

# Prevalence of Substance Use in Patients With Cancer Receiving Radiation Therapy

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**Background:** Individuals with cancer and risky alcohol and illicit substance use (AISU) are more likely to suffer diminished quality of life and subpar treatment outcomes. The prevalence of AISU in patients with cancer is poorly understood.

**Objectives:** This article reports on the results of a needs assessment to quantify AISU in individuals with cancer seeking care in the radiation oncology department of a large, academic medical center.

**Methods:** Medical records were reviewed for all patients seen in the radiation oncology department in a one-week (five-day) period in the fall of 2014 (N = 397). Demographic and prevalence data were analyzed.

**Findings:** The prevalence rates of AISU in this sample were slightly lower than estimates for the general population and inconsistency was noted in the documentation of relevant information. Despite the limitations, data analyses suggested that a significant percentage of patients receiving radiation therapy for cancer diagnoses exhibited substance use patterns that placed them at increased risk for negative short- and long-term outcomes. The findings support the need for systematic substance use screening, assessment, and risk-based interventions as an essential component of comprehensive cancer care.

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Each day, individuals with substance use problems are diagnosed with cancer and no current published evidence-based standards are in place to guide their care (Anghelescu, Ehrentraut, & Faughnan, 2013). Patients with cancer who partake in alcohol and illicit substance use (AISU), such as marijuana, heroin, cocaine, methamphetamines, or other nonprescribed drugs, are more likely to experience poorer physical outcomes, poorer quality of life, and missed opportunities for wellness than non-substance-using patients.

The prevalence of AISU in patients with cancer is poorly understood (Modesto-Lowe, Girard, & Chaplin, 2012; Passik et al., 2000). Because cancer-specific statistics are not available, prevalence rates historically have been drawn from the general population. Nationally, the estimated prevalence of illicit drug addiction in the United States is 6%–10% of the general population, and the estimated prevalence of alcohol

addiction is about 15% (Kircher, 2011; National Institutes of Health, 2015; Parsons et al., 2008).

AISU during cancer treatments confers significantly worse quality-of-life outcomes for patients, including problems with pain, sleep, dyspnea, total distress, anxiety, coping, shortness of breath, diarrhea, poor emotional functioning, fatigue, and poor appetite (Danker et al., 2011; Koyyalagunta, 2013; Modesto-Lowe et al., 2012; Parsons et al., 2008). Evidence shows that AISU and pain frequently co-occur, and some researchers suggest that patients suffering from addiction have a higher risk of low pain tolerance (Bailey, Hurley, & Gold, 2010). Healthcare providers may mistake symptoms of dependence with addiction, which can lead to inadequate pain management (Starr, Rogak, & Passik, 2010). Current alcohol use also has been associated with higher pain scores (Morasco, Turk, Donovan, & Dobscha, 2013) and increases in long-term use of opioids (Kwon, Hui, Chisholm, & Bruera, 2013).