Evaluation of a Web Course to Increase Evidence-Based Practice Knowledge Among Nurses

Nicole Allen, DNP, FNP-BC, AOCNP®
Barbara G. Lubejko, MS, RN
Julie Thompson, PhD
Barbara S. Turner, PhD, RN, FAAN

Evidence-based practice (EBP) is essential for quality health care, and EBP knowledge needs to be increased among nurses. Web-based courses may effectively deliver such education. In this study, data were collected about the Oncology Nursing Society web course "Developing Skills for Evidence-Based Practice" and evaluated for demographic characteristics and EBP knowledge test scores.

At a Glance
- No significant correlation was seen between knowledge test scores and participants’ education or experience levels.
- Course participants had significant improvement on knowledge test scores after web course completion.
- Additional studies are needed to explore the impact of EBP knowledge on clinical practice.

Evidence-based practice (EBP) in nursing is an approach to clinical decision making based on the combination of best evidence available, clinical expertise, and patient values and preferences in an effort to improve outcomes (DiCenso, Guyatt, & Ciliska, 2005; Melnyk & Fineout-Overholt, 2011). The importance of EBP in nursing has been established with the demonstrated improvement in patient outcomes (Melnyk & Fineout-Overholt, 2011). Literature supports the need to advance the incorporation of EBP into healthcare institutions, with major healthcare organizations placing an emphasis on EBP (Fineout-Overholt, Melnyk, & Schultz, 2005). Although current nursing education programs may incorporate EBP within their curriculum, a deficit in knowledge may exist with practicing nurses who do not have EBP education. The literature suggests that significant barriers to the implementation of EBP may exist and a solid education foundation may assist with them (Fineout-Overholt & Johnston, 2006; Penz & Bassendowski, 2006). Reduced implementation of evidence-based nursing into clinical practice settings may be because of barriers such as lack of research knowledge, lack of EBP skills, and attitudes surrounding EBP, such as perceived lack of value (Melnyk et al., 2004; Pravikoff, Tanner, & Pierce, 2005). Attitudes toward and knowledge of EBP among practicing nurses should continue to be investigated. In addition, modes of education need to be explored to increase knowledge of EBP and use of EBP guidelines to improve patient care among practicing nurses.

A consistent and striking increase has occurred in the use of web-based courses in nursing. Use of a web-based educational platform has been demonstrated as an effective and desirable mechanism to deliver educational content to nurses (Leasure, Davis, & Thievon, 2000; Ryan, Carlton, & Ali, 1999; Seiler & Billings, 2004). The Oncology Nursing Society (ONS), 2015 offers web-based courses, including “Developing Skills for Evidence-Based Practice” (www-ons.org/content/developing-skills-evidence-based-practice). This course is designed to increase knowledge and skills necessary to apply research to practice. Professional nursing societies, such as ONS, promote EBP by providing resources to increase EBP knowledge and practice change (Mallory, 2010). One such resource is the role of nurse facilitators of EBP or mentors, which have been found to have positive effects on EBP beliefs and implementation, as well as job satisfaction (Fineout-Overholt, Levin, & Melnyk, 2004; Wallen et al., 2010). Overall, the consensus in the literature is that the incorporation of EBP mentors is essential to accelerate the EBP paradigm shift in nursing (Fineout-Overholt et al., 2004, 2005; Melnyk et al., 2004; Wallen et al., 2010). ONS’s EBP web course offers an EBP expert resource/mentorship opportunity entitled “Ask the Expert” in which a master’s prepared nurse with EBP experience answers questions that course participants may have regarding EBP.

Validated evidence-based tools are needed to measure the practices of EBP, as