A Cognitive Behavioral Intervention for Symptom Management in Patients With Advanced Cancer

Paula Sherwood, RN, PhD, CNRN, Barbara A. Given, RN, PhD, FAAN, Charles W. Given, PhD, Victoria L. Champion, RN, PhD, FAAN, Ardith Z. Doorenbos, RN, PhD, Faouzi Azzouz, MS, Sharon Kozachik, RN, Kim Wagler-Ziner, RN, MSN, and Patrick O. Monahan, PhD

Purpose/Objectives: To evaluate the effect of a cognitive behavioral intervention in decreasing symptom severity in patients with advanced cancer undergoing chemotherapy.

Design: Prospective, randomized clinical trial based on cognitive behavioral theory.

Setting: Six urban cancer centers in the midwestern United States.

Sample: 124 patients 21 years of age or older were recruited and randomized to receive conventional care or conventional care and an intervention. Participants were newly diagnosed with stage III, stage IV, or recurrent cancer (solid tumor or non-Hodgkin lymphoma), undergoing chemotherapy, cognitively intact, and able to read and speak English.

Methods: Data were gathered via telephone interviews at baseline and 10 and 20 weeks after randomization. Nurses with experience in oncology delivered a five-contact, eight-week intervention aimed at teaching patients problem-solving techniques to affect symptom severity.

Main Research Variables: Gender, site of cancer, age, symptom severity and depressive symptoms at baseline, group (i.e., experimental versus control), and total symptom severity.

Findings: Patients in the experimental group and those with lower symptom severity at baseline had significantly lower symptom severity at 10 and 20 weeks; the experimental difference at 20 weeks occurred primarily in those 60 years of age and younger. Depressive symptoms at baseline predicted symptom severity at 20 weeks; however, age, gender, and site of cancer did not affect symptom severity at either time point.

Conclusions: A cognitive behavioral intervention to teach problem-solving skills can be effective for patient symptom self-management during and following an intervention.

Implications for Nursing: Problem-solving strategies should be included in educational programs for patients with advanced cancer, particularly those 60 years of age and younger.

Key Points . . .

➤ Conventional symptom management may not adequately meet the needs of patients with advanced cancer.

➤ Cognitive behavioral interventions using problem-solving techniques have affected symptoms in patients with early-stage disease.

➤ The effectiveness of cognitive behavioral interventions using problem-solving techniques is not well established in patients with late-stage disease or across multiple symptoms.

As the number of people living with cancer continues to increase, more patients are being diagnosed with recurrent and advanced stage (i.e., III or IV) disease. Treatment for patients with advanced cancer may be aggressive, resulting in severe symptoms that persist after treatment has ended (Hwang, Chang, Fairclough, Cogswell, & Kasimis, 2003; Kornblith et al., 2003). Patients have indicated that symptom management is an essential component of their cancer care, yet authors have reported that current methods to assist patients with symptom management may be ineffective (Morasso et al., 1999). Although assisting patients with managing symptoms has become a national priority (Patrick et al., 2003), the effectiveness of interventions aimed at decreasing the presence and severity of cancer- and treatment-related symptoms has not been well established for patients with advanced disease.

Cognitive behavioral interventions (CBIs) use a multimodal approach toward symptom management and are particularly effective in decreasing symptom severity for patients with cancer (Antoni et al., 2001; Dodd & Miaskowski, 2000; Given et al., 2002; Quesnel, Savard, Simard, Ivers, & Morin, 2004. Accepted for publication January 25, 2005.)

Paula Sherwood, RN, PhD, CNRN, is an assistant professor in the School of Nursing at the University of Pittsburgh in Pennsylvania; Barbara A. Given, RN, PhD, FAAN, is a university distinguished professor in the College of Nursing and Charles W. Given, PhD, is the associate chair for research and faculty in the Department of Family Practice, both at Michigan State University in East Lansing; Victoria L. Champion, RN, PhD, FAAN, is the associate dean for research and faculty in the Department of Family Practice, both at Michigan State University in East Lansing; Ardith Z. Doorenbos, RN, PhD, is a postdoctoral fellow in the School of Nursing at Michigan State University; Faouzi Azzouz, MS, is a biostatistician in the Department of Biostatistics at Indiana University; Sharon Kozachik, RN, is a doctoral candidate in the School of Nursing at Johns Hopkins University in Baltimore, MD; and Kim Wagler-Ziner, RN, MSN, is a doctoral student in the School of Nursing and Patrick O. Monahan, PhD, is an assistant professor of medicine in the Department of Measurement and Statistics, both at Indiana University. Funding for this study was provided by the Mary Margaret Walther Program at the Walther Cancer Institute in Indianapolis, IN. (Submitted October 2004. Accepted for publication January 25, 2005.)

Digital Object Identifier: 10.1188/05.ONF.1190-1198