

# The Sequelae of Anxiety in Breast Cancer: A Human Response to Illness Model

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**B**reast cancer is the most common cancer affecting women in the United States and Canada. In 2009, an estimated 22,700 women in Canada and 192,370 women in the United States were diagnosed with breast cancer (American Cancer Society, 2010; Canadian Cancer Society, 2010). Anxiety and distress are common responses among patients diagnosed with cancer (Canadian Cancer Society, 2010; Zabora et al., 1997). Specific to breast cancer, research indicates that many women experience fluctuations in emotional morbidity as they move through their illness trajectory (Doll et al., 2003; McGregor & Antoni, 2009). The detrimental effects of prolonged anxiety may include an increase in the severity of treatment side effects, delayed or discontinued treatments (Carlson, Specia, Patel, & Goodey, 2003), and decreased quality of life (Madden, 2006). Therefore, recognizing anxiety and intervening at appropriate intervals are pivotal to improving outcomes for women with breast cancer.

The purpose of this article is to review the current state of the scientific literature surrounding anxiety in patients with breast cancer from the point of diagnosis to the end of adjuvant treatment. Mitchell, Gallucci, and Fought's (1991) Human Response to Illness (HRTI) Model will provide the organizational framework for the current state of knowledge surrounding anxiety sequelae. The four major components of the model are the physiologic, pathophysiologic, behavior, and experiential perspectives.

## Background

About 33% of patients who undergo treatment for cancer develop psychological morbidity (Carlson & Bultz, 2003; Zabora, BritzenhofeSzoc, Curbow, Hooker, & Piantadosi, 2001). Research has demonstrated that anxiety and emotional distress persist throughout the disease continuum from the moment cancer is suspected to diagnosis, treatment, and beyond (Bultz & Holland, 2006; Carlson & Bultz, 2003). For example, the period following a diagnosis of breast cancer can be challenging for patients as they consider their treatment plans and an upcoming future (Doll et al., 2003; Melinyshyn & Wintonic, 2006). Follow-

**Purpose/Objectives:** To provide a critical review of the empirical literature on anxiety in women with breast cancer using the physiologic, pathophysiologic, behavior, and experiential perspectives of the Human Response to Illness (HRTI) Model.

**Data Sources:** Research articles, clinical articles, and Internet sources on breast cancer and anxiety. Literature sources included CINAHL®, PubMed, and PsycINFO, incorporating English language reports through March 2009.

**Data Synthesis:** Patients with breast cancer experience fluctuating levels of anxiety throughout their diagnosis and treatment trajectory. Anxiety may influence an individual's response to treatment, treatment decision making, and overall quality of life.

**Conclusions:** Research consistently demonstrates that anxiety in patients with breast cancer can have a negative effect on patient outcomes.

**Implications for Nursing:** The insight gained from exploring anxiety within the context of the four interrelated perspectives of the HRTI model fosters the provision of optimal care for patients suffering with anxiety throughout their breast cancer illness trajectory.

ing treatment, patients continue to face myriad complex emotional difficulties, such as changes in roles and responsibilities, relationships (Dow, Ferrell, Haberman, & Eaton, 1999), or employment status (Hewitt, Breen, & Devesa, 1999). Anxiety and distress also can affect treatment outcomes and play a role in a patient's overall quality of life (Madden, 2006; Vignaroli et al., 2006).

Despite vast improvements in health care, patients continue to experience anxiety related to fragmented care, difficulties understanding information, and misinterpretation of treatment plans (Canadian Strategy for Cancer Control, 2007). Although these anxiety-inducing circumstances can have negative consequences, screening for anxiety along the breast cancer trajectory remains inconsistent. Typically, medical information exchange, treatment decision making, and scheduling surgery take precedence over anxiety screening and management (Madden, 2006). In addition, potential nursing barriers in assessing anxiety include time constraints, a lack of knowledge of screening tools, and a reluctance to