

# Sexuality, Menopausal Symptoms, and Quality of Life in Premenopausal Women in the First Year Following Hematopoietic Cell Transplantation

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**H**ematopoietic cell transplantation (HCT) is an aggressive curative therapy for a number of malignant and nonmalignant diseases. The number of HCTs performed each year in the United States is about 18,000, and about 150,000 individuals are five or more years post-HCT (Horowitz, 2005; Pasquini & Zhu, 2014). In summarizing quality-of-life (QOL) research among recipients of HCT, Syrjala and Artherholt (2004) reported that the majority experience good to excellent QOL; however, about 5%–20% report ongoing problems, including alterations in sexual health. Sexual dissatisfaction and dysfunction were reported in QOL studies beginning in the 1990s (Baker et al., 1994; Wingard, Curbow, Baker, Zabora, & Piantadosi, 1992). The prevalence of altered sexuality in women following HCT has been reported to be as high as 80% (Syrjala, Kurland, Abrams, Sanders, & Heiman, 2008), and several studies have reported that sexual dysfunctions are more prevalent in female recipients of HCT (Humphreys, Tallman, Altmaier, & Barnette, 2007; Syrjala et al., 1998, 2008; Wong et al., 2013). Alterations in sexuality can persist for years, resulting in diminished QOL for the recipient of HCT, as well as for his or her sexual partner. A mandate from professional organizations, including the Oncology Nursing Society, the Institute of Medicine, and the National Comprehensive Cancer Network, addresses the QOL concerns of survivors (Brant & Wickham, 2013; Hewitt, Greenfield, & Stovall, 2006; Holland & Reznik, 2005).

## Background

The World Health Organization (2002) has stated that sexuality is an integral component of the human experience. Sexuality is a multidimensional construct with physiologic, psychological, and social dimensions and complex interactions among these dimensions. The Diagnostic and Statistical Manual of Mental Disorders describes sexual dysfunction as a clinically significant disruption in an individual's ability to respond sexually

**Purpose/Objectives:** To describe sexuality, menopausal symptoms, and quality of life (QOL) in premenopausal women in the first year following hematopoietic cell transplantation (HCT).

**Design:** One-year prospective longitudinal study.

**Setting:** Stanford University Medical Center in California.

**Sample:** 63 premenopausal female recipients of HCT with a mean age of 34.5 years.

**Methods:** Three instruments were used: Female Sexual Function Index, Menopause-Specific QOL Questionnaire, and a visual analog scale to measure QOL.

**Main Research Variables:** Sexuality, menopausal symptoms, and QOL.

**Findings:** At one year post-HCT, women reported absent to low desire and arousal, adequate lubrication less than half of the time, absent or rare orgasm, pain during vaginal penetration more than half of the time, and dissatisfaction with overall sex life. Women also reported moderate to severe vasomotor symptoms, including hot flashes, night sweats, and sweating. Twenty-one women were avoiding sexual activity, and 25 women were not sexually active. Mean QOL scores significantly increased ( $p = 0.028$ ) in the first year, signifying an improvement in QOL. Variables predictive of improved QOL at one year post-HCT include decreased psychosocial and physical symptoms, sexual satisfaction, and pre-HCT QOL score.

**Conclusions:** One year post-HCT, women reported sexual dysfunction, sexual dissatisfaction, and menopausal symptoms, which negatively affect QOL.

**Implications for Nursing:** Nurses and other healthcare providers working with recipients of HCT can provide anticipatory guidance on potential changes in sexuality and menopausal symptoms to facilitate adaptation by reducing discordance between expectations and new realities.

**Key Words:** hematopoietic cell transplantation; sexuality; menopause; quality of life

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or experience sexual pleasure (American Psychiatric Association, 2013). These disorders are characterized by physiologic or psychological changes that negatively