## Family Caregiver Knowledge, Patient Illness Characteristics, and Unplanned Hospital Admissions in Older Adults With Cancer

Patricia I. Geddie, PhD, CNS, AOCNS<sup>®</sup>, Victoria Wochna Loerzel, PhD, RN, OCN<sup>®</sup>, and Anne E. Norris, PhD, RN, FAAN

Geddie is a clinical nurse specialist in the Center for Nursing Research at Orlando Health in Florida; Loerzel is an associate professor in the College of Nursing at the University of Central Florida in Orlando; and Norris is a professor in the School of Nursing and Health Sciences at the University of Miami in Florida.

This research was funded by the Lupus Foundation of Florida and the Theta Epsilon Chapter, Sigma Theta Tau.

All authors contributed to the conceptualization and design. Geddie completed the data collection. Geddie and Norris provided the statistical support and analysis. All authors contributed to the manuscript preparation.

Geddie can be reached at patricia.geddie@orlandohealth.com, with copy to editor at ONFEditor@ons.org.

Submitted July 2015. Accepted for publication October 19, 2015.

Key words: family caregiver; unplanned hospital admissions; older adults; cancer

ONF, 43(4), 453-463.

doi: 10.1188/16.0NF.453-463

**Purpose/Objectives:** To explore factors related to unplanned hospital admissions and determine if one or more factors are predictive of unplanned hospital admissions for older adults with cancer.

Design: A prospective longitudinal design and a retrospective chart review.

**Setting:** Adult oncology outpatient infusion centers and inpatient units at Orlando Regional Medical Center in Florida.

Sample: A convenience sample of 129 dyads of older adults with cancer and their family caregivers.

**Methods:** Family caregiver demographic and side effect knowledge data were collected prospectively during interviews with family caregivers using a newly developed tool, the Nurse Assessment of Family Caregiver Knowledge and Action Tool. Patient demographic and clinical data were obtained through a retrospective chart review. Descriptive statistics and logistic regression analyses were used to evaluate data and examine relationships among variables.

Main Research Variables: Patient illness characteristics; impaired function; side effects, such as infection, fever, vomiting, and diarrhea; family caregiver knowledge; and unplanned hospital admissions.

**Findings:** Unplanned hospital admissions were more likely to occur when older adults had impaired function and side effects, such as infection, fever, vomiting, and diarrhea. Impaired function and family caregiver knowledge did not moderate the effects of these side effects on unplanned hospital admissions.

**Conclusions:** Findings suggest that the presence of impaired function and side effects, such as infection, fever, vomiting, and diarrhea, predict unplanned hospital admissions in older adults with cancer during the active treatment phase. Side effects may or may not be related to chemotherapy and may be related to preexisting comorbidities.

**Implications for Nursing:** Nurses can conduct targeted assessments to identify older adults and their family caregivers who will need additional follow-up and support during the cancer treatment trajectory. Information gained from these assessments will assist nurses to provide practical and tailored strategies to reduce the risk for unplanned admissions.

lder adults comprise the majority of patients with cancer (63%) and are the recipients of the greatest amount of chemotherapy (American Cancer Society, 2016; Lichtman et al., 2007; Siegel, Ma, & Jemal, 2014). However, older adults with cancer experience more chemotherapy side effects (Balducci, 2007; Flores & Ershler, 2010; Hurria, 2008; Hurria &

Lichtman, 2007; Jakobsen & Herrstedt, 2009; Lichtman et al., 2007) because of the higher prevalence of comorbidities and poorer physical and mental health and well-being compared to those without cancer (Smith et al., 2008). The effect of aging and comorbidities on chemotherapy side effects suggests that those factors may increase the risk for unplanned hospital admissions in older adults with cancer.