



## EVIDENCE-BASED PRACTICE IN NURSING

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### Abstract:

Evidence-based practice (EBP) in nursing integrates research, clinical expertise, and patient values to improve decision-making and patient outcomes, crucial for healthcare providers seeking to enhance care quality, satisfaction, and lower costs. Teaching EBP involves a structured approach with mentorship, role development, and integration into curricula and practice settings, utilizing models like the PICO format for formulating clinical questions. Successful EBP in nursing involves identifying a clinical issue using PICO, conducting a thorough literature search, critically appraising gathered evidence, synthesizing it with expertise and patient preferences for personalized care plans, and implementing and evaluating for effectiveness within a supportive organizational culture.

**Keywords:** Evidence-based practice – Nursing – implantation

### Introduction:

Evidence-based practice (EBP) in nursing is a critical approach that integrates the best available research evidence with clinical expertise and patient values to enhance decision-making and improve patient outcomes. (1) The importance of EBP is underscored by its ability to improve the quality of care, increase patient satisfaction, and reduce healthcare costs, making it a central component of clinical decision-making and a core competency for healthcare providers. (2) The implementation of EBP in nursing involves several steps, including the identification of clinical questions, systematic literature review, critical appraisal of evidence, and application of findings to clinical practice. Teaching EBP is essential for both nursing students and practicing nurses, and it requires a structured approach that includes mentorship, role development, and integration of EBP concepts into curricula and clinical practice settings. (3) The use of models and frameworks, such as the PICO (Patient, Intervention, Comparison, Outcome) model, helps in formulating clinical questions and guiding the EBP process. (1) Despite its benefits, the adoption of EBP in clinical settings has been slow, often due to a lack of organizational support and follow-up models. To address these challenges, healthcare facilities and professional organizations are encouraged to promote EBP through continuous education programs and the development of evidence-based guidelines. (4) The impact of EBP extends beyond individual practice to include broader initiatives such as quality improvement, healthcare transformation, and the development of national research networks to study and enhance EBP implementation. Moreover, EBP should be viewed as a collective and organizational responsibility rather than solely the responsibility of individual nurses, emphasizing the need for ethical foundations and peer-to-peer critical review processes. The integration of EBP into nursing

practice not only improves patient care but also aligns with accreditation standards for healthcare and educational systems, highlighting its significance in the professional development of nurses. (2)

### **Steps in the Evidence-Based Practice:**

The Evidence-Based Practice (EBP) process in nursing is a structured approach that integrates the best available evidence, clinical expertise, and patient preferences to improve healthcare outcomes. The process begins with the identification of a clinical problem or question, often framed using the PICO (Population, Intervention, Comparison, Outcome) format to ensure clarity and focus. The next step involves acquiring the best available evidence by conducting a thorough literature search across various databases and sources. (12) Once the evidence is gathered, it must be critically appraised to assess its validity, reliability, and applicability to the clinical question at hand. This appraisal process is crucial as not all evidence is created equal, and distinguishing high-quality studies from lower-quality ones ensures that only the most robust data informs clinical decisions <sup>[2]</sup>. Following appraisal, the evidence is synthesized and integrated with clinical expertise and patient preferences to formulate a care plan. This step emphasizes the importance of considering the unique context of each patient, including their values, beliefs, and circumstances, to ensure that the care provided is both effective and personalized. (13) Implementation of the care plan involves applying the synthesized evidence in clinical practice, which may require changes in protocols, procedures, or policies within the healthcare setting. This step often necessitates collaboration among healthcare team members to ensure that the new practices are adopted smoothly and effectively. Evaluation is the final step in the EBP process, where the outcomes of the implemented care plan are assessed to determine its effectiveness. This involves measuring patient outcomes, comparing them to baseline data, and making necessary adjustments to the care plan based on the results. Continuous evaluation and feedback loops are essential to refine and improve the practice over time, ensuring that it remains evidence-based and responsive to new research findings. (14) The entire EBP process is underpinned by a supportive organizational culture that values ongoing education, collaboration, and a commitment to quality improvement. Today, EBP is recognized as a critical component of professional nursing, providing a systematic framework for making informed clinical decisions that enhance patient care quality and safety.

### **Competence and Implementation**

Evidence-Based Practice (EBP) competence and implementation are critical for improving healthcare quality, yet they face numerous challenges. Newly qualified practitioners (NQPs) generally have a good understanding of EBP, but their implementation is moderate, with no significant differences based on age or years of practice. (5) Effective EBP implementation requires active leadership focused on redesigning workflows and reinforcing program improvements, rather than merely prioritizing workforce development. (6) Collaborative partnerships, such as those between universities and hospitals, can foster a culture conducive to EBP, as demonstrated by the successful Best Practice Series. However, the implementation process is often left to busy nursing leaders who may lack the necessary preparation, highlighting the need for application-oriented resources to guide them through complex healthcare systems. (7) Mental health professionals, particularly those treating youth psychiatric disorders, often lack the competence to implement empirically supported treatments (ESTs) due to inadequate training, underscoring the need for clear articulation of competencies and effective training programs. (8) Specific clinical protocols, such as prophylactic amiodarone for postoperative atrial fibrillation, have been validated as safe and beneficial, illustrating the importance of EBP in clinical decision-making. (9) Large healthcare systems can benefit from structured EBP toolkits and a representative group of clinicians to standardize and implement EBP, thereby improving patient care in a cost-effective manner. (9) Models like Evidence Mapping and the Evidence-Based Interagency Implementation Manual provide tools to address transportability, organizational capacity, and performance monitoring, essential for advancing EBP in public health and safety contexts. (10) The real-world application of EBP often results in more questions than answers, with challenges such

as lack of staff awareness and communication interruptions; however, engaging frontline staff in the change process can lead to successful outcomes. (11)

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