Let’s Be Perfectly Clear
Evidence Based Nursing Practice is not research.

Evidenced Based Practice relies on research and helps us apply research.

Challenges to keeping up on health care research:
- Volume = just too much information
- Form = not always easily understood

EBP to the rescue. EBP helps us:
- Wade through the growing complexity of science and technology, providing summaries and reviews that organize the research material for us.
- Organize current research data into meaningful and useable information.

What is EBP?
“the integration of best research evidence with clinical expertise and patient values” (Straus et al 2005).

“the conscientious, explicit, and judicious use of the current best evidence in making decisions about the care of individual patients ” (Sackett DL, 1998)

Goals of EBP
- Deliver effective nursing care based on the best research.
- Resolve problems in the clinical setting.
- Achieve excellence in care delivery.
- Introduce innovation.

What’s in it for me?
- Closes the research-practice gap.
- Keeps us current with latest research.
- Prevents us from using outdated information.

EBP means we ask these questions
- What is the clinical practice question?
- What evidence exists that will help answer the question?
- How valid is the evidence?
- How strong is the evidence or results?
- How relevant is it to my practice?
Your role in the process
- As a nurse you are the final filter before the research evidence, or study results gets to the patient.
- You choose to follow or not follow the ‘advise’ of the experts.
- You choose to apply or not apply the results of the studies.

Seven steps to Evidence-Based Nursing Practice
1. Formulate the clinical question.
2. Search the literature.
3. Read and evaluate the literature.
4. Make a decision based on the literature.
5. Apply what you found to your practice.
6. Evaluate the results: did the change result in improved care.
7. Tell others what you found and how it worked.

Step 1. Formulate the clinical question.
- What is the best way to prevent pressure ulcers?
- How can I prevent post op infections?
- Is the practice of turning patients q2h a valid practice?
- How can I prevent falls in long term care?
- Add yours here:
  - ________________________________
  - ________________________________
  - ________________________________

Key to a Good Search is a Robust Question

Use PICO to add strength to your question

<table>
<thead>
<tr>
<th>P</th>
<th>Patient characteristics</th>
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<tbody>
<tr>
<td>I</td>
<td>Interventions being considered</td>
</tr>
<tr>
<td>C</td>
<td>Comparison interventions, if any</td>
</tr>
<tr>
<td>O</td>
<td>Outcome you’re interested in</td>
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</table>

PICO Applied

<table>
<thead>
<tr>
<th>P</th>
<th>Behaviorally ill children</th>
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<tbody>
<tr>
<td>I</td>
<td>Limit setting</td>
</tr>
<tr>
<td>C</td>
<td>Clear expectations with positive choices</td>
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<tr>
<td>O</td>
<td>Effectiveness</td>
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More examples of PICO questions

• Are bleach baths more effective than cortisone cream for skin rashes in HIV patients?
• Is a visual analog scale more accurate in assessing dyspnea than asking the patient if they are short of breath?
• Do distracters in clinic waiting rooms reduce the dissatisfaction of long waiting times?
• Are emails a more effective teaching strategy to educate clinical staff on evidence-based practice than unit in-services?
• Is a surgical 2 minute hand wash as effective as a 4 minute hand wash?

Your Turn

Your PICO Question #1

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Your PICO Questions #2

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Step 2. Search the literature

• The Library is your new hang out.
• The Librarian is your new best friend.

Collaboration = mutual benefit

• *Nurses* learn how to use library resources more effectively.
• *Librarians* become aware of nurses information needs and are able to help meet those needs.
• Working together you can improve patient care.

Librarians help nurses to:

• Select appropriate information sources.
• Translate topics into searchable concepts.
• Search concepts.
• Identify evidence-based articles.
• Get full-text of articles.
Where to find EBP Literature

- **Cochrane Collaboration Databases**: Produces systematic reviews, meta-analyses, and reports of clinical trials. International not-for-profit independent organization dedicated to making accurate information about healthcare readily available. [www.cochrane.org](http://www.cochrane.org).

- **National Library of Medicine (NLM)**.
  - PubMed Central® a repository of biomedical journal literature providing free, unrestricted access to more than 1.5 million full-text articles. [www.ncbi.nlm.nih.gov/pmc/](http://www.ncbi.nlm.nih.gov/pmc/)

- **CINAHL®, the Cumulative Index to Nursing and Allied Health Literature** [http://www.ebscohost.com/cinahl/](http://www.ebscohost.com/cinahl/).

- **Textbooks**: Harrison’s Principles of Internal Medicine, Brunner and Suddarth's Textbook of Medical-Surgical Nursing, Wong's Essentials of Pediatric Nursing.


- **Specialty Guidelines**: American Heart Association (AHA) - Get With The Guidelines - hospital-based QI program for the AHA and the American Stroke Association (ASA) to empower healthcare provider teams to consistently treat heart and stroke patients according to the most up-to-date guidelines.

Step 3. Read and evaluate the literature

- Is it strong?
- Is it of good quality?
- Is it valid?
- Is it reliable?
- Can I apply it to my practice?

Strength of Evidence

**Research Based Evidence**

- Meta-analysis
- Experimental study – controlled, clinical trials.
- Review (literature search) – sum up current research.
- Non-experimental studies - descriptive, correlational, and qualitative research.
- Evidence-based practice guidelines - professional organization guidelines.

**Non - Research Based Evidence**

- Case studies.
- Program evaluation, quality improvement data, or case reports.
- Opinions of experts, standards of practice, practice guidelines.
Types of Reviews (Johnson, 2005)

- **Systematic Review** – compilation of like studies to address a specific clinical question, using a detailed comprehensive search strategy, and rigorous appraisal methods that minimize bias and ensures reliability across the studies.

- **Meta-analysis** - Statistical approach to synthesize the results of a number of studies that produce a larger sample size, therefore producing greater power to determine the true magnitude of the effect.

- **Narrative Review** (also called a literature review)
  - Includes published papers that support an author’s particular point of view.
  - Lacks the rigorous scientific approach of a systematic review.

**Step 4. Make a decision based on the literature**

- May need to seek approval.
- If unit based, need to talk with supervisor.
- If covers a wide area of practice, may need to present information to a committee or task force.
- Ask yourself “Who has the authority and responsibility to make this decision?”

**Step 5. Apply what you found to your practice**

If it is just you – you have all the power.
If it is for a group, you will need help.

You will need:
- Opinion leaders – those who change minds
- Change champions – those who implement
- Practice maintenance experts - those who maintain the change once it has been introduced.

**Step 6. Evaluate: did the change cause improvement?**

What was your return on investment (ROI)?

Ask these questions:
- Did nurses change their practice?
- Did patients profit?
- Did we save any resources: time, energy, money?

**Step 7. Tell others what you found and how it worked**

Start small – present big

- Poster festival.
- Articles in regional nursing magazines like Advance for Nurses.
- Group emails to nurses.
- Presentations are conferences.

**Integrating EBP into YOUR practice**

- Question the norm.
- Challenge the “way we always done it”.
- Speak DATA not OPINION.
- Reach out to colleagues and collaborators.
Creating an EBP culture
- Foster an environment that values inquiry and continual personal learning.
- Focus on data as the deciding factor in making clinical and administrative decisions.
- Create developmental systems for staff interested in pursuing research as a long term direction.

What resources are needed?
- Executive leadership
- Clinical leadership
- Time
- Patience
- Funds to seed project and support education/dissemination activities

Where do you get resources?
- Pull together what you have.
- Link all activities back to primary mission of the institution.
- Magnet program has helped.
- Success attracts attention and resources.

References

Schulte S & Sandstrom P. (2005) Searching for Evidence-Based Practice Literature. Walter E. Helmke Library, Indiana University-Purdue University Fort Wayne


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