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

Colorectal 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 gastrointestinal 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