

# Influence of Coping Style on Symptom Interference Among Adult Recipients of Hematopoietic Stem Cell Transplantation

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**P**hysical symptoms can cause difficulties for patients after cancer treatment. In a study assessing patients receiving chemotherapy, radiation, or both for breast cancer, greater experience of physical symptoms during treatment resulted in increased cancer-related distress and general distress after treatment (Jim, Andrykowski, Munster, & Jacobsen, 2007). Increased cancer distress is a concern because of its links to poorer health outcomes (Jim et al., 2007). Physical symptoms also influence patients' feelings of well-being and perceived life expectancy. A quality-of-life study revealed that patients, three years after treatment, judged their quality of life based on physical and somatic concerns (Broers, Kaptein, Le Cessie, Fibbe, & Hengeveld, 2000). In addition, physical symptoms influenced patients' quality of life more negatively than psychological factors (Gaston-Johansson & Foxall, 1996).

The authors of this article propose that degree of symptom interference is as important in patients' daily living as presence of symptoms. Health-related quality of life (HRQOL) originally was conceptualized (Ware, 1994) as both the presence of symptoms (e.g., fatigue) and the degree to which these symptoms cause interference in daily life roles (e.g., work, social functioning). Thus, generic measures of HRQOL (e.g., SF-36<sup>®</sup>) have scales that assess symptoms (e.g., bodily pain) and scales that assess the degree to which symptoms cause interference in life activities (e.g., functioning at work, interpersonal relationships with family) (Ware, 1994).

Patients with cancer have reported the occurrence of many types of symptoms, with some causing a burden when carrying out daily functions; however, extensive literature is not available on symptom interference in patients with cancer. In a study of pain among patients with cancer (primary sites lung and

**Purpose/Objectives:** To investigate the influence of coping style on interference caused by a variety of common post-treatment symptoms after hematopoietic stem cell transplantation.

**Design:** Longitudinal; secondary analysis of data from the original study that examined health-related quality-of-life variables (e.g., depression, well-being) in adult patients treated with conventional bone marrow transplantation or depleted T-cell bone marrow transplantation.

**Setting:** Fifteen university medical centers in the United States.

**Sample:** 105 adult recipients of hematopoietic stem cell transplantation.

**Methods:** Patients were assessed via telephone-based interviews for coping style at baseline and for symptom interference in daily living six months post-treatment.

**Main Research Variables:** Coping style and symptom interference.

**Findings:** Neither age nor gender predicted symptom interference, with the exception of chronic graft-versus-host disease, where older patients experienced more interference at six months, and breathing symptoms, for which women experienced more interference than men at six months. Avoidant coping style at baseline predicted increased interference from symptoms, but emotion-focused and instrumental coping styles did not predict decreased interference.

**Conclusions:** A generalized avoidant coping style before treatment increased interference from common cancer symptoms six months after hematopoietic stem cell transplantation.

**Implications for Nursing:** An intervention to teach alternate coping strategies should be implemented prior to treatment and tested for prevention of symptom-related life interference.

prostate), Hwang, Chang, and Kasimis (2002) demonstrated that pain severity predicted life interference, but pain relief and satisfaction with pain management did not. More recently, Wang, Tsai, Chen, Lin, and Lin