

## Measurement of Fatigue in People With Cancer

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**Purpose/Objectives:** To evaluate the quality of existing instruments measuring cancer-related fatigue (CRF).

**Data Sources:** Nursing and medical literature.

**Data Synthesis:** Although fatigue is highly prevalent among patients with cancer and adversely affects their quality of life, CRF often is unrecognized and untreated. The instruments available to measure CRF have numerous limitations. Many have been generated from investigators' observations, not actual experiences described by patients. Others operationalize different definitions of fatigue or differ in dimensionality, which leads to limited reliability and validity testing.

**Conclusions:** All of the instruments in this review need further study of their psychometric properties. Qualitative studies of CRF from the patients' perspective are needed to develop better instruments.

**Implications for Nursing Practice:** Nurses need to increase their knowledge of assessing CRF to intervene and improve the quality of life for patients with cancer.

Fatigue is the most frequently reported symptom of people with cancer (Winningham et al., 1994), but it has not been well studied. In a population-based survey, 78% of 419 patients with cancer experienced fatigue (Vogelzang et al., 1997). Fatigue in cancer generally is recognized as a result of the disease itself or of various treatments. Studies indicate that 65%–100% of patients receiving radiotherapy and 82%–96% of patients receiving chemotherapy report fatigue (Blesch et al., 1991; Richardson, 1995). Ninety-one percent of women with breast cancer who had undergone mastectomy and completed adjuvant chemotherapy reported fatigue (Gaston-Johansson, Fall-Dickson, Bakos, & Kennedy, 1999). The prevalence of fatigue was as high as 96% when patients were receiving chemotherapy and radiotherapy simultaneously (Irvine, Vincent, Bubela, Thompson, & Graydon, 1991). Although fatigue is an extremely prevalent condition among patients with cancer, the phenomenon is poorly understood.

The presence of fatigue in people with cancer can pose several clinical problems, such as limiting the doses of medication administered as cancer therapies (Winningham et al., 1994); leading to problems of adherence in treatment regimens (Irvine et al., 1991); disturbing mood, comfort level, and

### Key Points . . .

- ▶ Although fatigue is a frequently reported symptom of people with cancer, cancer-related fatigue (CRF) is poorly understood.
- ▶ CRF poses clinical problems, such as adverse effects on individuals' adherence to cancer treatments and their capacity to work, psychological and physical functioning, and quality of life.
- ▶ Fatigue assessment is an important aspect of oncology nursing.
- ▶ Reliable and valid measurements will further nurses' understanding of CRF, its impact, and the development of useful interventions to overcome or lessen fatigue.

### Objectives for CE Enrollees

- On completion of this CE, the participant will be able to
1. Describe the issues regarding cancer-related fatigue (CRF) as a measurable phenomenon.
  2. Describe attributes of some of the measurement tools available for CRF.
  3. Describe important considerations regarding the selection and use of measurement tools for CRF.

perception; and reducing capacities for attention and concentration (Irvine et al., 1991). Fatigue has adverse effects on individuals' adherence to cancer treatment regimens, their capacity to work, their physical and psychosocial functioning, and, ultimately, their quality of life (QOL). All of these are of interest to nursing researchers.

Varricchio (1985) recognized fatigue assessment as an important aspect of oncology nursing. By understanding the phenomenon of cancer-related fatigue (CRF), nurses can describe,

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