Improving Functional Status in African Americans With Cancer Pain: A Randomized Clinical Trial

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OBJECTIVES: To determine the efficacy of the Power Over Pain–Coaching (POP-C) intervention to improve functional status among African American outpatients with cancer pain.

SAMPLE & SETTING: 310 African American patients were recruited from an urban comprehensive cancer center. The study took place in the patients' homes.

METHODS & VARIABLES: A two-group randomized design with repeated measures was used. Data were analyzed with linear mixed effects regression analysis and structural equation change score models. Variables were pain, pain-related distress, functional status, perceived control over pain, and the following antecedents to control: medication management, pain advocacy, and living with pain.

RESULTS: Functional status was improved in POP-C participants relative to control group participants (p < 0.05). Distress also was differentially decreased (p < 0.05). Pain intensity ratings decreased significantly in all patients (p < 0.05). The largest intervention effects were observed in the living with pain component.

IMPLICATIONS FOR NURSING: Perceived control over pain was strongly related to functional status and is amenable to interventions using the POP-C intervention components described in this article.

KEYWORDS cancer pain; African Americans; pain-related distress; functional status; perceived control over pain
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espite the options of using analgesics and other modalities, pain continues to be moderate to severe in more than 50% of patients with cancer (Beuken-van Everdingen et

al., 2007; Hammer et al., 2016). The multidimensional experience of pain involves many factors, including pain-related distress and perceived control over pain, which affect a patient's functional status (Leung, Pachana, & McLaughlin, 2014; Vallerand, Templin, Hasenau, & Riley-Doucet, 2007; Wells & Sandlin, 2012).

Behavioral interventions to decrease cancer pain have focused on distress (Jacobsen, Møldrup, Christrup, Sjøgren, & Hansen, 2010; Wells & Sandlin, 2012). Although distress is important and should be assessed in all patients with cancer (National Comprehensive Cancer Network [NCCN], 2017), when general symptom distress and pain-related distress were compared in patients with cancer pain, distress from pain was found to be more upsetting than all other symptoms (Vallerand, Templin, et al., 2007). Assessing pain-related distress is essential in patients with cancer-related pain to develop interventions and effectively care for these patients. However, designing interventions to decrease distress is challenging because of the affective nature of the concept. The factors that lead to pain-related distress are more amenable to intervention strategies. Perceived control over pain, a factor that had not been previously considered, was found to have a direct effect on pain-related distress and mediated the effect of beliefs about pain and pain level on distress in ambulatory patients with cancer-related pain (Vallerand, Templin, et al., 2007).

African American patients with cancer have been shown to bear an excess burden of pain because of disparities in pain care (Anderson et al., 2015; Fisch