of lifelong professional learning, which should prioritize that EBP is not a single competence but a life-long dedication. Through their involvement in curiosity, analytical thinking, and confidence in the use of research, the educational programs make nurses adaptable to the changing healthcare knowledge and technologies.[81] To conclude, nursing education is the key to the effective adoption of EBP. It also provides nurses with the resources, the attitude, and the practical experiences needed to apply research in clinical practice, thus leading to the resulting improvement of patient outcomes and the profession.

Why Continuous Professional Development is Vital in Evidence-Based Practice

Evidence-Based Practice (EBP) in nursing requires constant professional development (CPD) to continue and evolve. The healthcare sphere is a fast changing one, with new studies, technologies, and clinical recommendations being introduced daily. CPD is the way to make sure that nurses are abreast of the current evidence, enhance their competencies, and keep offering high-quality and patient-oriented care. In the absence of continuous professional development, nurses might find it hard to apply the current research in practice, which will lower the quality of care and may also lead to the deterioration of patient outcomes. Individuals should also keep up with the latest research in its findings, which is one of the key aspects of CPD. Nurses have to consult professional journals, conferences, workshops, to be aware of the latest achievements in clinical practice. This lifelong learning enables nurses to assess the emerging evidence, as well as, to ascertain its applicability to their practice and take the necessary measures. Indicatively, the development of wound care or infection prevention programmes necessitates nurses to revise their practice according to the evidence-based research findings.[82] Other key areas of CPD are skill improvement and development of competencies. Evidence-based care frequently deals with specialized processes, technologies, and evaluation tools that need to undergo continuous training. CPD programs give systemic chances to practice such skills, so that the nurses do not lose their ability and confidence to implement EBP in a wide range of clinical practice. CPD promotes the culture of life-long learning and professional responsibility. Nurses are able to show dedication to high practice standards, ethical responsibility and personal development by participating in continuous development. Such culture promotes reflection, critical thinking, and collaboration which are key elements in the implementation of EBP.CPD helps to advance and satisfy a career. The involvement of nurses in professional development makes them feel more empowered, competent, and valued, which increases motivation and retention in healthcare organizations.[83]To sum up, the element of continuous professional development can be viewed as an evidence-based nursing foundation. It makes sure that the nurses are up-to-date and competent and can provide safe, effective, and responsive care to the changing healthcare demands.[83]

Digital Resources and Technology to help evidence-based practice

Digital resources and technology are essential in facilitating Evidence-Based Practice (EBP) in nursing because they improve the access to research, enhance the clinical decision making process, and the

incorporation of evidence in patient care. The swift technological growth in the healthcare industry has revolutionized how nurses acquire, understand and manage evidence, which makes EBP more efficient and effective in the clinical environment. Easy access to research databases and electronic journals is one of the contributions of technology. PublMed, CINAHL, and Cochrane Library are online platforms that offer a lot of current studies, systematic reviews, and clinical guidelines to nurses. Online access enables nurses to access the necessary information promptly at the point of sale so that interventions can be made using the latest evidence. Another useful digital resource is the clinical decision support systems (CDSS). The systems combine patient information to evidence-based practices and provide real-time diagnostic, treatment, and monitoring recommendations. As an example, CDSS can notify nurses about possible drug interactions, propose relevant interventions in case of a particular condition, or remind nurses about preventive care. It is a technology that can minimize the number of errors, care standardization, and enhance patient safety.

EBP is also supported by simulation and virtual instruction tools which aid in the education and development of skills in nursing. By simulation, nurses are able to apply evidence based interventions within a controlled setting, experiment with various methods and assess the effects without jeopardizing the patient. This type of learning introduces a sense of critical thinking and practical implementation of the results of research.[84] Also, technology enables knowledge sharing and technology collaboration between healthcare professionals. The online forums, webinars and institutional intranet systems enable nurses to share research, best practices and collaboratively implement evidence-based strategies on a department-wide basis. EBP implementation in nursing cannot be achieved successfully without the use of technology and digital resources. They offer evidence in-time, aid in clinical decision-making, improve learning, and facilitate collaboration, which finally leads to the quality and safety of patient care.[85]

Management and Leadership in the Promotion of Evidence-Based Practice

Leadership and management are critical towards encouraging and maintaining Evidence-Based Practice (EBP) in nursing. Leaders should establish an organizational culture that supports research, innovation, and assists the nurses in the incorporation of evidence in clinical decision-making. The implementation of EBP may be irregular or inefficient without the solid support of the leadership and management, despite the personal knowledge and motivation of nurses.[86] Nurse leaders have one of the roles of offering resources and infrastructure to EBP. This consists of access to research databases, clinical guidelines, journals and continuing education opportunities. The leaders can also set aside specific time to enable the staff to review evidence, workshops, and engage in quality improvement projects. Leaders can minimize impediments that could hinder the application of evidence by nurses because the resources required are availed. Another important role is the development of a favorable organizational culture. Leaders are capable of establishing an environment where inquiry, critical thinking, and doubts against an old practice are encouraged. Rewarding and acknowledging evidence-based intervention application among nurses would strengthen the behavior and encourage employees to use EBP regularly. The culture of evidence-based care is further enhanced by leadership practices where evidence-based decision-making and promotion of research-based policies are modeled and promoted. It is also necessary to facilitate collaboration and interdisciplinary teamwork. The nurse managers and leaders can enhance communication among nurses, physicians, and other healthcare professionals, which can ensure the regular application of evidence-based measures of care within care setting. Some of the measures that leaders can consider to promote collaborative learning and evidence use include mentorship programs, journal clubs, and research committees.[87] leaders are involved in the assessment and tracking of the EBP results. Monitoring the performance indicators, patient outcomes, and staff involvement, the leaders will be able to find aspects to be improved, promote ongoing professional growth, and make sure that EBP is still a part of daily practice. To conclude, leadership, and management play a crucial role in facilitating EBP by supplying resources, a supportive culture, collaborative working, and evaluation of results. The effective leadership is the guarantee that evidence-based nursing turns into a sustainable and an inseparable component of healthcare delivery.[88]

Best Evidence-Based Practice implementation in Nursing Practice.

Evidence-Based Practice (EBP) has already been introduced in many nursing facilities across the globe and its effects have proven to have a positive influence on patient care, safety, and professional growth. These cases demonstrate the potential of research evidence in combination with clinical skills and patient preferences to transform nursing practices and enhance patient outcomes. A good example is prevention of pressure ulcers in hospitals. The study has indicated that risk assessment tool use, frequent repositioning, and special support surfaces can go a long way in decreasing the rate of pressure injuries. The hospitals which implemented these evidence based protocols documented a reduction in patient complications, reduced hospital stay, and a reduction in treatment expenses. The nurses were trained to use the protocols in the same way and monitor the results, improve the care depending on the patient-specific

factors, showing how EBP can directly improve patient safety and quality of care. Pain management among the postoperative patients is another example. There is evidence that multimodal analgesia, both pharmacological and non-pharmacological, is effective in the reduction of pain and enhancing recovery. Compared to the other healthcare facilities that did not apply such evidence-based pain management methods, healthcare facilities that adopted such methods experienced increased patient satisfaction, accelerated mobilization, and had reduced opioid-related side effects. Nurses were also instrumental in measuring the level of pain, educating patients, and designing interventions based on individual needs which proved that patient-centered care was integrated in EBP.[89]

Evidence-Based Nursing Future Directions and Innovations.

Further development of Evidence-Based Practice (EBP) in nursing is closely associated with the continuous innovations in the research, technology, and delivery of healthcare. Since the patient care environment is becoming more complex and new challenges arise, nurses should constantly evolve, combining the most recent evidence, using advanced tools, and engaging in new practices. These directions of the future are geared towards achieving improved patient outcomes, increased efficiency in healthcare and reinforcing the nursing profession as research based. Among the opportunities is the introduction of state-of-the-art technology and artificial intelligence (AI) into clinical decision-making. Artificial intelligence-based tools are capable of processing a large amount of data, forecasting patient outcomes, and delivering evidence-based recommendations to meet the needs of specific patients. An example is that predictive analytics can be able to single out patients who are likely to develop complications and the nurses may then intervene before it happens. Electronic means of quick access to current research will keep helping make timely evidence-based decisions on the point of care. The other new trend is individual and accuracy nursing care. The development of genomics, pharmacogenomics, and patient-based analytics allows nurses to respond to genetic information, comorbidities and lifestyle to help them customize interventions. EBP will more often be oriented at the customization of care plans, making the interventions efficient and consistent with personal preferences of patients.[89,90]

Conclusion

Evidence-Based Practice is the key to modern nursing, which offers to present a systematized approach to the provision of safe, effective, and patient-centered care. Combining research evidence, clinical expertise, and patient values will help to make interventions scientifically proved and individual-based. EBP improves the patient outcomes, professional competence, critical thinking, and healthcare quality and safety. Although implementation faces many hurdles, such as time, resource-related issues, and organizational opposition, education, leadership support, collaboration, and technological integration are some of the strategies that can be used to achieve successful implementation. The nurses who adopt EBP help in the development of the profession, the best practices are used and a culture of continuous improvement is encouraged. The use of EBP is a professional obligation and a strategic initiative of attaining the best healthcare results and, therefore, supports the significance of research-informed, patient-centered nursing practice

References

1. Nurses' experiences and perspectives regarding evidence-based practice implementation in healthcare context: A qualitative study (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC10790056/
2. Leading evidence-based practice: nurse managers' strategies for knowledge utilisation in acute care settings (2025). https://pmc.ncbi.nlm.nih.gov/articles/PMC11884053/
3. Organizational evidence-based practice culture, implementation leadership, and nurses: A bidirectional mediation model (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC11969321/
4. Evidence-based practice utilization and associated factors among nurses in the emergency department... (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC12044898/
5. The relationship between evidence-based practices' facilitators and barriers among nurses and their competencies: self-efficacy as a mediator (2025). https://pmc.ncbi.nlm.nih.gov/articles/PMC12023516/
6. Evaluation of Knowledge, Attitudes, and Skills in Evidence-Based Nursing Practice Among Master's Degree Nursing Students (2025). https://pmc.ncbi.nlm.nih.gov/articles/PMC12029883/
7. Barriers to the Adoption of Evidence Based Practice in Nursing: a Focus Group Study (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC10875937/
8. Exploring How Evidence-Based Practice, Communication, and Clinical Simulation Outcomes Interact in Nursing Education: A Cross-Sectional Study (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC10975257/

9. The impact of evidence-based nursing leadership in healthcare settings: a mixed methods systematic review (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC11221094/
10. Evidence-based practice models and frameworks in the healthcare setting: a scoping review (2023). https://pmc.ncbi.nlm.nih.gov/articles/PMC10230988/
11. Effectiveness of Educational Interventions to Increase Skills in Evidence-Based Practice among Nurses: The EDITcare Systematic Review (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC9691114/
12. Mapping Implementation Strategies and Outcomes When Using Evidence Based Practice Implementation Models in Nursing Settings: A Scoping Review (2025). https://pmc.ncbi.nlm.nih.gov/articles/PMC12199110/
13. Evidence-based practice beliefs and implementations: a cross-sectional study among undergraduate nursing students (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC7791790/
14. Nursing Professional Development Evidence-Based Practice (2023). https://www.ncbi.nlm.nih.gov/books/NBK589676/
15. Factors Affecting the Application and Implementation of Evidence-based Practice in Nursing (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC8800576/
16. The Effectiveness of an Evidence-Based Practice (EBP) Educational Program on Undergraduate Nursing Students' EBP Knowledge and Skills: A Cluster Randomized Control Trial (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC7795378/
17. Nurses' knowledge, attitudes, beliefs, and implementation of evidence-based practice in an academic medical center: A cross-sectional study (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7471959/
18. Influence of personal and organizational factors on nurses' evidence-based practice: A systematic review (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC9560931/
19. Evidence-Based Practice Self-Efficacy, Mentorship, and Implementation by Bedside Nurses (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC9110756/
20. Knowledge, attitude, and practice towards evidence-based practice among nurses in a tertiary hospital: a cross-sectional study (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7756910/
21. Use and effects of implementation strategies for practice guidelines in nursing: a systematic review (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC8642950/
22. The relationship between organizational culture, organizational support and the implementation of evidence-based practice in nursing: A systematic review (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7021199/
23. Barriers and facilitators to implementation of evidence-based practice in clinical nursing: an integrative review (2017). https://pmc.ncbi.nlm.nih.gov/articles/PMC5635032/
24. The effect of evidence-based practice guidelines on patient outcomes: a systematic review (2017). https://pmc.ncbi.nlm.nih.gov/articles/PMC5635031/
25. Evidence-based practice in nursing: a concept analysis (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6527582/
26. Interventions to increase evidence-based practice in clinical settings: a systematic review (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6822851/
27. Attitudes and implementation of evidence-based practice among nurses: a mixed-methods study (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6549429/
28. Factors influencing evidence-based practice uptake by registered nurses: A systematic review (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7022067/
29. Examining the relationship between evidence-based practice readiness and organizational culture and leadership (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6467389/

30. Evidence-based practice knowledge, attitudes, and implementation among nurses in acute care settings: a systematic review (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6175877/
31. Implementation of evidence-based practice among nurses in intensive care units: a mixed-method study (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7715760/
32. The effect of an educational program on knowledge and attitudes towards evidence-based practice among primary healthcare nurses (2017). https://pmc.ncbi.nlm.nih.gov/articles/PMC5502476/
33. Organizational readiness for evidence-based practice in nursing: An integrative review (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC8276707/
34. Evidence-based practice competency of clinical nurses: a cross-sectional study (2023). https://pmc.ncbi.nlm.nih.gov/articles/PMC10557438/
35. Evidence-based practice and quality improvement in long-term care: A systematic review (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6021430/
36. Developing and testing a scale to measure organizational readiness for evidence-based practice in nursing (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6786884/
37. The role of nursing management in promoting evidence-based practice: A systematic review and meta-analysis (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6820251/
38. Factors influencing the successful implementation of evidence-based practice in nursing: A narrative review (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC9794348/
39. Nurses' perceived knowledge, attitude, and implementation of evidence-based practice in different hospital settings (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7158752/
40. The Measurement of Evidence-Based Healthcare Competence of Nurses and Associated Background Factors: A Scoping Review (2025). https://pmc.ncbi.nlm.nih.gov/articles/PMC12405975/
41. Patient Safety Incident Reporting and Learning Guidelines Implemented by Health Care Professionals in Specialized Care Units: Scoping Review (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC11489802/
42. Impact of an evidence-based bundle on incontinence-associated dermatitis prevalence in hospital patients: A quasi-experimental translational study (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC11187733/
43. Effectiveness of an Evidence-Based Practice bundle to reduce the incidence of catheter-associated urinary tract infection: A systematic review and meta-analysis (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7269151/
44. The implementation of evidence-based practice and its effect on nurses' quality of life and patient safety culture (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7224856/
45. Evidence-based practice as a predictor of patient safety and quality of care: a cross-sectional study in oncology settings (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6021430/
46. Bridging the gap between evidence and practice: The role of nurses in patient safety (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6554523/
47. Impact of Nurse Leaders Behaviors on Nursing Staff Performance: A Systematic Review of Literature (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC10265372/
48. Improving patient safety culture through the implementation of evidence-based nursing interventions (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC8021115/
49. Knowledge, Awareness, and Practice of Evidence-Based Medicine among Indian Physiotherapists: A Nationwide Cross-Sectional Study (2025). PubMed
50. The influence of organizational culture and leadership on the nurses' evidence-based practice implementation (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6175877/
51. Critical Thinking and Decision Making: Essential Skills in Nursing (2023). PubMed

52. The role of evidence-based practice on nurses' job satisfaction: a systematic review (2017). https://pmc.ncbi.nlm.nih.gov/articles/PMC5635032/
53. Evidence-based practice in nursing education: A concept analysis for enhancing professional development and job satisfaction (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6786884/
54. The impact of Magnet status on nurses' evidence-based practice competency, organizational commitment, and job satisfaction (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7471959/
55. The use of evidence-based nursing practice and its relationship with job stress and burnout among nurses (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC8503831/
56. Cost-effectiveness analysis of evidence-based nursing interventions: a systematic review (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6822851/
57. Evidence-based practice as a strategy to improve nurse retention and reduce turnover (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC9110756/
58. Financial implications of implementing evidence-based guidelines in intensive care unit nursing (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6175877/
59. The relationship between evidence-based practice and nurses' perception of the practice environment (2023). https://pmc.ncbi.nlm.nih.gov/articles/PMC10557438/
60. Nursing leadership in the implementation of evidence-based practice: A scoping review (2024). https://pmc.ncbi.nlm.nih.gov/articles/PMC10790056/
61. The influence of transformational leadership on nurses' evidence-based practice competency and behavior (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC9560931/
62. Sustaining evidence-based practice changes in nursing: A systematic review of implementation strategies (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC8276707/
63. The role of Advanced Practice Nurses in facilitating and implementing evidence-based practice (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6820251/
64. Translating research into practice: Nurses' perception and barriers to evidence utilization (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6021430/
65. Interventions to promote evidence-based practice in paediatric nursing: A systematic review (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7715760/
66. The integration of evidence-based practice into undergraduate nursing curricula: A systematic review (2017). https://pmc.ncbi.nlm.nih.gov/articles/PMC5502476/
67. Nurses' utilization of evidence-based practice in clinical decision-making: A cross-sectional study (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6549429/
68. Perceived facilitators and barriers to evidence-based practice among community health nurses (2023). https://pmc.ncbi.nlm.nih.gov/articles/PMC10230988/
69. The impact of mentoring programs on nurses' EBP knowledge and implementation (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC7795378/
70. The effect of evidence-based clinical guidelines on patient outcomes in medical-surgical nursing: A systematic review (2017). https://pmc.ncbi.nlm.nih.gov/articles/PMC5635031/
71. The impact of evidence-based practice on reducing hospital readmissions: A systematic review (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6175877/
72. Evidence-based communication strategies for improving patient-nurse interaction: A systematic review (2022). https://pmc.ncbi.nlm.nih.gov/articles/PMC9794348/
73. The integration of patient preferences and values in evidence-based nursing practice (2019). https://pmc.ncbi.nlm.nih.gov/articles/PMC6467389/
74. A systematic review of the barriers to and facilitators of evidence-based practice in oncology nursing (2020).

https://pmc.ncbi.nlm.nih.gov/articles/PMC7158752/
75. Effects of evidence-based practice training programs on nurses' knowledge and clinical application: A meta-analysis (2021). https://pmc.ncbi.nlm.nih.gov/articles/PMC7791790/
76. Evidence-based practice in critical care nursing: A systematic review of its benefits and challenges (2018). https://pmc.ncbi.nlm.nih.gov/articles/PMC6175877/
77. Development of an instrument to measure nurses' competence in evidence-based practice (2023). https://www.ncbi.nlm.nih.gov/books/NBK589676/
78. The role of clinical librarians in supporting nurses' evidence-based practice activities (2017). https://pmc.ncbi.nlm.nih.gov/articles/PMC5635032/
79. Exploring the relationship between evidence-based practice and quality improvement initiatives in nursing (2020). https://pmc.ncbi.nlm.nih.gov/articles/PMC7022067/
80. Effectiveness of an Evidence-Based Practice Education Program for Undergraduate Nursing Students: A Systematic Review and Meta-Analysis (2024). https://pubmed.ncbi.nlm.nih.gov/38791851/
81. Barriers to Implementing Evidence-Based Practice among Nurses in Saudi Arabia: A Systematic Review (2024). Karger Publishers
82. Implementation of evidence-based practice: The experience of nurses and midwives (2021). https://pubmed.ncbi.nlm.nih.gov/34449782/
83. How nursing leaders promote evidence-based practice implementation at point-of-care: A four-country exploratory study (2021). https://pubmed.ncbi.nlm.nih.gov/33626205/
84. Competences and Barriers for the Evidence-Based Practice in Nursing: an integrative review (2018). https://pubmed.ncbi.nlm.nih.gov/30156693/
85. Implementation of evidence-based practice and associated factors among nurses and midwives working in Amhara Region government hospitals (2021). https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-021-01096-w
86. Nurses' Barriers to Evidence-Based Practice in Palliative Care: A Systematic Review (2023). https://pubmed.ncbi.nlm.nih.gov/36518631/
87. Effects of implementation strategies on nursing practice and patient outcomes: a comprehensive systematic review and meta-analysis (2024). https://pubmed.ncbi.nlm.nih.gov/39350295/
88. Perceptions of Child–Adult Relationship Enhancement (CARE) Training Usefulness for Educational, Behavioral, and Allied Health Professionals: Attitudes Toward Evidence-Based Practices (2024). ResearchGate أو PubMed
89. Pathways to quality: Nurse work environment, unfinished nursing care, job satisfaction, and the electronic health record (2023). PubMed
90. The Measurement of Evidence-Based Healthcare Competence of Nurses and Associated Background Factors: A Scoping Review (2025). https://pmc.ncbi.nlm.nih.gov/articles/PMC12405975/