Music and Anxiety in Chemotherapy Treatment of Breast Cancer Patients

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Background

Since 1982, cancer has been the highest among the top ten causes of death among Chinese people. In particular, patients undergoing chemotherapy need to face the physiological effects of chemotherapy side effects, and also need to adapt to the changes and impacts of the quality of life caused by the disease itself and treatment. Therefore, a detailed assessment of the physiological and psychological symptoms caused by chemotherapy in patients, through music therapy, to evaluate whether it can reduce or prevent the anxiety level of cancer patients during chemotherapy. In turn, the patient can continue to receive chemotherapy, which is the goal that clinical nurses can work hard.

Methods

We used a randomized, parallel-group, controlled trial design and allocated the 60 enrolled participants. Randomly assigned to the experimental group and the control group, each group of 30. The experimental group listened to the MP3 player with headphones for 30 minutes of optional music during chemotherapy. The control group listened to the MP3 player for 30 minutes of ambient sound during the chemotherapy period. Subjects were tested for anxiety, salivary amylase, and finger temperature before, 6th, 12th, and 24th week of interventional measures.

Results

The results showed significant differences between the two groups at week 12 and week 24 (p < .05). Moreover, the average score of listening to music anxiety in the experimental group was lower than that in the control group (Figure 1). The effect of music on salivary amylase showed that the experimental group had a decrease in salivary amylase values compared with the pretests at the baseline values of music intervention measures, weeks 6 and 12, and 24 weeks. The control group was on the rise (Figure 2). The difference between the measured and post-tested finger temperatures at four time points was not statistically significant (P > .05) after the Paired t test.

Figure 1 Changes in the score of anxiety in the two group

Figure 1 Changes in the alpha amylase in the two group