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 2006-2010 strategic plan.
Why is evidence-based practice important and why now?

- Changing patient demographics require new approaches to care.
- The evidence base for practice is rapidly expanding and growing in complexity for nursing and other disciplines.
Why is evidence-based practice important and why now?

- How to search, evaluate, and apply evidence in practice is unknown by many or inconsistently used.
- There continues to be a mismatch between what we know to be quality care and the quality of care that is delivered.
Why is evidence-based practice important and why now?

• Quality problems occur even in the hands of dedicated, conscientious professionals.
• The burden of harm from the underuse, misuse, and overuse of care is staggering.
Why is evidence-based practice important and why now?

• The 2003 report by the Institute of Medicine (Health Professions Education: A Bridge to Quality) recommends that all health care professionals possess certain skills and competencies in order to enhance patient care quality and safety.

– All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics.

(Institute of Medicine, 2003)
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, 2003).
  – 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 (Institute of Medicine, 2003) for crossing the quality chasm.

- Define EBP.
Objectives

• Identify two characteristics differentiating research utilization and EBP in nursing.
• List three components of EBP.
• Provide two examples of how EBP benefits the nurse.
• Provide two examples of how EBP benefits the patient.
Objectives

• Describe the 5 steps of the EBP process.
• 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 Knowing that what we do is the best practice.
How do we \textit{know} in nursing?

- Tradition
- Authority
- Borrowing
- Trial and error
- Personal experience
- Role modeling and mentorship
- Intuition and reasoning
- Nursing research
Diligent, systematic inquiry to validate and refine existing knowledge and generate new knowledge that directly and indirectly influences nursing practice. (Burns & Grove, 2004)
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.
– Development of research-based practice guidelines (i.e., Agency for Health Care Policy and Research/AHCPR practice guidelines; Conduct and Utilization of Research in Nursing/CURN practice protocols).
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…

- Conscientious, explicit, and **judicious** use of theory-driven, research-based information in making **decisions** about care delivery to individuals or a group of patients, and in consideration of **individual needs and preferences** (Ingersoll, 2000).
EBP is...

- Integration of best research evidence, clinical expertise, and patient values in making decisions about the care of individual patients (Institute of Medicine, 2001).
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
Benefits for Med-Surg Nurses

Fewer Errors — Reduced likelihood of making type 1 and type 2 errors in practice

Type 1 – Acceptance of a practice that is incorrect. *Example: Administration of a wrong dose, using the wrong procedure, teaching patients using the wrong information.*

Type 2 – Rejection of a practice that is correct. *Example: Failing to screen patients for fall or pressure ulcer risks; failing to wash hands before and after patient contact; failing to provide patients with smoking cessation information.*

(Aherns, 2005)
Benefits for Med-Surg Nurses

Greater professional satisfaction from working as part of a team and experiencing effective practice.
Benefits for Med-Surg Nurses

• Better Care
  – Less variation in care among caregivers where knowledge for improvement is already available.
  – More predictable health outcomes.
  – Less waste and inefficiency yielding fewer delays in diagnosis and treatment and fewer complications.
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?
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)
Additional Readings


