

Part 1 Transcript

A brief introduction to evidence based medicine and background sources

The evidence-based medicine approach requires that health practitioners integrate and take into account three areas of knowledge when making clinical decisions:

1. Clinical Expertise - That is, the ability to use clinical skills and the past experience of the practitioner
2. Patient Values, meaning the unique preferences of each patient. The concerns and expectations of the patient must be integrated into the clinical decisions if practitioners are to serve the patients
3. The Best Research Evidence – valid and clinically relevant research mainly published as clinical trials, guidelines and reviews of trials in the literature. All three prongs combine to make evidence-based practice.

The following tutorials will focus on this last prong and provide a basic introduction to obtaining the best evidence.

There are 5 steps to the EBM approach. These steps are from and outlined in detail in the book Evidence-based medicine: how to practice and teach EBM by Sharon Straus:

Step 1 is converting the need for information into an answerable question and ultimately into good search queries to use when utilizing the health literature databases

Step 2 is tracking down the best evidence; that is, finding the best clinical trials, studies, reviews or guidelines that answer your particular question. This step involves efficiently using ebm and health literature resources such as PubMed.

Step 3 involves critically appraising the evidence you find for it's validity (or truthfulness), impact (or effect size), and applicability to your patient and particular question.

Step 4 is integrating the evidence with your clinical expertise and knowledge and the circumstances of your clinical question

Step 5 is evaluating Steps 1-4 and seeking ways to improve the process

The following modules will focus on the first two steps.

Many of you are probably asking the question: why incorporate EBM in my practice? There are several reasons for this:

First, much of what you learn in the health field will become obsolete very quickly. It has been often quoted that ½ of what you learn in medicine will be wrong after 10 years.

Although your diagnostic skills and clinical judgment increase over time, your up-to-date knowledge and clinical performance will decline.

The medical literature continues to expand at a rate too overwhelming to anyone that does not have a systematic approach to using it. For example in the year 2008, there were more than 50,000 clinical trials published in the literature. Using the EBM techniques makes this process more productive and manageable.

Finally, each day health care practitioners encounter questions that they cannot readily answer. On this topic an interesting series of studies was conducted out of Iowa led by JW Ely.

One study found that for every 10 patients that are seen, practitioners have 3.2 unanswerable clinical questions. Regarding these questions, practitioners did not pursue, or find answers at all, or had a difficult time finding an answer to a staggering 87%.

Add to this that practitioners spend less than 2 minutes to find an answer to a pursued question...all points to the need of having a good systematic approach to finding answers to clinical questions!

You have completed part one.