Optimism, Symptom Distress, Illness Appraisal, and Coping in Patients With Advanced-Stage Cancer Diagnoses Undergoing Chemotherapy Treatment

Catherine Sumpio, PhD, MSN, RN, OCN®, Sangchoon Jeon, PhD, Laurel L. Northouse, PhD, RN, FAAN, and M. Tish Knobf, PhD, RN, AOCN®, FAAN

Sumpio is an educator and quality coordinator at Smilow Cancer Hospital at Yale New Haven in Connecticut; Jeon is a research scientist in the School of Nursing at Yale University in West Haven, CT; Northouse is a professor emerita in the School of Nursing at the University of Michigan in Ann Arbor; and Knobf is a professor in the School of Nursing at Yale University.

This research was funded by a Clinical and Translational Science Award grant (No. TL1 TR000141) from the National Center for Advancing Translation Science, a component of the National Institutes of Health.

Sumpio, Northouse, and Knobf contributed to the conceptualization and design. Sumpio completed the data collection. Jeon provided statistical support. All of the authors provided the analysis and contributed to the manuscript preparation.

Sumpio can be reached at catherine.sumpio@ynhh.org, with copy to editor at ONFEditor@ons.org.

Submitted June 2016. Accepted for publication September 10, 2016.

Keywords: advanced-stage cancer; optimism; stress-coping model; illness appraisal; symptom distress

ONF, 44(3), 384-392.

doi: 10.1188/17.0NF.384-392

Purpose/Objectives: To explore the relationships between optimism, self-efficacy, symptom distress, treatment complexity, illness appraisal, coping, and mood disturbance in patients with advanced-stage cancer.

Design: Cross-sectional study.

Setting: Smilow Cancer Hospital at Yale New Haven in Connecticut, an outpatient comprehensive cancer center.

Sample: A convenience sample of 121 adult patients with stages III–IV cancer undergoing active chemotherapy.

Methods: Participants completed common self-report questionnaires to measure variables. Treatment hours and visits were calculated from data retrieved from medical record review. Mediation and path analysis were conducted to identify direct and indirect pathways from the significant antecedent variables to mood disturbance.

Main Research Variables: Dispositional optimism, self-efficacy, social support, treatment complexity, symptom distress, illness appraisal, coping, and mood disturbance.

Findings: Greater optimism and self-efficacy were associated with less negative illness appraisal, less avoidant coping, and decreased mood disturbance. Conversely, greater symptom distress was associated with greater negative illness appraisal, greater avoidant coping, and greater mood disturbance. In the final model, optimism and symptom distress had direct and indirect effects on mood disturbance. Indirect effects were partially mediated by illness appraisal.

Conclusions: Mood disturbance resulted from an interaction of disease stressors, personal resources, and cognitive appraisal of illness. Avoidant coping was associated with greater disturbed mood, but neither avoidant nor active coping had a significant effect on mood in the multivariate model.

Implications for Nursing: Illness appraisal, coping style, and symptom distress are important targets for intervention. Optimism is a beneficial trait and should be included, along with coping style, in comprehensive nursing assessments of patients with cancer.

ajor advances in the science of cancer treatment during the past two decades have changed the trajectory of disease and improved survival for patients diagnosed with advanced-stage cancer (Haylock, 2010; Institute of Medicine, 2006). However, compared to individuals with early-stage cancer who experience treatment-free survival, life with stage III or IV cancer is often one of interminable treatment. In addition, cancer treatment regimens are of varying complexity, which may involve lengthy infusions and frequent outpatient visits for chemotherapy treatment and supportive care (Cusack, Jones-Wells, & Chisholm, 2004; Sumpio, Knobf, & Jeon, 2016). The prolonged treatment trajectory can be viewed as a significant stressor, which may influence a person's coping ability. Personal characteristics,