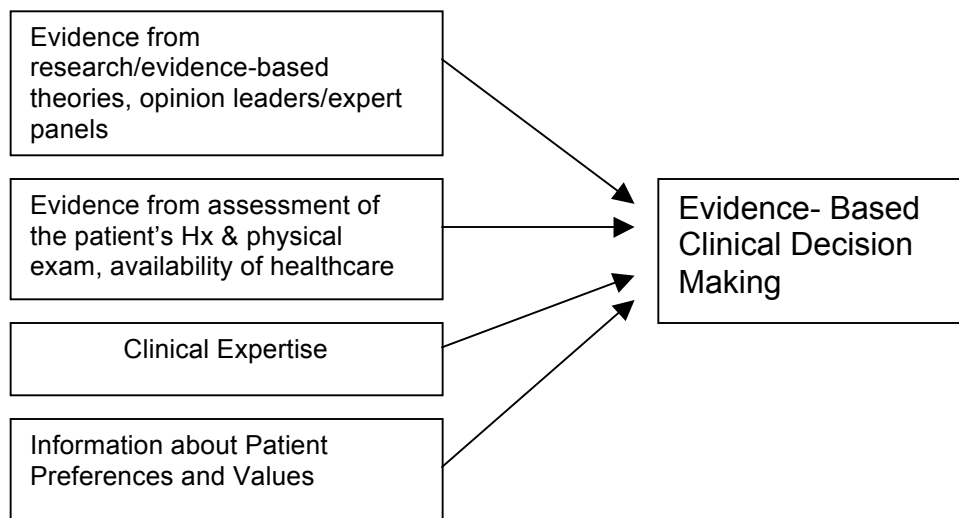


Evidence Based Practice

Evidence-based practice is the conscientious use of current best evidence in making decisions about patient care. It is a problem solving approach to clinical practice that integrates:

- ◆ A systematic search for and critical appraisal of the most relevant evidences to answer a “burning” clinical question
- ◆ One’s own clinical expertise
- ◆ Patient preferences and values

Although evidence from systematic reviews of randomized clinical trials (RCTs) has been regarded as the strongest evidence on which to base practice decisions, evidence from descriptive and qualitative studies as well as from opinion leaders should be factored into clinical decisions when randomized trials are not available.



The components of Evidence -Based Practice (Melnyk & Overholt, 2005)

Key Steps of Evidence-Based Practice

The five critical steps of EBP include:

1. Asking the burning clinical question in the format that will yield the most relevant and best evidence.
2. Collecting the most relevant and best evidence to answer the clinical question, including searching for systematic reviews/meta-analyses or clinical practice guidelines first.
3. Critically appraising the evidence with one's clinical expertise, assessment of the patient's condition and available healthcare resources along with the patient's preferences and values to implement a clinical decision.
4. Evaluating the change resulting from implementing the evidence in practice.

Five Steps of Evidence-Based Practice

1. **Ask the burning clinical question.**
2. **Collect the most relevant and best evidence**
3. **Critically appraise the evidence.**
4. **Integrate all evidence with one's clinical expertise, patient preferences and values in making a practice decision or change.**
5. **Evaluate the practice decision or change.**

Step 1: Formulating the Burning Clinical Question

Clinical questions should be asked in **PICO format** (i.e., patient population, intervention of interest, comparison intervention or status, and outcome) to yield the most relevant and best evidence resulting in an effective search.

Step 2: Search for Best Evidence

Begin with systematic reviews or **meta-analyses** and evidence-based clinical practice guidelines. A systematic review is a summary of evidence on a particular topic, typically by an expert or expert panel that uses a rigorous process for identifying, appraising and synthesizing studies to answer a specific clinical question. Conclusions are then drawn about the data gathered through this process. Many systematic reviews incorporate quantitative methods to

summarize the results from multiple studies. These reviews are called meta-analyses. A meta-analysis often yields an overall summary statistic that represents the effect of the intervention across multiple studies.

Step 3: Critical Appraisal

Critical appraisal can be efficiently identified by asking three key questions.

1. What were the results of the study?
2. Are the results valid?
3. Will the results of the study facilitate the care of the practitioner's patient's?

Step 4: Integrate the Evidence

Step 4 involves integration of the evidence found from the literature search, with the healthcare provider's expertise, clinical assessment of the patient and available healthcare resources as well as patient preferences and values to implement a decision. A clinician's assessment of healthcare resources that are available to implement a treatment decision is a critical part of the EBP decision-making process.

Step 5:

Evaluate the evidence-based intervention in terms of how the treatment worked or how effective the clinical decision was with a particular patient or practice setting.