

This material is protected by U.S. copyright law. To purchase quantity reprints, e-mail reprints@ons.org. For permission to reproduce multiple copies, e-mail pubpermissions@ons.org.

Changes in Sexual Function on Mood and Quality of Life in Patients Undergoing Radiation Therapy for Prostate Cancer

Kristie Howlett, RN, MS, Theresa Koetters, RN, MS, Janet Edrington, RN, PhD, Claudia West, RN, MS, Steven Paul, PhD, Kathryn Lee, RN, PhD, Bradley E. Aouizerat, PhD, William Wara, MD, Patrick Swift, MD, and Christine Miaskowski, RN, PhD

Prostate cancer is the most common cancer, excluding skin cancer, in men in the United States. Treatment options for prostate cancer include surgery, brachytherapy, external beam radiation therapy, hormonal therapy, or surveillance. The choice of treatment is determined by the tumor's stage, Gleason score, level of prostate-specific antigen, patient's age, and concurrent comorbidities as well as physicians' and patients' preferences (Incrocci, 2006; Incrocci et al., 2001). A major factor influencing preferences is treatment-specific side effects (Incrocci; Incrocci, Slob, & Levendag, 2002). The impact of a particular treatment on a patient's sexual function is an important consideration in the shared decision-making process (van der Wielen, van Putten, & Incrocci, 2007).

Side effects of external beam radiation therapy include urinary incontinence, bowel changes, and sexual dysfunction. Sexual dysfunction is a multifactorial phenomenon. According to Litwin et al. (1999), male sexual function includes the quality and frequency of erections, the strength of libido, and the ability to be physically and sexually intimate. In addition, van der Wielen et al. (2007) suggested that sexual function includes sexual interest, pleasure, and activity. Many studies have found that decreased sexual function in men with prostate cancer is associated with poorer quality of life (QOL) (Bokhour, Clark, Inui, Silliman, & Talcott, 2001; Cooperberg et al., 2003; Incrocci, 2006; Incrocci et al., 2001; Litwin et al., 1999, 2007; Potosky et al., 2004).

Although many longitudinal studies have examined changes in the QOL of men with prostate cancer during and after treatment (Chen et al., 2001; Litwin et al., 1999, 2007; Symon et al., 2006; Turner, Adams, Bull, & Berry, 1999; van der Wielen et al., 2007), none has evaluated the effect of changes in sexual function on the various

Purpose/Objectives: To describe the percentages of men with and without changes in sexual function from the beginning to end of radiation therapy and evaluate for differences in demographic and clinical characteristics, mood states, and quality of life (QOL) among patients who did and did not experience changes in sexual function.

Design: Descriptive, longitudinal.

Setting: Two radiation therapy departments in northern California.

Sample: 70 men with prostate cancer who underwent primary or adjuvant radiation therapy.

Methods: Self-report questionnaires, medical record reviews, and repeated measures analysis of variance.

Main Research Variables: Changes in sexual function; depression, anxiety, and QOL.

Findings: Patients were categorized into one of four sex groups (No Problem X 2, Problem–No Problem, No Problem–Problem, and Problem X 2) based on their responses to “Is your sexuality impacted by your illness?” at the beginning and end of radiation therapy. About 50% had a problem with sexual function either at the beginning or end of radiation therapy. Overall, men without sexual problems at both the beginning and end of radiation therapy had significantly less anxiety and depression and higher QOL scores than patients who developed a problem at the end and patients who had a problem at both time points.

Conclusions: Changes in sexual function during the course of radiation therapy affect patients' mood and QOL.

Implications for Nursing: Clinicians should evaluate the effects of radiation therapy on sexual function and monitor patients with prostate cancer for depression and anxiety as well as for changes in QOL.

domains of QOL (e.g., physical, social, psychological, spiritual). In addition, only one study was found that examined the relationships between depression and anxiety