

# Weighted Blankets

## Anxiety reduction in adult patients receiving chemotherapy

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**BACKGROUND:** Weighted blankets have been used as a deep touch pressure (DTP) tool to alleviate anxiety in many patient populations. Patients with cancer can experience anxiety related to diagnosis and treatments, such as chemotherapy infusions. Research on the effectiveness of weighted blankets as a DTP tool to alleviate anxiety in patients receiving chemotherapy is limited.

**OBJECTIVES:** This study assessed the effectiveness of a medical-grade therapeutic weighted blanket on anxiety in patients receiving their first and second chemotherapy infusions at an outpatient infusion center.

**METHODS:** A randomized controlled trial with a crossover design was performed with new patients in the outpatient chemotherapy infusion center. Patients were randomized to one of two study arms (given the weighted blanket during their first infusion or given the weighted blanket during their second infusion). Anxiety was measured using an anxiety inventory and a visual analog scale.

**FINDINGS:** Anxiety was reduced among patients receiving chemotherapy when the weighted blanket was used. Based on the results, a standard-weight, medical-grade therapeutic weighted blanket can be safely used to reduce anxiety in patients of various weights, and a visual analog scale can be a reliable indicator of patients' state anxiety.

### KEYWORDS

weighted blanket; deep touch pressure; anxiety; infusion; chemotherapy; cancer

### DIGITAL OBJECT IDENTIFIER

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**PATIENTS WITH CANCER CAN EXPERIENCE HIGH ANXIETY** related to their diagnosis and treatment (Grassi et al., 2017; Spiegel & Riba, 2015). Oncology nurses are often at the forefront of implementing complementary interventions for patients' levels of comfort, coping, and overall well-being. Complementary interventions for anxiety, such as massage, music therapy, and progressive muscle relaxation, have been shown to be effective in reducing anxiety among patients (Satija & Bhatnagar, 2017; Sheldon et al., 2014). Implementing similar interventions may also help oncology nurses to care for patients receiving chemotherapy who are experiencing anxiety.

### Literature Review

The American Psychological Association (2019) defines anxiety as "an emotion characterized by feelings of tension, worried thoughts, and physical changes" (p. 1). Other symptoms of anxiety can include muscle tension, restlessness, sympathetic hyperactivity, gastrointestinal issues, increased heart rate, sweating, shaking, or fear of losing control. Anxiety is a common response to a cancer diagnosis and can continue throughout treatment, such as during chemotherapy infusions (Bates et al., 2017; Curran et al., 2017; Sheldon et al., 2014). According to Jadoon et al. (2010), adults with cancer have a high prevalence of depression and anxiety (66%) compared to patients with other diagnoses. In addition, anxiety levels are increased in patients receiving chemotherapy treatment compared to patients receiving other forms of cancer treatment (Lim et al., 2011).

Weighted blanket therapy has been identified as a method to decrease anxiety in autistic, psychiatric, dental, and nonmalignant patient populations (Champagne et al., 2015; Chen et al., 2012; Gee et al., 2017; Zimmerman et al., 2019). However, there is a lack of research on the effectiveness of weighted blankets as a method to alleviate anxiety in patients with cancer receiving chemotherapy infusions in an outpatient setting. Implementing a nonpharmacologic therapy option, such as a weighted blanket, can help to reduce anxiety in patients receiving chemotherapy, improve the patient experience during treatment, and decrease the use of medications to manage anxiety.

### Deep Touch Pressure

Previous studies in different patient populations have found a reduction in anxiety with the use of weighted blankets (Champagne et al., 2015; Chen et al., 2012; Mullen et al., 2008; Zimmerman et al., 2019). A study by Mullen et al. (2008) discovered that 78% of nonhospitalized participants self-reported being more relaxed when using weighted blankets. This same study also