

# Evaluation of a Cancer Pain Education Module

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**Purpose/Objectives:** To assess whether a case-based cancer pain education module would lead to acquisition and retention of knowledge and attitudes at the graduate nursing student level.

**Design:** Quasi-experimental pretest, post-test, and follow-up.

**Setting:** Three nursing schools in the New England area.

**Sample:** 92 graduate nursing students.

**Methods:** An oncology nurse specialist delivered seven two- to four-hour seminars integrated in existing pharmacology, primary care, or adult health courses. Participants' cancer pain knowledge was assessed at four time points with a paper-and-pencil test: before the seminar, immediately after, and approximately 6 and 24 months after the seminar.

**Main Research Variable:** Cancer pain knowledge.

**Findings:** The intervention was effective in improving students' knowledge of cancer pain management and assessment ( $p = 0.0001$ ), and the effect was retained at 6 and 24 months ( $p = 0.0001$  and  $p = 0.0024$ , respectively).

**Conclusions:** Policymakers, clinicians, and professional organizations have recommended providing cancer pain education during professional training to overcome the continuing problem of the undertreatment of cancer pain. The education module used was effective in changing students' knowledge of cancer pain management, and the results suggest that this knowledge is lasting.

**Implications for Nursing:** Early cancer pain education for nurses may play an important role in improving pain control for patients with cancer. Although this study did not evaluate the application of cancer pain knowledge to clinical practice, the results support the notion that advanced practice nurses can improve their cancer pain management knowledge and attitudes while in training. One implication is that this shift in attitudes and knowledge will translate to effective management of pain in varied healthcare settings.

A number of initiatives have been implemented to improve healthcare professionals' knowledge of and attitudes toward cancer pain management and assessment. Among these are the clinical practice guidelines developed by the World Health Organization (1990, 1996), the American Pain Society (1987), American Society of Anesthesiologists (Task Force on Pain Management, 1996), and the Agency for Health Care Policy and Research (Jacox, Carr, & Payne, 1994; Jacox et al., 1994). These guidelines offer comprehensive recommendations for physicians, nurses, and other medical personnel about the assessment and treatment of cancer-related pain. Little evidence exists, however, that these guidelines have been used in clinical practice or, if they are used, whether adherence to the guidelines produces significant changes in clinical outcomes (Carr, 2001; Sterman, Gauker, & Krieger, 2003; Worrall, Chaulk, & Freake, 1997).

Just as the literature reports an increasing number of cancer pain educational interventions, it also continues to report the undertreatment and inappropriate treatment and assessment of

## Key Points . . .

- Appropriate pain assessment and management will be endured if education is provided during professional training.
- Cancer pain education should focus on appropriate medication for specific types of pain, equianalgesic dosing, and pain with addiction.
- Pain content can be integrated into existing courses during professional education.

cancer pain. Nurse and physician researchers have developed, implemented, and evaluated cancer pain education programs for practicing professionals (Weissman & Dahl, 1995; Weissman, Dahl, & Beasley, 1993). These programs have tried to improve pain management through institutional, quality-assurance, observership, case-based role-model workshop, community-based, multidisciplinary integrated, and CD-ROM multimedia approaches (Breitbart, Rosenfeld, & Passik, 1998; Elliott, Murray, Oken, et al., 1995; Miaskowski, 1994; Weissman & Dahl; Weissman et al.). Their focus has been on improving the knowledge and attitude deficits of experienced nurses, doctors, and pharmacists (Janjan et al., 1996; Thompson, Savidge, Fulper-Smith, & Strode, 1999). Lasch, Wilkes, Lee, and Blanchard (2000) reported that didactic workshops were as effective as hands-on experience in improving nurses' knowledge and attitudes concerning pain management across the care continuum—home, hospital, and hospice.

These results confirm a clear link between educational exposure to pain management principles and improved knowl-

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