Do Older Adults With Cancer Fall More Often? A Comparative Analysis of Falls in Those With and Without Cancer

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As the age of the general population increases, significant growth will occur in the number of older adults who have had cancer and may suffer from the impact of the disease or its treatment through the end of life (National Cancer Institute, 2013). The various effects of cancer or treatment may appear months or even years after treatment has ended (Blaauwbroek et al., 2007; Fox & Lyon, 2007; Hawkins et al., 2008); therefore, examining the association between cancer history and an adverse outcome such as a fall is important so that clinicians can implement prevention strategies, if needed. Although the literature has given attention to falls (Mohile et al., 2011; Overcash, 2007), few studies have examined whether cancer diagnoses alter fall rates in older adult survivors compared to a like group of older adults without cancer.

The research team previously had described the prevalence of falls in older adults with cancer (Spoelstra, Given, von Eye, & Given, 2010a, 2010b). The current study extends that work by examining falls over a longer period of time so that more refined comparisons can be made between those with and without cancer and identifying whether fall rates vary by cancer type, stage, or time since cancer diagnosis.

Conceptual Framework

The selection of variables for the current study was guided by a synthesis of the Life-Course Model of Aging (Freedman, Martin, Schoeni, & Cornman, 2008) and the Health-Related Quality of Life model (Ferrans, Zerwic, Wilbur, & Larson, 2005) (see Figure 1). The Life-Course model directed examination of items such as disability in activities of daily living (ADLs), and the Health-Related Quality of Life model directed examination of biologic factors. The current framework synthesized factors from the two models to determine how characteristics and biologic or environmental factors influenced falls. The researchers expected that falls

Purpose/Objectives: To examine whether a history of cancer increased the likelihood of a fall in community-dwelling older adults, and if cancer type, stage, or time since diagnosis increased falls.

Design: A longitudinal, retrospective, cohort study.

Setting: A home- and community-based waiver program in Michigan.

Sample: 862 older adults aged 65 years or older with cancer compared to 8,617 older adults without cancer using data from the Minimum Data Set–Home Care and Michigan cancer registry.

Methods: Reports of falls were examined for 90–180 days. Generalized estimating equations were used to compare differences between the groups.

Main Research Variables: Cancer, falls, patient characteristics, comorbidities, medications, pain, weight loss, vision, memory recall, and activities, as well as cancer type, stage, and time since diagnosis.

Findings: A fall occurred at a rate of 33% in older adults with cancer compared to 29% without cancer (p < 0.00). Those with a history of cancer were more likely to fall than those without cancer (adjusted odds ratio 1.16; 95% confidence interval [1.02, 1.33]; p = 0.03). No differences in fall rates were determined by cancer type or stage, and the odds of a fall did not increase when adding time since cancer diagnosis.

Conclusions: The fall rate was higher in older adults with cancer than in older adults without cancer.

Implications for Nursing: Nurses need to assess fall risk and initiate fall prevention measures for older adults at the time of cancer diagnosis.

Knowledge Translation: When caring for older adults with cancer, nurses should be aware of an increased risk for falls. Healthcare staff also should be aware of an increased risk for falls in that population during cancer treatment. Evidence-based fall prevention measures should be included in care plans for older adult cancer survivors.

would be more prevalent among those with cancer, particularly in certain types of cancer, later stages of cancer, or more recently diagnosed older adults.