

# The Relationship of Sick Leave Benefits, Employment Patterns, and Individual Characteristics to Radiation Therapy–Related Fatigue

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**Purpose/Objectives:** To examine the relationship among sick leave benefits, employment patterns, individual characteristics, and fatigue in patients receiving radiation therapy.

**Design:** Prospective, longitudinal design.

**Setting:** A community hospital radiation oncology department.

**Sample:** 77 patients receiving radiation therapy to the breast, chest, head and neck, pelvis, or prostate. All were employed at the time of diagnosis.

**Methods:** The Piper Integrated Fatigue Model guided the study. The Revised Piper Fatigue Scale (PFS), Brief Fatigue Inventory, and a single-item scale were used to measure five dimensions of subjective fatigue. Sick leave, employment, individual characteristics, and fatigue were measured at baseline, weekly during treatment, and at one month post-treatment.

**Main Research Variables:** Employment patterns, availability of sick leave benefits, and fatigue.

**Findings:** Mean total fatigue scores on the PFS ranged from 0–4.77 at baseline ( $\bar{X}$  = 0.46, SD = 0.93), 0–8.77 at the completion of treatment ( $\bar{X}$  = 2.84, SD = 2.40), and 0–4.82 at one month post-treatment ( $\bar{X}$  = 0.77, SD = 1.20). Side effects, education, living situation, age, treatment site, and work were associated with fatigue along the trajectory of radiation therapy. Study participants who were working at the end of radiation had lower fatigue scores than those who were not. Availability of sick leave benefits was associated with employment patterns during treatment.

**Conclusions:** Work may have benefits during radiation therapy but may be affected by radiation therapy–related fatigue.

**Implications for Nursing:** Management of treatment side effects, including fatigue, may help patients remain in the workforce during radiation.

## Key Points . . .

- Fatigue continues to be one of the most common side effects of radiation therapy and is influenced by a variety of factors, including working during treatment.
- Current sick leave policies at workplaces do not adequately support patients' needs to adjust employment because of side effects of treatment, such as fatigue.
- Oncology nurses need to take an active role in policies related to employment issues and symptom management for patients undergoing cancer treatment.

management (Dillon & Kelly, 2003; Passik et al., 2002; Stone et al., 2003). In surveys conducted in the United States and Ireland, a much higher percentage of healthcare providers reported providing information on fatigue management than patients reported receiving such information (Dillon & Kelly; Stone et al.). Interestingly, of those who reported fatigue in the study conducted in Ireland, 46% discussed the symptom with their doctor and 44% discussed it with a nurse (Dillon & Kelly). In a companion study of patients in the United States, 79% discussed fatigue with their doctor, whereas only 28% spoke with a nurse (Curt et al., 2000). Therefore, in spite of recommendations by professional organizations that clinicians assess and manage fatigue, evidence shows that this is not happening.

Although fatigue in patients receiving radiation therapy has been well described, few investigators have examined the relationship of specific lifestyle behaviors, such as participation in the workforce, to the prevalence and severity of cancer-related fatigue. Financial necessity and the need to maintain health insurance may force many patients with cancer to work during their treatment. Others may choose to work to maintain a sense of normalcy in their lives.

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The American Cancer Society (2006) estimated that 1,399,790 new cases of cancer would be diagnosed in the United States in 2006. Approximately 60% of all people diagnosed with cancer will receive radiation therapy at some point during their treatment (Hilderly, 1997). Although radiation therapy plays a major role in the cure, control, or palliation of cancer, it also produces adverse effects. Haylock and Hart (1979) were among the first to describe fatigue as a result of radiation therapy for cancer. Since that time, fatigue consistently has been reported as the most common and distressing side effect of radiation therapy (Munro & Potter, 1996; Oberst, Hughes, Chang, & McCubbin, 1991; Williams et al., 2001).

Research has revealed an inconsistency between patients' and healthcare providers' perceptions of fatigue and fatigue