

Associations between Loneliness and Cancer Patients' Pain and Fatigue

Madison E. Stout¹, Rebecca N. Adams¹, and Catherine E. Mosher¹

¹Department of Psychology, IUPUI

Introduction: Pain and fatigue occur at higher rates in cancer patients than in the general population. One study found that loneliness predicted both pain and fatigue in cancer patients; however, the study only focused on patients with breast or colon cancer. The goal of the current study is to examine whether loneliness is associated with pain and fatigue in a sample of patients with various cancer types, including more rare diagnoses. We hypothesized that loneliness would be positively correlated with pain and fatigue, controlling for demographic and medical characteristics.

Methods: Participants ($N=44$) were 60 years old ($SD=12$) on average, 68% Caucasian, and 59% female. All participants had received treatment for cancer at the Indiana University Simon Cancer Center or another Indiana University Hospital since 2013. Participants were recruited from the Indiana Tumor Registry, and after consenting, they were mailed a survey to complete at home that included measures of loneliness, pain, and fatigue. To test our hypothesis, we computed correlations between loneliness and each symptom (i.e., pain and fatigue), controlling for age, gender, and time since diagnosis.

Results: As hypothesized, we found a large, positive correlation between loneliness and fatigue ($r=0.51$, $p=0.001$), controlling for demographic and medical characteristics. In addition, loneliness was positively correlated with pain, but this result fell just short of statistical significance ($r=0.28$, $p=0.09$).

Conclusions: Results from this study suggest that greater loneliness is associated with greater fatigue in cancer patients, consistent with the results of one prior study. Although the association between loneliness and pain was more modest, it may reach statistical significance as the study sample size increases. If future longitudinal research shows that greater loneliness predicts cancer patients' pain and fatigue, it would suggest that interventions to reduce loneliness may also reduce their physical symptoms.

Mentor: Catherine E. Mosher, Ph.D., Department of Psychology, IUPUI