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

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This research was funded by the National Cancer Institute of the National Institutes of Health (R25CA116339) and the University Cancer Research Fund (UL1RR025747), and Alvin Tarlov and John E. Ware Post-Doctoral Patient Reported Outcomes, Support Pilot for Advancing Research and Knowledge through funding from the School of Nursing at UNC Chapel Hill (NCI SK420A120780-07). Walton was supported by a grant from the National Institute of Nursing Research of the National Institutes of Health (T32NR007091).

Leak Bryant, Phillips, Bailey, Mayer, and Battaglini completed the data collection. Leak Bryant, Walton, Mayer, and Battaglini provided the analysis. Leak Bryant, Mayer, and Battaglini provided statistical support. All authors contributed to the conceptualization and design and the manuscript preparation.

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Submitted July 2016. Accepted for publication September 10, 2016.

Keywords: physical activity; acute care; qualitative nursing research; acute leukemia

ONF, 44(4), 413–420.
doi: 10.1188/17.ONF.413-420

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