

Perceived Benefits and Barriers to Exercise for Recently Treated Adults With Acute Leukemia

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Purpose/Objectives: To explore perceived exercise benefits and barriers in adults with acute leukemia who recently completed an inpatient exercise intervention during induction therapy.

Research Approach: Descriptive, exploratory design using semistructured interviews.

Setting: Inpatient hematology/oncology unit at North Carolina Cancer Hospital in Chapel Hill.

Participants: 6 adults with acute leukemia aged 35–67 years.

Methodologic Approach: Content analyses of semistructured interviews that were conducted with each participant prior to hospital discharge.

Findings: Most participants were not meeting the recommended physical activity levels of 150 minutes of moderate-intensity exercise per week before their diagnosis. Patients were highly pleased with the exercise intervention and the overall program. Common barriers to exercise were anxiety and aches and pains.

Interpretation: Overall, participants experienced physical and psychological benefits with the exercise intervention with no adverse events from exercising regularly during induction chemotherapy. Referrals for cancer rehabilitation management will lead to prolonged recovery benefits.

Implications for Nursing: Findings inform the nurses' role in encouraging and supporting adults with acute leukemia to exercise and be physically active during their hospitalization. Nurses should also be responsible for assisting patients with physical function activities to increase mobility and enhance overall health-related quality of life.

Acute myelogenous leukemia (AML) and acute lymphocytic leukemia (ALL) are two rapidly progressing cancers of the blood and bone marrow. An estimated 21,380 people will be diagnosed with AML and 5,970 will be diagnosed with ALL in the United States in 2017 (American Cancer Society, 2017). Incidence of AML increases with age, whereas ALL is most commonly diagnosed in children and has less favorable outcomes for those treated later in life (Marks, 2015).

Because of the rapidly progressing nature of these high-risk cancers, patients are promptly treated with induction chemotherapy with the goal of achieving a complete remission (Sekeres & Stone, 2002). Depending on the treatment regimen, patients will generally remain in the inpatient hospital setting for about four weeks to allow for recovery from myelosuppression and treatment-related side effects. Although chemotherapy for AML and ALL improves overall patient survival, burden is placed on the musculoskeletal system, leading to decreased physical activity levels (Smith-Turchyn & Richardson, 2015). Consequently, researchers have focused on the effects of exercise and physical activity interventions in solid and non-solid tumor cancers (Schmitz et al., 2010), and