

Gender Differences in Predictors of Quality of Life at the Initiation of Radiation Therapy

Claudia West, RN, MS, Steven M. Paul, PhD, Laura Dunn, MD, Anand Dhruva, MD, John Merriman, RN, PhD, and Christine Miaskowski, RN, PhD, FAAN

Decreases in quality of life (QOL) are associated with patients' responses to their disease and its treatment and can have a negative impact on survival (Efficace et al., 2006; Gotay, Kawamoto, Bottomley, & Efficace, 2008). For these reasons, QOL is one of the most important patient-reported outcomes in clinical practice and research (Trask, Hsu, & McQuellon, 2009.). Many demographic and clinical factors can affect QOL, including gender, age, race, education, marital status, social support, income, one's ability to function in multiple domains (e.g., physical, psychological, cognitive, social, spiritual) (Cherepanov, Palta, Fryback, & Robert, 2010; Hagelin, Seiger, & Fürst, 2006; Juul et al., 2014; Luncheon & Zack, 2012; Mor, Allen, & Malin, 1994; Parker, Baile, de Moor, & Cohen, 2003), as well as many disease-specific characteristics, number and severity of comorbidities, number and severity of symptoms, illness severity, and prognosis (Hagelin et al., 2006; Hopman et al., 2009; Jordhoy et al., 2001; Juul et al., 2014; Miaskowski et al., 2014; Zimmerman et al., 2011).

Several population-based studies (Cherepanov et al., 2010; Hinz, Singer, & Brähler, 2014; Juul et al., 2014; Mielck, Vogelmann, & Leidl, 2014), as well as studies across a number of chronic conditions, including cancer (Bushnell et al., 2014; Heo, Lennie, Moser, & Kennedy, 2014; Lisspers, Stållberg, Janson, Johansson, & Svärdsudd, 2013; Miaskowski et al., 2014; Pashos et al., 2013; Smith, Cho, Salazar, & Ory, 2013; Zimmermann et al., 2011), have reported gender differences in QOL, with women usually reporting a lower QOL than men in at least one of the domains assessed. These differences hold true across different measures of QOL and when controlling for age, income, and disease severity (Cherepanov et al., 2010; Hopman et al., 2009; Zimmermann et al., 2011).

The reasons for these gender differences are not completely understood. However, they may be related to differences in responses to disease and its treatment,

Purpose/Objectives: To evaluate gender differences in quality of life (QOL), demographic, clinical, and symptom characteristics.

Design: Prospective, observational.

Setting: Two radiation oncology departments in northern California.

Sample: 185 patients before initiation of radiation therapy (RT).

Methods: At their RT simulation visit, patients completed a demographic questionnaire, a measure of QOL, and symptom-specific scales. Backward elimination regression analyses were conducted to determine the significant predictors of QOL.

Main Research Variables: QOL, gender, and 20 potential predictors.

Findings: In women, depressive symptoms, functional status, age, and having children at home explained 64% of the variance in QOL. In men, depressive symptoms, state anxiety, number of comorbidities, being a member of a racial or ethnic minority, and age explained 70% of the variance in QOL.

Conclusions: Predictors of QOL differed by gender. Depressive symptom score was the greatest contributor to QOL in both genders.

Implications for Nursing: Nurses need to assess for QOL and depression at the initiation of RT. Knowledge of the different predictors of QOL may be useful in the design of gender-specific interventions to improve QOL.

Key Words: quality of life; gender differences; depression; anxiety; radiation therapy

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differences in perceptions and reporting of symptoms, and differences in gender roles and societal expectations (Izadnegahdar, Norris, Kaul, Pilote, & Humphries, 2014; Norris, Murray, Triplett, & Hegadoren, 2010; Zimmerman et al., 2011). Given these differences, the characteristics that predict QOL in women and men are likely to be different. Greater understanding of these characteristics would assist clinicians in identifying patients at greater