

# Effects of Making Art and Listening to Music on Symptoms Related to Blood and Marrow Transplantation

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**Purpose/Objectives:** To understand the benefits of making art and listening to music and whether those activities may be beneficial for reducing symptoms associated with blood and marrow transplantation.

**Design:** A randomized, three-group, pre-/post-pilot design.

**Setting:** Outpatient Blood and Marrow Transplant Clinic at the University of Kansas Cancer Center in Kansas City.

**Sample:** 39 adults aged from 22–74 years receiving blood and marrow transplantations.

**Methods:** Participants were randomly assigned to one of three groups: (a) art making, (b) diversional music (comparison), or (c) control (usual treatment). The Therapy-Related Symptoms Checklist was used to assess the patients' self-reported symptoms related to treatment. The Spielberger State-Trait Anxiety Index was used to measure self-reported anxiety symptoms. Vital signs were obtained pre- and postintervention to measure physiologic stress.

**Main Research Variables:** Therapy-related symptoms, state anxiety, and physiologic distress.

**Findings:** Of the 39 participants, 14 were randomized to the control group, 14 to the art group, and 11 to the diversional music group. No significant differences in age, gender, ethnicity, or diagnosis existed between groups. No statistical differences were found between groups on all measures following the intervention.

**Conclusions:** Although the results of the current study did not indicate significant differences, healthcare professionals may still consider creative therapies as a viable option for patients within hospital or outpatient clinics because they do not require specialty training or costly resources, and they may be an enjoyable activity to occupy time for patients and caregivers.

**Implications for Nursing:** Art making and music listening are safe and desirable for patients undergoing blood and marrow transplantation in an outpatient clinic. Nurses might consider partnering with therapists to offer these creative therapies as diversion during treatment.

**B**lood and marrow transplantation (BMT) can have positive effects on blood and marrow cancers, but it often results in adverse side effects, creating the need for alternative therapies (Carlson & Bultz, 2008; Gabriel et al., 2001; Nainis et al., 2006). The basis of BMT involves transplanting stem cells, which are intended to replace and destroy diseased cells to produce healthy blood-producing cells (Leukemia and Lymphoma Society, 2013). After transplantation, blood and platelet infusions are needed while the immune system and bone marrow return to normal functioning. During treatment, patients are required to adhere to strict infection precautions because of weakened immune systems (Mosher, Redd, Rini, Burkhalter, & DuHamel, 2009; University of Kansas Hospital Cancer Center, 2008). Once blood counts have