FROM RESEARCH TO REALITY: THE DEVELOPMENT OF EVIDENCE BASED NURSING WORKFORCE STRATEGY

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ABSTRACT

Nursing, at its core, is an occupation grounded in the dedication to patient welfare and the application of expertise vital to their care. ***Evidence Based Practice*** *on the other hand is the consensus use of the best available evidence gained from the scientific method to make decisions related to the most beneficial health care for patients. Nurses aren't always applying the best available knowledge to patient care due to various barriers- due to various barriers, leading to potential suboptimal patient outcomes; this is often called the "****research-practice gap****". The core components of evidence-based practice are:* ***best available evidence, clinical expertise,patient preferences and values.*** *The basic steps to implement evidence-based practice are* ***ask a clinical question, find the best evidence, critically appraise the evidence, integrate the evidence, evaluate clinical outcomes and disseminate results.*** *Transitioning to a model of evidence-based practice can require substantial shifts in routine, mindset, and collaboration across a team of healthcare professionals or entire health care organization and can even require a systematic review of operations. To develop an evidence-based nursing workforce, a strategic approach should focus on fostering a culture of inquiry, providing robust education on evidence-based practice (EBP) methodologies, empowering nurses to access and critically appraise research, facilitating implementation of research findings into practice, and continuously evaluating the impact of EBP initiatives, all while actively engaging leadership support and creating opportunities for collaboration across the healthcare team. Four conditions have to be met if nurses are to implement research. These are; nurses must have the necessary knowledge, skill and attitudes, be able to overcome barriers to implementation, support for innovation must be available, innovation must be valued and rewarded.*

KEY WORDS:*Evidence Based Practice, Research-practice gap, Ask a clinical question, Find the best evidence, Critically appraise the evidence, Integrate the evidence, Evaluate clinical outcomes, Disseminate results.*

INTRODUCTION

Nursing, at its core, is an occupation grounded in the dedication to patient welfare and the application of expertise vital to their care. As methodologies evolve and the connection between clinical research and patient outcomes grows ever-clearer, the prominence of evidence-based practice in nursing continues to expand. This practice forms the cornerstone of clinical care excellence, combining rigorous research with the expertise that nurses bring to the bedside, each reinforcing the other to raise the bench mark of patient care.

IS EVIDENCE BASED PRACTICE AND RESEARCH ONE AND THE SAME?

Well, Yes and No. EBP involves Research but it is one small part of the entire process and they both have different purposes. Research is the quest for new knowledge or validating existing ones. But EBP on the other hand is the consensus use of the best available evidence gained from the scientific method to make decisions related to the

most beneficial health care for patients. We can say EBP take a step further than research because it puts all that knowledge into action.

RESEARCH-PRACTICE GAP - A "gap in nursing practice" refers to the disconnect between evidence-based research findings and the actual practices implemented by nurses in clinical settings, meaning that nurses aren't always applying the best available knowledge to patient care due to various barriers, leading to potential suboptimal patient outcomes; this is often called the "research-practice gap" or "theory-practice gap" in nursing literature.

Key aspects of the research-practice gap in nursing:

- **Lack of awareness:**
  Nurses might not be adequately informed about the latest research findings, due to limited access to research literature or insufficient training in evidence-based practice.
- **Organizational barriers:**
  Factors like inadequate staff levels, time constraints, limited resources, and lack of institutional support for implementing research-based practices can hinder translation of knowledge into practice.
- **Clinical setting constraints:**
  The complexity of real-world clinical situations can make it difficult to directly apply research findings without adaptations, leading to deviations from the ideal practice described in research.
- **Cultural factors:**
  Established routines and traditional practices within a healthcare setting can sometimes resist change, even when new evidence supports different approaches.
- **Individual factors:**
  Nurses' personal beliefs, attitudes towards research, and confidence in their ability to implement new practices can also contribute to the gap.

Implementation of evidence-based techniques requires more than an understanding of studies and outcomes—it demands intention and the cultivation of a workplace culture conducive to change. From solo practitioners to expansive healthcare systems, the successful application of evidence-based practice hinges on strategic planning and steadfast commitment. In the shifting landscape of health care, evidence-based practice stands out not only as a best practice but as a necessary pivot point, leading to the kind of innovation and improved outcomes that professionals in nursing strive for.

Pragmatic approaches and key strategies have to be designed and implemented that can smooth the path for nurses and their leadership teams to fully embrace and integrate evidence-based methodologies. The transition of research to reality will ensure that the care delivered reflects the latest and most robust clinical scholarship.

CORE COMPONENTS OF EVIDENCE-BASED PRACTICE

Evidence-based practice is grounded upon three fundamental elements, each contributing to the comprehensive approach required to provide high-quality care

justified by empirical evidence. The core components of evidence-based practice are:

1. Best available evidence

At the heart of evidence-based practice is the utilization of the most current and relevant research findings. Peer-reviewed studies, systematic reviews, clinical guidelines, and well-designed trials to guide decisions about patient care are all examples of potentially useful and valid research evidence.

2. Clinical expertise

Even though evidence-based practice is concerned with using current research findings, clinicians must interpret that evidence through the lens of their own clinical experience and understanding of their patient's needs. In other words, nurses need to use critical thinking to determine when evidence should or should not be incorporated into treatment and how it can be adapted to fit individual circumstances.

3. Patient preferences and values

In evidence-based practice, patients are partners in the care process, not merely recipients. Evidence-based practice respects and integrates patient values, choices and beliefs, ensuring that clinical decisions align with patient preferences and consent. This shared decision-making ensures care that resonates personally with each patient.

Relevant evidence, clinical expertise, and patient preferences serve as the outline for effective evidence-based healthcare.

STEPS TO IMPLEMENT EVIDENCE-BASED PRACTICE EFFECTIVELY

The theoretical argument to use evidence-based practice and its benefits are pretty clear. However, the challenge lies in its application. Meticulously bridging the gap between scholarly evidence and hands-on patient care can be complex and require a lot of resources, but is critical to advancing nursing–and all types of medical practice. Part of the challenge is that implementation of evidence-based practice effectively isn't a one-and-done aspect of professional development, but rather an iterative cycle that involves continual discovery, integration, and evaluation.

Here are the basic steps to implement evidence-based practice:

1. Ask a clinical question

Evidence-based practice hinges on asking foreground clinical questions. Champion the PICOT framework for its systematic nature that sharpens the search in electronic databases. Crafting a query using the PICOT structure involves several components:

- Patient-pinpointing the specific patient or population group in question.
- Intervention- Identifying the procedure or treatment of interest.
- Comparison-Selecting an alternative or comparing a group to contrast with the intervention.
- Outcome-Defining the desired outcome or goal of the intervention.
- Time- Considering the timeframe over which the outcome will be measured.

This format also helps researchers slow down and put together question with a clear goal.

2. Find the best evidence

In evidence-based practice there are several hierarchical levels by which information is to be ranked and determined to be reliable research. Understanding and applying the

levels of evidence helps practitioners to critically evaluate research and make informed decisions that optimize patient outcomes. It also aids in prioritizing research when there is conflicting evidence or when evidence is limited. The sources supporting EBP decisions should be peer reviewed—whatever study article or journal you decide to present as evidence has to be reviewed by other experts in the field. You can use databases like EPSCO, CINHAL and Medline or online Medical and Nursing Journals.

Starting at the top of the pyramid with the "best" evidence, here are the levels:

Level I: Systematic Reviews and Meta-Analyses

Systematic reviews and meta-analyses synthesize results from multiple studies on a specific clinical question, using rigorous methodology to identify, select, and critically appraise relevant research.

Level II: Randomized Controlled Trials (RCTs)

RCTs are experimental studies that randomly assign participants to an intervention or control group to measure the effectiveness of interventions. They are considered the gold standard for evaluating the efficacy of treatments due to the minimization of bias.

Level III: Controlled Trials without Randomization

These are studies in which participants are assigned to intervention or comparison groups, but the assignment is not random. While still valuable, these studies are seen as less rigorous than RCTs due to the potential for allocation bias.

Level IV: Cohort Studies and Case-Control Studies

Cohort studies observe a group of individuals with common characteristics (like a treatment or risk factor) over time and measure their outcomes against a non-exposed group. Case-control studies, on the other hand, compare individuals with a specific condition to those without the condition, looking retrospectively for exposure to risk factors or interventions.

Level V: Case Reports, Case Series, and Qualitative Studies

Descriptive studies such as case reports or case series detail individual or group cases, providing insights into specific phenomena. Qualitative studies explore phenomena in depth and context through methodologies like interviews or focus groups.

Level VI: Expert Opinion and Consensus Statements

This level includes opinions from experts in the field, based on their clinical experiences, knowledge from the literature, and consensus panels. These sources are valuable for areas in which there is limited research but are considered the weakest form of evidence due to their subjective nature.

3. Critically appraise the evidence

The questions required for analyzing research evidence:

a. **Are the results valid?** Did the study address a clearly focused issue? Was the assignment of participants to treatments randomized? Were all the participants who entered the study properly accounted for at its conclusion? Description of dropouts and

withdrawals: How do dropouts threaten validity?

b. **How precise are the results?** Were the methods of analysis appropriate, clearly described and justified? What are the key findings? If the results are unbiased, they need further examination in terms of precision. Better precision comes from larger studies compared with smaller studies.
c. **Are the results applicable to my patient?** What are the patient populations, disease and treatments under investigation? What are the benefits and risks associated with the treatment? Do the benefits outweigh the harms? Other important considerations are whether you have the necessary skills or resources to deliver the intervention.

4. Integrate the evidence

This step is where clinical expertise and patient values come in. Considering the research evidence that's been evaluated, researchers should incorporate their own clinical practice experiences and patient preferences into their final decision for how to proceed. You'll need to include evaluation of the strategic case, get informed written consent from the patient and ensure patient safety, plus take into account potential risks for the health care system and ensure that your implementation process doesn't disrupt the rest of the healthcare practice. This part is obviously easier said than done. There is no magic formula for how to weigh each of these elements; implementation of EBP is highly influenced by institutional and clinical variables.

5. Evaluate clinical outcomes

In the fifth step of evidence-based practice, evaluating clinical outcomes is imperative to determine the actual impact of interventions on patient health and wellbeing. This phase involves systematic observation and measurement of specific indicators after implementing an evidence-informed intervention. For instance, if a new protocol for pain management in postoperative patients is adopted, the evaluation would assess metrics such as pain scores, medication use, recovery times, and patient satisfaction. This step not only measures efficacy but also sheds light on potential areas for refinement of the clinical question or plan of action. The continual analysis of patient outcomes ensures the interventions remain both effective and relevant, leading to sustained improvements in patient care. To evaluate the clinical outcomes of Evidence Based Practice (EBP) in nursing, you would need to measure specific patient-centered metrics like mortality rates, complication rates, length of stay, patient satisfaction, and adherence to treatment plans, comparing them before and after implementing the EBP intervention, while also considering factors like staff competency and practice changes related to the new evidence-based approach.

6. Disseminate results

The final phase in the evidence-based practice cycle is crucial. Disseminating results is about sharing knowledge and experiences to promote widespread adoption of successful practices. This step involves communicating the outcomes and insights from evidence-based interventions to

stakeholders, such as fellow healthcare professionals, through various channels like conferences, journals, professional networks, and workshops. For example, if an EBP project successfully reduces incidence of hospital-acquired infections, dissemination might include a detailed case study publication or a presentation at a nursing symposium.

STRATEGIES IMPERATIVE TO IMPLEMENTING EVIDENCE-BASED PRACTICE IN NURSING

Transitioning to a model of evidence-based practice can require substantial shifts in routine, mindset, and collaboration across a team of healthcare professionals or entire health care organization and can even require a systematic review of operations. To facilitate this transition, strategic approaches can build a sustainable foundation for evidence-based research nursing. Here are some fundamental strategies.

Create a supportive environment

Provide administrative support for research activities, allowing time for nurses to find educational opportunities related to evidence-based practice, and recognizing efforts and accomplishments when it's properly implemented in clinical practice. Cultivating a culture that values inquiry and continuous improvement encourages all staff to engage with and contribute to evidence-based practice initiatives.

Develop proper education and training

When nurses are equipped with the skills to interpret and apply research findings, evidence-based practice thrives. Through comprehensive training programs including workshops, degree programs, seminars, and continued education courses, nurses can develop their skills in critical appraisal, statistics, and the evidence-based practice process.

Seek out interdisciplinary collaboration

Healthcare is a team effort, and successful evidence-based practice projects often require diverse expertise. Collaborating with healthcare professionals from all disciplines like physicians, pharmacists, therapists, and others can provide a well-rounded perspective on patient care and enhance the design and implementation of evidence-based practice interventions. It also helps to create an atmosphere of shared responsibility for improving patient outcomes.

Embrace technology

Technological resources are indispensable for accessing the latest research and data. Implementing user-friendly databases, mobile applications, and other digital tools plus paying for subscriptions and access to such tools can streamline the process of finding and applying research evidence. Additionally, health technology can aid in monitoring outcomes and providing feedback, which is essential for the continuous evaluation of evidence-based practice effectiveness.

Through a combination of these strategies, evidence-based practice can become a standard of care in an organization, amplifying both the quality of patient care and the professional development of nurses.

NURSES ROLE TO ENSURE SUCCESSFUL EBP IMPLEMENTATION

Transitioning to evidence-based practice can be transformative, enhancing patient care and outcomes. While a lot of it depends on the culture of an organization, individual nurses can do certain things to ensure they implement evidence based practice successfully:

- **Communicate readily:** Encouraging dialogue between staff about research findings, best practices, and patient experiences helps demystify evidence-based practice and its relevance to daily nursing tasks.
- **Invest in training and ongoing education:** Continuous education is critical for staying up-to-date with the latest evidence and clinical decision-making methodologies. Regular workshops, seminars, and accessing e-learning platforms are excellent ways to reinforce nurses' skills and confidence in applying EBP. Pursuing advanced degrees, online nursing programs, can also greatly enhance understanding and confidence in the practice of evidence-based practice.
- **Cultivate a culture of lifelong learning:** Creating a culture that prioritizes learning and professional growth is essential. Actively promoting research participation, rewarding innovative ideas, and supporting advanced studies are ways to instill a love for ongoing learning. This continuous learning environment inspires nurses to stay curious, question the status quo, and embrace new evidence that can improve patient outcomes.

By focusing on these elements, nurses can lead and navigate the evidence-based practice landscape with skill and confidence, embodying the highest standards of care envisioned by the nursing profession

ADVANTAGES OF EVIDENCE BASED PRACTICE

- **Prioritizing the needs of patients.** Although evidence based nursing relies on research, it also considers the desires of individual patients. Since one of the main tenets of nursing is focusing on the patient's needs, evidence based practice helps you continue to improve patient outcomes while weighing the preferences and experiences of each patient.
- **Better patient care decisions that also save nurses time.** Evidence-based practice can save time, as you can stop engaging in activities that have no known benefit to patients. For example, nurses used to spend up to 20 minutes a day bathing each patient and changing their dressings, until research revealed that some dressings are better left in place longer and that daily baths don't impact outcomes. (Of course, under some circumstances it may be indicated to perform these practices daily or even more often; it depends on >the individual patient case.)
- **Contributions to the Science of Nursing.** Evidence-based practice also benefits nursing by keeping practices current and relevant, increasing nurses' confidence and decision-making skills, and contributing to the science of the profession.

STRATEGIES TO DEVELOP AN EVIDENCE BASED WORKFORCE

To develop an evidence-based nursing workforce, a strategic approach should focus on fostering a culture of inquiry, providing robust education on evidence-based practice (EBP) methodologies, empowering nurses to access and critically appraise research, facilitating implementation of research findings into practice, and continuously evaluating the impact of EBP initiatives, all while actively engaging leadership support and creating opportunities for collaboration across the healthcare team.

1. **EDUCATIONAL FOUNDATION**

- **Integrate EBP into Nursing Curricula**
  Incorporate EBP concepts and skills throughout nursing programs, from basic to advanced levels, ensuring graduates are equipped to utilize research in practice. A major challenge to the nursing profession is to find ways of merging theory and practice in the delivery of nursing education and patient care. One option for achieving this goal is Joint appointments for nurse educators. Joint appointments refer to a variety of arrangements whereby concurrent employment occurs within an educational institution and a clinical setting. The major benefit of joint appointment of nurse educators is that it allows the nurse educators spend time in clinical practice updating their clinical skills and re-experiencing the realities of practice.
- **EBP Focused Continuing Education**
  Provide regular continuing education courses on EBP topics like systematic reviews, critical appraisal, and research methodologies.
- **Simulation-Based Learning**
  Utilize simulation scenarios to practice applying EBP principles in real-life clinical situations.

2. CULTURE OF INQUIRY

- **Leadership Advocacy**
  Actively promote a culture of inquiry by leadership demonstrating commitment to EBP and encouraging nurses to question current practices and seek evidence-based solutions.
- **Mentorship and Coaching**
  Establish mentorship programs to guide nurses in the EBP process and support their development as clinical researchers.
- **Journal Clubs and Shared Learning**
  Facilitate regular journal clubs where nurses can discuss current research findings and critically appraise evidence together.

3. ACCESS TO EVIDENCE

- **Develop a Robust Library Database**
  Provide nurses with easy access to a comprehensive nursing research database and tools to search for relevant literature.
- **Technology Integration**
  Utilize electronic health records (EHR) with integrated EBP decision support tools to guide clinical decision-making.

4. IMPLEMENTATION AND EVALUATION

- **EBP Project Development**
  Encourage nurses to identify practice gaps and develop EBP projects to

address them, including data collection and analysis plans.

- **Change Management Strategies**
  Utilize effective change management techniques to facilitate the adoption of evidence-based practices within the clinical setting. Even though the clinical area is considered to be the centre of nursing, the ethos of the ward has a profound effect on the utilization of nursing research. How can a nurse use her professional nursing knowledge effectively when you are alone in shift caring for 40 patients? Acute staff shortage mitigate the use of research in nursing.
- **Outcome Measurement**
  Regularly monitor and evaluate the impact of implemented EBP interventions on patient outcomes.

5. COLLABORATION AND PARTNERSHIPS

- **Interdisciplinary Teams**
  Foster collaboration with other healthcare professionals, including physicians, pharmacists, and therapists, to promote shared decision-making based on evidence.
- **Research Partnerships**
  Establish partnerships with academic institutions to facilitate research activities and translate findings into practice.

KEY CONSIDERATIONS

Tailor to Context

Adapt EBP strategies to the specific needs and context of the healthcare setting.

Sustainability

Ensure long-term sustainability by embedding EBP into organizational culture and providing ongoing support for nurses.

Ethical Considerations

Always prioritize patient safety and ethical practices when implementing evidence-based interventions.

CONCLUSION

By actively promoting a culture of inquiry, providing accessible research, and empowering nurses to critically evaluate evidence, healthcare organizations can effectively develop a highly skilled, evidence-based nursing workforce that delivers optimal patient care. Four conditions have to be met if nurses are to implement research. These are; nurses must have the necessary knowledge, skill and attitudes, be able to overcome barriers to implementation, support for innovation must be available, innovation must be valued and rewarded.

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