

The Association Between Analgesic Treatment Beliefs and Electronically Monitored Adherence for Cancer Pain

William E. Rosa, PhD, MBE, ACHPN®, FAANP, FAAN, Barbara Riegel, PhD, RN, FAHA, FAAN,
Connie M. Ulrich, PhD, RN, FAAN, Jesse Chittams, MS, Ryan Quinn, MPH,
and Salimah H. Meghani, PhD, MBE, RN, FAAN

OBJECTIVES: To determine whether clusters based on analgesic treatment beliefs among patients with cancer predict objective analgesic adherence.

SAMPLE & SETTING: 207 patients with cancer in the outpatient setting who were aged 18 years or older, self-identified as White or African American, were diagnosed with solid tumor or multiple myeloma, and were prescribed at least one around-the-clock analgesic prescription for reported cancer pain.

METHODS & VARIABLES: This study is a secondary analysis of an existing dataset. General linear modeling with a backward elimination approach was applied to determine whether previously identified analgesic treatment belief clusters, as well as sociodemographic, clinical, and pain variables, were associated with adherence behaviors.

RESULTS: Significant explanatory factors were experiential in nature and included sociodemographic, clinical, and pain-related variables, explaining 21% of the variance in analgesic adherence. Analgesic belief clusters were not predictive of adherence.

IMPLICATIONS FOR NURSING: Future research should examine sociodemographic and other clinical factors, as well as the influence of analgesic treatment beliefs, to better understand adherence behaviors among patients with cancer.

KEYWORDS analgesics; cancer pain; adherence; belief clusters; opioids

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The majority of patients with cancer report pain, and as many as 38% of those patients report their pain as moderate to severe (Shi et al., 2011; van den Beuken-van Everdingen et al., 2016). Despite a lack of data on outcomes related to long-term opioid use for cancer pain (Meghani & Vapiwala, 2018), a number of cancer pain guidelines continue to identify opioids as a core component of moderate to severe cancer pain management (National Comprehensive Cancer Network [NCCN], 2020; Paice et al., 2016; World Health Organization [WHO], 2018). Although some pain management guidelines promote the use of complementary and alternative strategies (Dowell et al., 2016; NCCN, 2020), their affordability may be unmanageable for some, and several systematic reviews have noted insufficient evidence to support their clinical efficacy in alleviating cancer pain (Hetkamp et al., 2019; Kim, Kang, & Lee, 2018; Kim, Loring, & Kwekkeboom, 2018; Shin et al., 2016; Wayne et al., 2018). Therefore, analgesic use—and opioid use in particular—remains a primary modality for achieving moderate to severe pain control in the cancer population. Despite the many national initiatives that focus on advancing pain science from the provider perspective (Adams et al., 2017; Bonnie et al., 2017; National Academy of Medicine, 2020), little is known about the predictors of patients' actual analgesic-taking behaviors.

As a result of the opioid epidemic and its healthcare implications, the phenomenon of analgesic adherence requires better understanding. A number of individual, family, provider, and system-level factors have been shown to predict nonadherence behaviors in this context (Rosa et al., 2020). Patients who experience less pain relief with analgesic use or higher side effect severity are typically less adherent to prescribed