

# The PRO-SELF<sup>®</sup> Pain Control Program Improves Patients' Knowledge of Cancer Pain Management

Jung-Eun Kim, RN, MS, Marilyn Dodd, RN, PhD, Claudia West, RN, MS, Steven Paul, PhD, Noreen Facione, RN, PhD, Karen Schumacher, RN, PhD, Debu Tripathy, MD, Peter Koo, PharmD, and Christine Miaskowski, RN, PhD

**Purpose/Objectives:** To evaluate the effectiveness of a psychoeducational program (i.e., PRO-SELF<sup>®</sup> Pain Control Program) compared to standard care in increasing patients' knowledge regarding cancer pain management.

**Design:** Randomized clinical trial.

**Setting:** Seven outpatient settings in northern California.

**Sample:** 174 outpatients with cancer and pain from bone metastasis.

**Methods:** Following randomization into either the PRO-SELF<sup>®</sup> or standard care group, patients completed the Pain Experience Scale (PES) prior to and at the completion of the intervention.

**Main Research Variables:** Total and individual item scores on the PES.

**Findings:** Total PES knowledge scores increased significantly in the PRO-SELF<sup>®</sup> group (21%) compared to the standard care group (0.5%). Significant improvements in knowledge scores for patients in the PRO-SELF<sup>®</sup> group were found on five of the nine PES items when compared to baseline scores.

**Conclusions:** The PRO-SELF<sup>®</sup> Pain Control Program was an effective approach to increase patients' knowledge of cancer pain management.

**Implications for Nursing:** The use of a structured paper-and-pencil questionnaire, such as the PES, as part of a psychoeducational intervention provides an effective foundation for patient education in cancer pain management. Oncology nurses can use patients' responses to this type of questionnaire to individualize the teaching and to spend more time on the identified knowledge deficits. This individualized approach to education about pain management may save staff time and improve patient outcomes.

Despite major advances in pain management, cancer pain is managed poorly in 80% of patients with cancer (Cleeland et al., 1994). The undertreatment of cancer pain results in decreased functional status, depressed mood, increased fatigue, and decreased quality of life (Cleeland et al., 1994; Ferrell, Wisdom, & Wenzl, 1989; Glover, Dibble, Dodd, & Miaskowski, 1995; Miaskowski, Zimmer, Barrett, Dibble, & Wallhagen, 1997). Early studies of undertreatment focused on the identification of patient (Cleeland, 1987; Dar, Beach, Barden, & Cleeland, 1992; Jones, Rimer, Levy, & Kinman, 1984; Lin & Ward, 1995; Riddell & Fitch, 1997; Ward et al., 1993), provider (Cleeland, Cleeland, Dar, & Rinehardt, 1986; Elliott & Elliott, 1991, 1992; Elliott et al., 1995; Ferrell, Eberts, McCaffrey, & Grant, 1991; Fife, Irick, & Painter, 1993), and system (Ingham & Foley, 1998; Jacox et al., 1994; Joranson, 1994; Payne, 2000) barriers to optimal cancer pain management.

## Key Points . . .

- ▶ Outpatients with cancer have inadequate knowledge of pain management.
- ▶ Oncology nurses should assess patients' knowledge of cancer pain management using a standardized questionnaire.
- ▶ Oncology nurses should individualize patients' education about cancer pain management based on the results of a questionnaire that evaluates their baseline knowledge.

One of the major barriers to effective cancer pain management is patients' lack of knowledge regarding the principles of pain management. In addition, patients have misconceptions about tolerance, physical dependence, and psychological addiction (Ferrell & Schneider, 1988; Jones et al., 1984; Riddell & Fitch, 1997; Rimer et al., 1987; Yeager, Miaskowski, Dibble, & Wallhagen, 1995). In fact, work by Yeager et al. showed that outpatients with cancer, with and without cancer pain,

*Jung-Eun Kim, RN, MS, is a staff nurse at the University of California Medical Center in San Francisco. Marilyn Dodd, RN, PhD, is a professor and associate dean, Claudia West, RN, MS, is a clinical professor, and Steven Paul, PhD, is a principal statistician, all in the School of Nursing at the University of California, San Francisco. Noreen Facione, RN, PhD, is an associate professor in the School of Nursing at Loyola University in Chicago, IL; Karen Schumacher, RN, PhD, is an assistant professor in the School of Nursing at the University of Pennsylvania in Philadelphia; and Debu Tripathy, MD, is a professor in the School of Medicine at the University of Southwestern Medical Center in Dallas, TX. Peter Koo, PharmD, is an associate clinical professor of pharmacy and a pharmacy specialist of pain management in the School of Pharmacy, and Christine Miaskowski, RN, PhD, is a professor and chair, and director of the Program in Symptom Management and Palliative Care in the Comprehensive Cancer Center, both at the University of California, San Francisco. This study was supported by a grant from the National Cancer Institute (CA 64734). Additional support was provided through unrestricted grants from Janssen Pharmaceutica and Purdue Pharma LP. (Submitted August 2003. Accepted for publication November 26, 2003.)*

Digital Object Identifier: 10.1188/04.ONF.1137-1143