Evidence-Based Practice

An Independent Study Short Course for Medical-Surgical Nurses
This module was developed by the Clinical Practice Committee of the Academy of Medical-Surgical Nurses, in accordance with the 2010 strategic plan.
(Revised February 2013)
Why is EBP relevant to nursing practice?

- There is a gap between what we know and what we do
- Nursing practice can and must be changed from tradition-based to science-based
  - Improved Patient Outcomes
  - Decreased unnecessary procedures & complications
  - Greater provider job satisfaction
  - Third party reimbursement
- Effective nursing practice requires information, judgment, and skill
- EBP empowers nurses and expands their skills
The 2011 report by the Institute of Medicine (The Future of Nursing: Leading Change, Advancing Health) recommends that all health care professionals possess certain skills and competencies in order to enhance patient care quality and safety.

*Competencies necessary for continuous improvement of the quality and safety of health care systems—patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics.*

- IOM, 2011
Purpose of Module

• To provide an overview of evidence-based practice (EBP), one of the five competencies that all health care professionals should possess (Institute of Medicine, 2011).
  – Where and how to find the best possible sources of evidence for your practice.
  – How to formulate clear clinical questions.
  – How to search for relevant answers to the questions.
  – Determine when and how to integrate these new findings into practice.
Objectives

At the end of this module, you will be able to:

• Recognize evidence-based practice (EBP) as one of five core competencies all health professionals should possess regardless of their title or discipline.

• Define EBP.
Objectives

• Identify two characteristics differentiating research utilization and EBP in nursing.
• List three components of EBP.
• Describe the nurse’s role in EBP.
• Describe the 5 steps of the EBP process.
Objectives

- Write a researchable clinical question.
- Identify resources for developing relevant answers to the question.
- Use clinical judgment and the 5-step process for determining when and how to integrate findings into practice.
Evidence-Based Practice is \textit{knowing} that what we do is the best practice.
How do we *know* in nursing?

- Tradition
- Authority
- Borrowing
- Trial and error
- Personal experience
- Role modeling and mentorship
- Intuition and reasoning
- Nursing research
Types of Nursing Research

• Describe
  *Identify and understand phenomena, issues*

• Explain
  *Clarify relationships*

• Predict
  *Estimate the probability of outcome*

• Control
  *Manipulate the situation to get desired outcomes*
Much of what is *known* from research has not been applied in practice. This is known as **Research-Practice Gap**
Research-Practice Gap

During the 1980s and 1990s, nursing emphasized bridging this research-practice gap through the development of research utilization (RU) projects.
Research-Practice Gap

Steps of the process included:

– Dissemination of knowledge.
– Synthesis of findings.
– Critique of studies.
– Application of findings.
Research-Practice Gap

Even though guidelines and knowledge have been disseminated, the overall effect on clinical practice and patient outcomes is unclear.
Research-Practice Gap

• The problems of importance to medical-surgical nursing (skin breakdown, pain, bowel function, treatment adherence, nausea) and related interventions are largely not collected in medical record databases.

• Nursing research studies are predominately descriptive or qualitative in design, rather than what is considered more rigorous and quantitative.
EBP is...

- Needed to help **bridge the research-practice gap** by:
  - Strengthening the evidence base so that we *know* what works and what doesn’t work in providing patients with the best outcomes.
  - Standardizing evidence across fields to reach the best outcome for the patient.
  - Housing evidence in online databases providing reviews of the evidence base.
  - Translating and consolidating state of the science into clinical recommendations.

(Stevens, 2004)
EBP is...

- “A problem-solving approach to clinical decision making within a health-care organization that integrates the best available scientific evidence with the best experiential (patient and practitioner) evidence.”

(Johns Hopkins Nursing Evidence-Based Practice Model and Guidelines, 2007)
Goals of EBP

• Provide practicing nurses with the best evidence-based data
• Resolve problems in the clinical setting
• Achieve excellence in care delivery
• Reduce variations in nursing care
• Promote effective nursing interventions
• Assist with efficient and effective decision-making
Key Components of EBP

Decisions about care are based on:

A. Research evidence.
B. Clinical expertise, judicious use.
C. Patient values and circumstances.

(Institute of Medicine, 2003)
A. Research Evidence

- Randomized controlled trials
- Laboratory experiments
- Clinical trials
- Epidemiological research
- Outcomes research
- Qualitative research
- Expert practice knowledge, inductive reasoning
B. Clinical Expertise

- Knowledge gained from practice over time
- Inductive reasoning
C. Patient Values, Circumstances

- Unique preferences
- Concerns
- Expectations
- Financial resources
- Social supports
“In nursing, best research evidence refers to methodologically sound, clinically relevant research about the effectiveness and safety of nursing interventions, the accuracy and precision of nursing assessment measures, the power of prognostic markers, the strength of causal relationships, the cost-effectiveness of nursing interventions, and the meaning of illness or patient experiences.”

- Evidence-Based Nursing: A Guide to Clinical Practice, 2005
Nurse’s Role in EBP

American Nurses Association Standards of Professional Nursing Practice

• “The registered nurse participates, as appropriate to education level and position, in the formulation of evidence-based practice through research.”

• “The registered nurse utilizes current evidence-based nursing knowledge, including research findings, to guide practice.”

Nurse’s Role in EBP

AMSN Standards of Professional Performance

• “STANDARD VII. RESEARCH: Medical-surgical nurses use research findings in practice.”

Nurse’s Role in EBP

– Generate important questions
– Know basis for nursing practice
– Expect that evidence is the foundation of practice
– Participate in EBP projects
– Disseminate project findings in various forums
– Collaborate with the healthcare team to provide quality care
There are 5 steps in judging the evidence and determining the circumstances and patient values for guiding application.
EBP Process

The EBP Process Steps are:

1. **Assess practice (formulate question)**
   - What isn’t working?
   - What do you want to know about?

2. **Decide (evidence review)**
   - What resources are available and are they any good?
   - What has worked in other places?
   - How can you change your practice?

3. **Plan (develop a plan based on findings)**
   - Make a plan to change care based on relevant, applicable information.
   - Let others help.

4. **Intervene (take action to review process or change)**
   - Implement revised caregiving protocol in clinical unit.

5. **Evaluate (care improved or modify and again intervene)**
   - How well is that working for you?
Additional Readings


References


References


Stevens, K. R. (2004). *ACE Star Model of EBP: Knowledge Transformation*. Academic Center for Evidence-based Practice. The University of Texas Health Science Center at San Antonio. [www.acestar.uthscsa.edu](http://www.acestar.uthscsa.edu)