A Process Model for Evidence-Based Literature Syntheses

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Purpose/Objectives: To describe the development and implementation of the Triad Model of Research Synthesis, developed as a mechanism to produce systematic literature reviews that can serve as sources of evidence for decision making in health care.

Data Sources: Authors’ recollections of the development and implementation process over a one-year period during 2002. Tracking forms were completed by members of three triad teams as they compiled research syntheses on clinical topics: pharmacologic treatment of dyspnea, assessment of sleep disturbances in patients with cancer, and exercise as an intervention for cancer-related fatigue.

Data Synthesis: The systematic literature review process includes the following steps: (a) organize, search the literature, and focus the research synthesis question; (b) critique the selected literature; (c) synthesize the evidence; and (d) write. On average, triad members spent hours that were equivalent to full-time work during the year (excluding completion of manuscripts) on the synthesis projects. Hours spent varied by member role and with each phase of the process.

Conclusions: Performing a research synthesis using the triad model was a productive and resource-intensive experience that points to the need for negotiating resources prior to embarking on such an exercise.

Implications for Nursing: Given a group of highly motivated nurses and others with adequate time and resources, this model can be effective when developing systematic reviews about a variety of topics. Literature syntheses developed can be used as evidence for clinicians and others to develop practice protocols and other evidence-based care guidelines.

Evidence-based practice (EBP) is a new paradigm in health care that recently has emerged in the international healthcare literature. Originally referred to as evidence-based medicine (Rutledge & Grant, 2002), EBP easily applies to nursing and other healthcare professions because it incorporates the application of best evidence by clinical experts who value the individuality of the patient and family. EBP is “a total process beginning with knowing what clinical questions to ask, how to find the best practice, and how to critically appraise the evidence for validity and applicability to the particular care situation. The best evidence then must be applied by a clinician with expertise in considering the patient’s unique values and needs. The final aspect of the process is evaluation of the effectiveness of care and the continual improvement of the process” (DePalma, 2000, p. 115).

Ideal implementation of the EBP process requires the collaboration of nurses from clinical practice, education, and research. Advanced practice nurses (APNs) are master’s-prepared nurses who are crucial to the EBP process because of their clinical expertise, knowledge of systems within the clinical setting, and ability to facilitate interdisciplinary clinical improvement projects. APNs can foster the EBP process because of their role within healthcare settings and offer a unique perspective of care ranging from the individual patient and family level to the broader population level. Researchers offer expertise about methods for fully capturing the nature and quality of the evidence on a clinical topic. Educators teaching graduate students are aware of the capabilities of APNs related to synthesis work and also understand the expertise of researchers. The vision of the triad model was that members of a triad would work together in mutual respect toward completion of a literature synthesis.

Key Points...

➤ Developing a written research synthesis is a time-consuming and resource-intensive experience.
➤ Products of research synthesis work benefit from contributions by nurses in multiple professional roles (e.g., clinical practice, education, research).
➤ Using the Triad Model of Research Synthesis, practice-focused syntheses of evidence are produced through the collaborative efforts of advanced practice clinicians, educators who understand the role of advanced practice nurses, and researchers who understand how to critically appraise research studies and synthesize findings across studies.