

Free continuing nursing education credits are available by completing an online test. To access the test for this and other articles, visit <http://evaluationcenter.ons.org>.

# Understanding Weight Loss in Patients With Colorectal Cancer: A Human Response to Illness

Sunita Bayyavarapu Bapuji, RN, MN, and Jo-Ann V. Sawatzky, RN, PhD

**C**olorectal cancer (CRC) is the second and third leading cause of cancer-related deaths in Canada and the United States, respectively (American Cancer Society [ACS], 2009; Canadian Cancer Society [CCS], 2009). Per 100,000 people, about 62 Canadians, 59 American men, and 44 American women are diagnosed with CRC annually (ACS, 2009; CCS, 2009). Although patients with CRC experience many symptoms, unintentional weight loss is a common issue. The weight loss has a detrimental effect on patients' physical and emotional well-being, including their self-image, quality of life, employment, and survival. The Human Response to Illness (HRTI) model provides an appropriate framework for understanding the physiologic, pathophysiologic, behavioral, and experiential perspectives of a response to an illness (Mitchell, Gallucci, & Fought, 1991). In this article, the HRTI model will be used to develop a comprehensive understanding of weight loss in patients with CRC. The insights gleaned from the application of this model will provide the foundation for a holistic and evidence-based approach to nursing interventions.

## Weight Loss in Colorectal Cancer

Cancer-related weight loss is an important predictor of negative health outcomes in patients with cancer (Cunningham & Bell, 2000). The weight loss is attributable to a broad range of factors, including altered metabolism, decreased dietary intake, increased energy expenditure, loss of appetite, cancer-related treatments, and stress related to cancer itself. According to DeWys et al. (1980), patients with gastrointestinal malignancies experience the second highest frequency and severity of cancer-related weight loss. Individuals with gastro-

**Purpose/Objectives:** To provide a comprehensive overview of weight loss in patients with colorectal cancer (CRC) within the context of the Human Response to Illness (HRTI) model.

**Data Sources:** Research from 1990–2008 and classic research from the 1980s were included. PubMed, CINAHL®, and Google™ Scholar were searched for the terms *cancer*, *CRC*, *weight loss*, and *cancer cachexia*.

**Data Synthesis:** Progressive, unintentional weight loss is a common issue in patients with CRC that has a devastating effect on patients' self-image, quality of life, and survival. Physiologic abnormalities, responses to the tumor, and treatments contribute to weight loss in these patients. In addition, cancer cachexia is an end-stage wasting syndrome and a major cause of morbidity and mortality in this population.

**Conclusions:** The HRTI model provides an appropriate framework to gain a comprehensive understanding of the physiologic, pathophysiologic, behavioral, and experiential perspectives of weight loss and cancer cachexia in patients with CRC.

**Implications for Nursing:** By examining weight loss in patients with CRC within the context of the four perspectives of the HRTI model, oncology and gastroenterology nurses can gain insight into optimal, evidence-based assessment and management of this patient population. In addition, current gaps in knowledge can be identified and provide guidance for future nursing research.

intestinal tumors lose more than 50% of their muscle mass and 30%–40% of body fat (Huhmann, 2006). As a result, muscle loss and malnutrition cause 30%–50% of deaths in patients with gastrointestinal cancer (Palesty & Dudrick, 2003).

Cancer cachexia falls on the distal end of the weight-loss continuum in patients suffering from malignant diseases. MacDonald, Easson, Mazurak, Dunn, and Baracos (2003) defined cancer cachexia as “a wasting