



# Evidence-Based Practice: Making It Happen in Your Clinical Setting

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## Introduction

The *Clinical Journal of Oncology Nursing* column “From Research to Clinical Practice” will be undergoing some changes. Beginning with the next issue, the column will shift from a review of research with patient-care applications to a focus on evidence-based practice (EBP). Rising costs of health care and limited healthcare resources have created a demand for cost-effective, beneficial patient care. As a result, a paradigm shift from practice decisions based on intuition and tradition to EBP has occurred in an effort to ensure economical, high-quality health care. EBP is the process of basing clinical decisions on research findings and the best available evidence. Oncology nurses must have an understanding of evidence-based practice and be able to develop and use patient guidelines and treatments based on valid and relevant information. This issue’s column presents an introduction to EBP and discusses the process, controversial issues, and implications for nursing.

## Defining Evidence-Based Practice

EBP originated from evidence-based medicine (EBM), which was created in the 1980s at the School of Health Sciences at McMaster University in Hamilton, Ontario, Canada, to describe an approach to clinical learning (Rosenberg & Donald, 1995). In 1992, the first definition of EBM was developed by the Evidence-Based Medicine Working Group (EBMWG) at McMaster. EBMWG’s (1992) definition states, “Evidence-based medicine de-emphasizes intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision-making and stresses the examination of evidence from

clinical research” (p. 2420). A more frequently used definition in the medical and nursing literature was developed later by Sackett, Rosenberg, Gray, Haynes, and Richardson (1996) at the Centre for Evidence-Based Medicine at the University of Oxford in England and defines EBM as “the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research” (p. 71). In comparison, the initial definition focuses only on clinical research with the randomized controlled trial (RCT) as the gold standard. The latter definition differs with the inclusion of clinical expertise as evidence, in addition to research. Furthermore, other definitions subsequently have been created and include patients’ perspectives in making clinical decisions (Gray, 1997; Ingersoll, 2000). Despite the variations in definitions, the basic tenet of EBP is the use of best available evidence to make clinical decisions that are most effective and beneficial for patients.

1. Precise definition of a patient problem
2. Identification of information necessary to solve problem
3. Efficient and thorough search of the literature
4. Critical appraisal of the evidence
5. Extraction of the clinical answer as it applies to the patient problem
6. Clinical guideline or protocol development and implementation
7. Evaluation

### FIGURE 1. EVIDENCE-BASED PRACTICE PROCESS

*Note.* Based on information from Guyatt et al., 2000.

## Executing Evidence-Based Practice

EBP is a multistep process (see Figure 1). The first step, identification of patients’ problems, is a critical step in the process. Nurses are faced with patient situations on a daily basis that stimulate clinical questions. For example, patients who will be receiving 5-fluorouracil for colon cancer may ask, “How can I prevent mouth sores during chemotherapy?” The question may be answered by turning to the literature for the best available evidence. However, before performing literature searches, nurses should develop clear questions or problem statements to guide the search for precise answers. Essential components of a question should include the patients or problems being addressed, the interventions being considered, comparison interventions (when relevant), and the clinical outcomes of interest. For this example, the question may be, “What type of mouth cleansing protocol is best in preventing mucositis in patients receiving 5-fluorouracil for Duke’s C colon cancer?” The type of information needed to answer this question would include published research studies investigating oral care during chemotherapy, systematic or integrative reviews that provide a synopsis of the evidence pertaining to oral care during chemotherapy, and published clinical guidelines or protocols.

The next step is to perform a literature search. When obtaining studies, levels of evidence should be considered. Levels of

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