

# The Effect of Telephone Social Support and Education on Adaptation to Breast Cancer During the Year Following Diagnosis

Elizabeth Ann Coleman, PhD, RNP, AOCN®, Lorraine Tulman, DNSc, RN, FAAN, Nelda Samarel, EdD, RN, Margaret Chamberlain Wilmoth, PhD, MSS, RN, Linda Rickel, RNP, MNsc, Marti Rickel, RN, MSN, APRN, BC, and Carol Beth Stewart, BS

**Purpose/Objectives:** To find the most effective methods of providing social support for women diagnosed with breast cancer by testing the effectiveness of a telephone social support and education intervention to promote emotional and interpersonal adaptation to breast cancer.

**Design:** Multisite, two-group experimental study with repeated measures.

**Setting:** Arkansas and New Jersey.

**Sample:** The Arkansas sample consisted of 106 women who entered the study two to four weeks postsurgery for nonmetastatic breast cancer and were randomly assigned to an experimental or control group. The comparison group consisted of 91 women from New Jersey who had participated in a previously completed study that used the same interventions and found that telephone support resulted in more positive, statistically significant adaptation to the disease.

**Methods:** The experimental group received 13 months of telephone social support and education. Both groups received educational materials via a mailed resource kit. The Profile of Mood States; Visual Analogue Scale–Worry; Relationship Change Scale; University of California, Los Angeles, Loneliness Scale–Version 3; and the modified Symptom Distress Scale provided data regarding the variables of interest. Data analysis included descriptive statistics, t tests, and multivariate analysis of variance with repeated measures.

**Main Research Variables:** Mood, worry, relationships with significant others, loneliness, and symptoms.

**Findings:** Data analysis showed no significant differences between groups, and both improved on some of the outcomes. Significant time-by-location interaction effects were found when comparing the Arkansas and New Jersey samples, thereby supporting the need to consider regional differences when developing interventions.

**Conclusions:** The mailed educational resource kit alone appeared to be as effective as the telephone social support provided by oncology nurses in conjunction with the mailed resource kit.

**Implications for Nursing:** Mailed educational resource kits may be the most efficient and cost-effective way to provide educational support to newly diagnosed patients with breast cancer, but their effect may differ according to region.

## Key Points . . .

- The most effective and time efficient methods of providing social support for women with breast cancer need to be determined.
- This multisite experimental study tested the effectiveness of telephone social support and mailed educational resource kits for women with breast cancer.
- Researchers found that the mailed resource kit alone was as beneficial as the telephone social support coupled with mailed education in helping women in Arkansas with mood disturbance, cancer-related worry, symptom distress, and relationships with significant others, which was in contrast to the sample in New Jersey, for whom telephone support and education were more effective.

Since the 1980s, social support has been advocated for women diagnosed with breast cancer (Blume; Pillon & Joannides, 1991; Sparks, 1988). Social support is an interaction between two or more people with the purpose of promoting education and awareness, assisting with problem solving, and providing emotional support (Sandgren, McCaul, King, O'Donnell, & Foreman, 2000). Supportive care has become the standard in

*Elizabeth Ann Coleman, PhD, RNP, AOCN®, is a professor in the Colleges of Nursing and Medicine at the University of Arkansas for Medical Sciences in Little Rock; Lorraine Tulman, DNSc, RN, FAAN, is an associate professor in the School of Nursing at the University of Pennsylvania in Philadelphia; Nelda Samarel, EdD, RN, is a professor in the School of Nursing at William Paterson University in Wayne, NJ; Margaret Chamberlain Wilmoth, PhD, MSS, RN, is an associate professor in the School of Nursing at the University of North Carolina–Charlotte; Linda Rickel, RNP, MNsc, is an independent consultant in Hot Springs, AR; Marti Rickel, RN, MSN, APRN, BC, is an associate professor in the Vocational Nursing Program at Austin Community College in Texas; and Carol Beth Stewart, BS, is a project program specialist in the Nursing Science Department at the University of Arkansas for Medical Sciences. Funding for this study was provided by a grant (RPG-91-026-01-PBP) from the American Cancer Society, and Nelda Samarel was the principal investigator. (Submitted March 2004. Accepted for publication November 11, 2004.)*

Digital Object Identifier: 10.1188/05.ONF.822-829

Women with breast cancer may experience emotional distress and mood disturbances, such as anxiety, confusion, and depression (Longman, Braden, & Mishel, 1999; Ward, Viergutz, Tormey, deMuth, & Paulen, 1992); worry about the recurrence of breast cancer (Blume, 1993; Brandt, 1996); a decreased sense of well-being (Kahn & Steeves, 1993); and difficulty maintaining established relationships with significant others, resulting in feelings of loneliness (Knobf, 1986; Wolberg, Romsaas, Tanner, & Malec, 1989).