## **Guided Imagery**

## Reducing anxiety, depression, and selected side effects associated with chemotherapy

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**BACKGROUND:** Cancer treatment can be a great source of anxiety and depression for patients. Patients who experience anxiety and depression may be treated with a variety of nonpharmacologic treatments, such as guided imagery.

**OBJECTIVES:** The purpose of this article is to determine the effect of guided imagery on patients' anxiety, depression, and other selected side effects prompted by chemotherapy.

**METHODS:** This pre- and postintervention assessment randomly selected patients with various types of cancer who were undergoing chemotherapy to listen to a guided imagery audio file for 20 minutes per day for one week. Data collection included a demographic questionnaire, the Hospital Anxiety and Depression Scale, and the Symptom Distress Scale.

FINDINGS: A significant decrease in anxiety and depression was noted in the intervention group compared to the control group. No reduction in the mean score for anxiety and depression was observed postintervention for the control group. In addition, patients in the intervention group showed improvement in all side effect categories. Patients in the intervention group reported the greatest rate of improvement in the items of pain, insomnia, appetite, and nausea

guided imagery; cancer; chemotherapy; anxiety; depression; side effects

**DIGITAL OBJECT IDENTIFIER** 10.1188/19.CJON.E87-E92

CANCER TREATMENT CAN PROMPT SYMPTOMS of anxiety and depression in patients (Chien, Liu, Chien, & Liu, 2014; Mitchell et al., 2011). Providers are well aware of the great effect that fear and anxiety associated with cancer treatment have on the physiologic and psychological health of patients with cancer (Chen, Wang, Yang, & Chung, 2015). The majority of patients with cancer report at least a mild level of depression and anxiety, which can reduce social functioning and can lead to physical symptoms such as sleep problems, fatigue, and pain (Charalambous et al., 2016). In addition, depression and anxiety can affect the quality of life of patients with cancer by weakening their motivation and reducing their ability to adapt (Charalambous et al., 2016).

Cancer treatment, including chemotherapy, can be associated with side effects such as nausea, vomiting, fatigue, loss of appetite, pain, sleep disturbance, inability to concentrate, and anxiety (Olver, Eliott, & Koczwara, 2014). Complementary and alternative medicine (CAM) has been used as a treatment for side effects because, in general, CAM therapies can be simple to use, inexpensive, and safe for the patient (Chen et al., 2015). One specific CAM therapy, mind-body intervention, consists of exercises focusing on the interactions between the mind, body, and behavior (Elkins, Fisher, & Johnson, 2010). Guided imagery is one type of mind-body intervention in which symbols, visualization of dreams, and visual techniques are used to improve mental status. The impact of guided imagery has been studied individually and in combination with other methods of mind-body interventions across a wide range of conditions, with various results reported. For example, Chen et al. (2015) reported that a positive guided imagery experience can alleviate anxiety and depression in patients with breast cancer. The positive effect of guided imagery on stress in patients with thyroid cancer has been reported (Lee, Kim, & Yu, 2013). Hosseini, Tirgari, Forouzi, and Jahani (2016) reported the positive effect of guided imagery on the reduction of chemotherapy-induced nausea and vomiting in patients with breast cancer. In addition, Shahriari, Dehghan, Pahlavanzadeh, and Hazini (2017) examined the impact of using guided imagery with progressive muscle relaxation and deep diaphragmatic breathing on the quality of life of patients with breast and prostate cancers. Particolo et al. (2017) studied the effect of guided imagery in comparison with the effect of massage therapy on anxiety in hospitalized patients. In both studies (Particolo et al., 2017; Shahriari et al., 2017), the results indicated the positive effect of guided imagery on the studied variables.