

# The Impact of a Nurse-Led Exercise Activity for Cancer-Related Fatigue in Patients With Leukemia

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Many patients with leukemia experience cancer-related fatigue (CRF). However, when patients are admitted for treatment with chemotherapy, clinicians often overlook CRF and interventions that can help to manage it. The purpose of this four-week intervention was to determine whether a nurse-led exercise activity would reduce CRF and increase physical activity compared to current practice. The results suggest that nurse-led exercise programs can immediately decrease CRF and increase activity in admitted patients with leukemia receiving chemotherapy. Including patients in nurse-led exercise activities can support active participation in their own care during and after hospitalization.

## AT A GLANCE

- CRF is treatable provided the patient is routinely screened using the Multidimensional Fatigue Inventory.
- Oncology nurses can independently implement an intervention to help improve CRF.
- As patient activity increased, patient-reported CRF decreased.

## KEYWORDS

cancer-related fatigue; exercise therapy; MFI-10; symptom management theory

## DIGITAL OBJECT IDENTIFIER

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More than 60%–90% of patients with cancer report cancer-related fatigue (CRF), making it the highest-reported symptom of cancer and related treatments (Nunes et al., 2019; Oertle et al., 2016). According to the National Comprehensive Cancer Network (NCCN) and the American Cancer Society (ACS), CRF is a distressing, long-lasting, subjective symptom related to cancer and cancer treatment that is not proportional to activity and greatly interferes with patients' functional capacity (ACS, 2020; Baussard et al., 2017; Gerber, 2017; Matsugaki et al., 2018). CRF involves an extreme feeling of exhaustion in the physical, affective, and cognitive domains. Simple activities such as eating, combined with anemia and a low white blood cell count, can lead to worsening CRF (ACS, 2020; NCCN, 2022). CRF can be present during pretreatment, post-treatment, and survivorship (Gerber, 2017).

Helping patients to minimize the effects of CRF can improve quality of life and is a key role for oncology nursing staff, falling within the scope and standards of nursing practice (Cooley & Siefert, 2016; Lubejko & Wilson, 2019). If CRF is not managed, it can compromise the patient's ability to continue with treatment (Banipal et al., 2017). Studies in the ambulatory, home, and hospital settings have reported that supervised and nurse-monitored interventions were effective in reducing the effects of CRF (Abbott & Hooke, 2017; Dennett et al., 2017; Duregon et al., 2019; Egegaard et al., 2019; Wang et al., 2019; Witlox et al., 2018; Zhang et al., 2018). Studies have indicated that walking can reduce CRF (Gheyasi et al., 2019; Matsugaki et al., 2018). Walking is a simple intervention that is feasible to implement in a hospital setting. Patients can participate while receiving treatment and continue independently at home posthospitalization (Boing et al., 2018; Gheyasi et al., 2019).

Hospitalization and treatment for patients diagnosed with leukemia can be lengthy, lasting for about four weeks on average (Bryant et al., 2017). Toxicities associated with treatment for leukemia can compound patients' exhaustion, causing increased periods of bed rest and physical deconditioning, which can affect quality of life (Bryant et al., 2017). Exhaustion related to cancer or cancer treatment rather than recent activity inhibits patients' usual functioning (NCCN, 2022).