

# Complementary Therapy for Cancer Survivors: Integrative Nursing Care

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## ABSTRACT

**Objective:** The number of cancer patients who survive more than 5 years after the completion of their initial treatment is increasing. Oncology nurses must consider the needs of long-term cancer survivors in addition to those of cancer patients undergoing treatment because cancer survivors experience anxiety over several issues, including the risk of recurrence and progression of cancer status and symptom management.

**Methods:** We tried to examine the effect of complementary therapy (CT) to reduce anxiety. The experimental study compared an intervention group (5 males and 68 females) that underwent four CTs and a control group (5 males and 56 females) that received no intervention. The intervention group practiced the CTs in their home for 20 min/day, 2 days/week, for 8 weeks, for a total of 16 times, whereas the control group performed their usual routines. Stress response scale-18 (SRS-18) scores consisting of three subscales (depression-

anxiety, temper-anger, and lethargy) were compared between the groups and across time within each group. **Results:** The intervention group reduced depression and anxiety significantly than the control group. Furthermore, the intervention group expressed the following positive feedback: “being able to relax,” “being distracted from their worries and anxieties,” “being able to sleep,” “feeling more in-touch with reality,” and “wanting to continue the practice.” **Conclusions:** The study might accurately reflect the perspectives of women with cancer because the majority of the patients were women. Meanwhile, the result suggests that CTs might be useful for long-term cancer survivors who experience anxiety that influence their quality of life.

**Key words:** Cancer survivor, complementary therapy, integrative nursing care

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## Introduction

By 2030, Asian countries are expected to constitute 60% of the world's population of 8.5 billion and represent an aging society; hence, 10 million cancer diagnoses and 6.5 million cancer deaths are expected to occur in these countries.<sup>[1,2]</sup> Meanwhile, the number of cancer patients who survive more than 5 years after the completion of their initial treatment is increasing. However, oncology nursing has focused on cancer patients who are undergoing treatment at a hospital. Oncology nurses must also consider the needs of long-term cancer survivors in addition to those of cancer patients currently undergoing treatment. In this article, we describe the effectiveness of complementary therapy (CT) for reducing depression and anxiety in cancer survivors.

Cancer has been the most common cause of death in Japan since 1981. At present, 982,100 people are newly diagnosed with cancer each year, and 370,900 people die from cancer annually. Up to 225,000 cancer survivors have lived more than 5 years after their initial diagnosis, whereas 308,000 have lived <5 years after diagnosis. The 5-year survival rates are more than 50% for stomach cancer, 60% for colon cancer, and 80% for breast cancer. The importance of coordinated healthcare and social welfare that supports individuals living with cancer is becoming more apparent as the number of long-term survivors increases.<sup>[3-6]</sup>

Our previous study entitled, "Oncology Nurses' Recognition of Long-term Cancer Survivorship Care in Japan"<sup>[7]</sup> showed that oncology nurses are aware of the need to recognize and address issues faced by long-term cancer survivors and provide related nursing education. However, very few of these nurses put effective patient education and interventions into practice possibly because of their few opportunities to interact with cancer survivors who are no longer under the direct supervision of healthcare professionals. The increasing number of long-term cancer survivors has opened the need to implement nursing practices related to long-term cancer survivorship care because cancer survivors experience anxiety over several issues, including the risk of recurrence and progression of cancer status, health and symptom management, social rehabilitation and finances, and sexual issues. Therefore, oncology nurses should be concerned with a broad range of issues, such as exercise, diet, relaxation, and sexual issues because patients have specific individual needs depending on their diagnoses. To this end, we examined the use of CT to improve relaxation.

CT can be a useful practice facilitated by nurses as a part of integrated nursing care for maintaining a high

quality of life for cancer patients.<sup>[8]</sup> Our previous study examined the psychological and physiological effects of CT in nurses with high-stress levels and found that CT effectively reduces stress and could be used as a self-management strategy to maintain a high quality of life. Therefore, the present study investigated the effect of CT on cancer survivors and determined whether or not CT can enable cancer patients to maintain a high quality of life.

## Methods

This experimental study compared an intervention group that underwent four CTs and a control group that received no intervention. The CTs practiced in the intervention group were progressive muscle relaxation (PMR), deep breathing exercises (DBE), two different kinds of relaxing music (RM), and aroma therapy (AT). Four compact discs guiding the participant through the use of the CTs (PMR, DBE, and 2 RMs) and citrus AT oil were included in one package [Figure 1]. The patients were randomized into two groups. The intervention group practiced the CTs in their home for 20 min per day, 2 days per week, for 8 weeks, for a total of 16 times, whereas the control group performed their usual routines.

SRS-18<sup>[9]</sup> scores consisting of three subscales (depression-anxiety, temper-anger, and lethargy) were compared between the groups and across time within each group. Measurements were taken in the outpatient department when the patients were at the hospital for a physical examination or treatment. Friedman tests were used to compare the measurements between the baseline and 4-week time point, baseline and 8-week time point, and between the 4- and 8-week time points for each group. *t*-tests were used to determine differences between the intervention and control groups. The data were analyzed using IBM SPSS Statistics, Version 22.



**Figure 1:** Four compact discs guiding the use of the CTs and aroma oil in package

At the 8-week time point, an interview with the patient was conducted to assess how they felt using the CTs (intervention group) or how they felt in general over the past 8 weeks (control group). Similar answers related to components of care were aggregated for category identification to explore the qualitative interview data.

## Results

The study enrolled 73 patients (5 males and 68 females) with a mean age of  $51.80 \pm 10.76$  years in the intervention group and 61 patients (5 males and 56 females) with a mean age of  $55.37 \pm 10.9$  years in the control group (total  $n = 134$ ). The majority of the patients were female, and the primary diagnoses in this study were breast and uterine cancers; the male patients were mainly diagnosed with lung, stomach, and pancreatic cancers.

The two groups showed significant differences in SRS-18 scores. On the depression-anxiety subscale, the differences in the scores between the baseline and 4-week time point and between the baseline and 8-week time point were significant ( $P = 0.016$  and  $0.044$ , respectively). Depression and anxiety significantly improved more in the intervention group than in the control group. No significant differences in the temper-anger or lethargy subscales were observed between the intervention and control groups.

The patients in the intervention group expressed the following positive feedback during the interview: “being able to relax,” “being distracted from their worries and anxieties,” “being able to sleep,” “feeling more in-touch with reality,” and “wanting to continue the practice.” The negative feedback included the following: “experiencing no effect of the CTs” and “practicing CT feels burdensome when feeling unwell.” Some patients in the control group expressed that they have already developed their own self-management strategies, whereas others worried about their physical symptoms and anxiety related to their disease.

## Conclusion

The study population ( $n = 134$ ) mostly consisted of female patients ( $n = 124$ ). Therefore, the study results might accurately reflect the experiences and perspectives of women with cancer in Japan. After practicing the CTs at home for 2 months, the patients in the intervention group had improved scores on the depression-anxiety subscale of the SRS-18. This result suggests that the CTs effectively reduced depression and anxiety in the cancer survivors. Thus, CTs might be useful for long-term cancer survivors

who experience anxiety that influences their quality of life. The temper-anger and lethargy subscales of the SRS-18 did not significantly change; however, the scores on these subscales for both groups were low at baseline, indicating that the study participants were not experiencing anger or lethargy before beginning the CT practices.

The assessment of the interview feedback revealed that the CTs are more effective for patients who enjoyed the CTs than for those who had no interest in the CTs. Furthermore, some patients who are beyond 5 years of survival after diagnosis have already developed their own self-management strategies. Thus, the patients who recently completed their initial treatment may experience the greatest benefit from the CTs because they have less experience with self-management. Future studies should consider the influence of individual characteristics on the effectiveness of CTs.

One limitation of this study is that whether or not the CTs were practiced properly was undetermined because the intervention was performed in the participants' homes. Therefore, future studies should explore appropriate methods for using CT and following up with patients' performance at home. In the future, we will consider concrete ways of providing the CTs to patients to help them learn self-management skills and improve their quality of life.

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## Conflicts of interest

There are no conflicts of interest.

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