Intervention to Improve Psychological Functioning for Newly Diagnosed Patients With Cancer

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Purpose/Objectives: To test the effects of a computer-based nursing intervention designed to provide patients and family caregivers with concrete, objective information on symptom management; provide education about disease and treatment; coordinate medical resources; and provide emotional support and counseling.

Design: Two-site, randomized clinical trial.

Settings: A large, urban, midwestern, tertiary-cancer center and a community-based cancer center in a medium-sized midwestern city.

Sample: 109 patients newly diagnosed with breast, colon, or lung cancer who were receiving chemotherapy; 54 received standard care, and 55 participated in the intervention group.

Methods: Outcome data were collected via structured telephone interviews at three time points: baseline, midway through the intervention, and one month postintervention. The intervention consisting of nine visits, five in person and four by telephone, was conducted over 18 weeks by advanced practice oncology nurses.

Main Research Variables: Psychosocial functioning, anxiety, and depression.

Findings: Patients who received the intervention had significantly less depression between baseline and the midway point, as well as less anxiety and greater improvement in the role-emotional and mental health subscales of the Medical Outcomes Study 36 Short Form.

Conclusions: Cancer-care nursing interventions can decrease psychosocial morbidity and improve quality of life for newly diagnosed patients with cancer undergoing treatment. Additional research is needed to understand who benefited most from the intervention.

Implications for Nursing: This nurse-directed intervention resulted in improved mental health for patients; however, physical subscales were not changed. Further work is needed to determine why depression and mental health were affected yet physical health and symptoms did not differ between groups. Results support the important role of nurses in addressing mental health issues in patients and families experiencing cancer.

Newly diagnosed patients with cancer frequently struggle to cope with diagnosis, treatment, and survival, often with limited resources, creating physical, psychological, and financial burdens. Hospital stays have been shortened, limiting the time patients and caregivers have to learn care tasks (e.g., administering medications and treatments, managing and monitoring symptoms). Coping at home with cancer-treatment-related symptoms, such as fatigue and pain, presents tremendous challenges for patients and their families and may contribute to psychological dysfunction, such as depression and anxiety (Schag & Heinrich, 1989).

The purpose of this pilot study was to test a computer-based nursing intervention that provided assistance with symptom management, information about disease and treatment, emotional counseling and support, and coordination of services to newly diagnosed patients and their families who are dealing with cancer and chemotherapy treatment. Providing patients with computer-based intervention may improve psychological functioning, depression, and anxiety for newly diagnosed patients with cancer undergoing chemotherapy.