Evidence-based practice (EBP) has and will continue to be the mainstay among clinicians in applying interventions to practice. Sackett, Rosenberg, Gray, Haynes, and Richardson (1996) defined EBP as the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. Sackett et al. continued to describe EBP as integrating individual clinical expertise with the best available external clinical evidence from systematic research. The Oncology Nursing Society (ONS) offers a valuable resource with the EBP Resource Area (www.ons.org/evidence). ONS (n.d.) also provides nurses with a guideline of minimum standards to assist healthcare professionals in systematically reviewing related research. EBP provides a basis for decision making and individualized patient care, thereby enhancing the efficiency of clinics and hospitals, revenue reimbursement, and the quality of patient care (Maxwell & Stein, 2006). EBP consistently impacts the quality of care for patients in a positive manner and has become a top priority for healthcare providers.

How Do You Use Evidence in Your Practice?

Do you practice using evidence on a daily basis? What evidence do you use? Do you have EBP references readily available for easy access? Does your evidence exist in a formal guideline or protocol for reference? When EBP recommends an intervention, is it implemented consistently among all nurses to all appropriate patients? If not, what barriers prevent consistent EBP? This article poses these questions to increase awareness of the potential impact that incidental deviations from evidence may induce.

Neutropenia: An Exemplar

To emphasize the reality of incidental deviations from EBP, this article addresses the assessment and management of chemotherapy-induced neutropenia. In 2005, the ONS Prevention of Infection Outcomes Intervention Project Team reviewed, critiqued, and summarized the current research related to the prevention of infection among compromised patients with cancer (Zitella et al., 2006). The research resulted in one of the first ONS Putting Evidence Into Practice® projects and resources provided by ONS. Zitella et al. conducted a thorough review of evidence, specifically detailing the interventions noted in the research, such as colony-stimulating factors, antibiotic prophylaxis, protective isolation, diet, and oral care. The National Comprehensive Cancer Network (NCCN, 2007) has provided guidelines for supportive care use of myeloid growth factors. Lyman (2005) reviewed previous NCCN guidelines and highlighted specific details regarding consequences of neutropenic complications, specifically hospitalization, mortality, substantial cost, poor quality of life, and reduced relative dose intensity, along with their associated poor outcomes. Reduced chemotherapy dose intensity, resulting from either dose reduction or treatment delay, can compromise treatment outcomes in patients with curable cancers (Bonadonna et al., 2005). However, among a potentially curable population of 4,522 patients with non-Hodgkin lymphoma, 53% of the patients did not receive the optimal dose intensity believed to be a predictor of survival (Lyman, Dale, Friedberg, Crawford, & Fisher, 2004).

Neutropenia has been identified as the primary reason for chemotherapy dose delays and dose reductions (Epelbaum, Haim, Ben-Shahar, Ron, & Cohen, 1988; Link et al., 2001). Based on the clinical evidence, Lenhart (2005) conducted a performance improvement project and implemented numerous interventions, including a neutropenia risk assessment, which was shown to greatly improve average relative dose intensity and ultimately improve overall quality of care. A similar performance improvement project was summarized by Donahue (2006), who confirmed the positive outcome of using a neutropenia risk-assessment tool as evidenced by a decrease in dose delays from 32% to 8.6% and dose reductions from 8% to 2.9%. The guidelines also have shown a positive impact on patients receiving adequate doses of chemotherapy (Lenhart). Based on the previously mentioned relationship between optimal dose intensity and maximum survival benefit (Bonadonna et al.; Lyman et al.), evidence clearly supports interventions

Christy Mitchell, RN, MSN, OCN©, is a clinical nurse liaison for Amgen Inc. in Prairieville, LA.

Digital Object Identifier: 10.1188/08.CJON.365-367
to minimize neutropenia-related dose reductions and delays, as shown in populations of patients with breast cancer or non-Hodgkin lymphoma.

Whether interventions to minimize neutropenic complications in your practice involve improving patient educational materials, changing patient cancellation processes, or implementing neutropenia risk-assessment tools, an imperative question remains: Are the tools or interventions applied consistently to all appropriate patients? Sustainability of identified interventions is crucial in creating practice based on evidence.

**Promoting the Application of Evidence-Based Practice**

To enhance the application of EBP in an institution, consider implementing three approaches to improve sustainability. First, the concept of shared governance creates an environment of interdependence and accountability for the nurses involved. Shared governance is defined as a network of nursing practice decisions in a decentralized environment (Sullivan, Decker, & Jamerson, 2001). Autonomy maintained in the realm of nursing practice may create a system which improves practice efficiency and patient care through the control of nursing practice. To answer the challenge of sustaining EBP, nurses must be visible and vocal about the profession of nursing and its potential impact on high-quality care. Rather than being passive observers, nurses must become active participants in the quality of care they provide. Control may be lost when nurses allow others to take away their power, when they become fragmented in their profession (Sullivan et al.). Conversely, control is maintained when nurses remain steadfast patient advocates, speaking on behalf of patients and explaining their expectations and rights to excellent-quality evidence-based care.

The second approach sheds new light on the importance of the clinic or hospital policy and procedure manual. A manual based on evidence may be used as a resource by nurses to maintain consistency of clinical practice. Most nurses consider the policy and procedure manual as their main source of practice knowledge and were more consistent in the application of knowledge when they believed it was evidence based (Squires, Moralez, & LeFort, 2007). Furthermore, when EBP was included in nurses’ education and they were involved in organized presentations or programs by experienced speakers, nurses’ utilization and sustainability of EBP increased (Thompson, Estabrooks, Scott-Findlay, Moore, & Wallin, 2007). For example, a policy outlining expectations of a risk-assessment tool, tracking febrile neutropenia rates or average relative dose-intensity numbers, may ensure sustainability of evidence-based interventions.

The third approach involves a strategy to improve adherence to guidelines identified in literature: audit and feedback. The approach requires timely, individualized, non-punitive feedback from providers regarding their adherence to best practice. Such action may influence the feedback’s effectiveness in changing desired behaviors (Hysong, Best, & Pugh, 2006). The mechanism by which feedback is delivered plays an important role in any desired behavior change. Providing average relative dose-intensity numbers to healthcare providers or febrile neutropenia hospitalization rates to an infection control department can arm a healthcare team with evidence validating the importance of interventions. Audits easily can become simple tasks, but with appropriate support, the completion of a thorough audit can provide concrete information that adds value to the intervention audited. The timely feedback of audit results may help achieve the highly desired sustainability of EBP.

**Conclusion**

How can a lack of implementation of EBP adversely affect patients? How will you change your practice to not only implement EBP tools but also maintain their consistent use among all patients? Challenge your colleagues to do what nurses do best and advocate for patients by creating a sustained effort to maintain EBP.

**Author Contact:** Christy Mitchell, RN, MSN, OCN®, can be reached at christym@amgen.com, with copy to editor at CJONEditor@ons.org.

**References**


