## Using Relaxation and Guided Imagery to Address Pain, Fatigue, and Sleep Disturbances: A Pilot Study

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**Background:** Few studies have been conducted on the use of patient-controlled relaxation and guided imagery interventions for the symptom cluster of pain, fatigue, and sleep disturbance during cancer treatment.

**Objectives:** The primary aim of this study was to evaluate the feasibility, acceptability, and participant satisfaction with use of patient-controlled relaxation and/or imagery interventions for pain, fatigue, and sleep disturbance. A secondary aim was to examine the data for trends in

pain, fatigue, and sleep improvement because of the effects of relaxation and guided imagery.

**Methods:** Twelve adult patients with cancer were randomized to one of four groups: a guided imagery intervention, a relaxation intervention, a combined intervention using guided imagery and relaxation, or usual care. Pain, fatigue, and sleep disturbance were assessed upon enrollment and at 30 and 60 days. Patients' scores were obtained using the Patient-Reported Outcomes Measurement Information System (PROMIS) Pain Interference Short Form, PROMIS Fatigue Short Form, and PROMIS Sleep Disturbance Short Form tools.

**Findings:** Patients reported a high degree of satisfaction with the relaxation and guided imagery interventions. Patients in the relaxation and guided imagery or combined groups showed a trend toward improvement in fatigue and sleep disturbance scores. Pain remained a problem for the majority of patients. Difficulties in recruiting participants resulted in an insufficient sample size for generalizable findings. With hospital environments tending to be noisy, relaxation and guided imagery may facilitate rest and sleep for hospitalized patients. An examination of individual scores showed a trend toward improvement in sleep quality.

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espite improvements in diagnosis and treatment, many patients with hematologic malignancies still experience undesirable symptoms and side effects that undermine quality of life. The primary purpose of this study was to evaluate the feasibility, acceptability, and participant satisfaction with the use of patient-controlled relaxation and imagery interventions for pain, fatigue, and sleep disturbance in a population

of patients with hematologic malignances and solid tumors. A secondary aim was to examine the data for trends in pain, fatigue, and sleep improvement because of the effects of relaxation and guided imagery.

Studies have shown that as many as 96% of patients with cancer experience fatigue during treatment and after therapy has been completed (Finnegan-John, Molassiotis, Richardson, & Ream, 2013; Yeo & Cannaday, 2015). The National