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The Effectiveness of Spiritual Emotional Freedom Technique in Improving Sleep Quality among Cancer Patients

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Abstract

Introduction: Cancer patients often experience sleep disorders. One of the non-pharmacological treatments that can improve sleep quality is the spiritual, emotional freedom technique (SEFT). **Objectives:** The study aimed to identify the effectiveness of SEFT on sleep quality among cancer patients. **Methods:** This research applied a quasi-experiment with a pre-test and post-test approach using a non-equivalent control group design. The total sample of this study was 30 respondents collected by purposive sampling. The sleep quality index questionnaires measured sleep quality. **Results:** In the pre-test, the average sleep quality score among respondents in the experimental group was 12.33, then became 8.93 after the post-test with a p-value < 0.007. Meanwhile, the pre-test score for sleep quality among respondents in the control group was 13.40, then became 13.20 after the post-test with a p-value of 0.026. **Conclusion:** it can be concluded that SEFT can improve the sleep quality of cancer patients. Improving the quality of sleep in cancer patients can reduce fatigue, the main side effect of undergoing therapy.

Keywords: Spiritual, emotional freedom technique, cancer, sleep quality

INTRODUCTION

Cancer is a serious health problem in both developed and developing countries. Data shows 18.1 million new cases and 9.6 million deaths in 2018 due to cancer. Cancer is estimated to be among 43.8 million, with a 5-year prevalence (1). This will happen more quickly, especially in poor and developing countries. The prevalence of cancer in the population of all ages in Indonesia in 2020 was 183 thousand (2).

One of the experiences that cancer sufferers often complain about is sleep disturbances (3). Sleep disturbances in cancer patients were generally caused by physical discomforts such as pain and psychological disorders such as anxiety (3,4). Sleep disturbances can occur in 33-50% of cancer patients (5). In Indonesia, the data even reaches 60% (6). Sleep disturbances are difficulties initiating and maintaining sleep so that they cannot meet the need for adequate sleep, even though sleep is essential for health, especially in cancer patients, to restore energy and allow optimal functioning (7–9). In addition, sleep disturbances will also be positively associated with the incidence of fatigue and the ability to tolerate the primary side effects of chemotherapy (10).

Efforts that can be made to overcome the problem of sleep disorders are using medical and non-medical therapy (6). However, medical therapy can cause other physical disorders and can be dependent (11–13). Therefore, non-medical therapy is an option for overcoming sleep disorders in patients with minimal side effects (14). One of the non-medical therapies that can be done for cancer patients is the spiritual, emotional freedom technique (SEFT) (15,16).

SEFT is an energy psychology-based therapy technique where a practitioner performs a light tap on the body's meridian points along the 12 meridian lines of the body while praying to the Creator (16). This therapy is a technique of combining the body's energy system and spirituality therapy. SEFT has overcome various physical and emotional problems (15). SEFT decreased anxiety among cancer patients (15), but the effectiveness of SEFT in improving sleep quality in cancer patients has never been done.

OBJECTIVE

This study aimed to determine the effectiveness of SEFT in improving the sleep quality of cancer patients.

METHODS

Design

A quasi-experimental, pre-test, and post-test with a non-equivalent control group were applied in this study. In this design, the experimental group was treated with SEFT, while the control group with standard therapy from hospital standard care.

Sample, sample size, and sampling technique

Sampling was done using the purposive sampling technique with inclusion criteria: stage II and Stage III inpatient cancer patients with sleep disorders in the age range of 36-55 years old were willing to participate and had never received SEFT therapy. This study was conducted at Arifin Achmad General Hospital in Riau Province was the place of this study.

Intervention Procedure

The experimental group was given an explanation of sleep quality and SEFT therapy for 10 minutes. Respondents were given SEFT therapy for 15 minutes, carried out 6 days a week from 4:00-5:00 p.m., while the control group received usual care management to overcome sleep problems. Furthermore, after completing the study, the control group received education about SEFT and how to overcome sleep problems as well.

Data collection

The data collected in this study consisted of demographic data and sleep quality assessed by the Pittsburgh Sleep Quality Index Indonesian version. The Cronbach's alpha for the Pittsburgh Sleep Quality Index-Indonesian version was adequate. According to receiver operating characteristic curve analysis, the cut-off point at a score of 6.5 indicated the best possible relationship between sensitivity and specificity (17).

Instrument for data collection

The Pittsburgh Sleep Quality Index Indonesian version has 19-item and consists of

seven components: (1) subjective sleep quality, (2) sleep latency, (3) sleep duration, (4) sleep efficiency, (5) sleep disturbance, (6) sleeping medication use and (7) daytime dysfunction. Each component is scored from 0 to 3, and the total score ranges from 0 to 21, with a lower score of < 5 indicating good sleep quality and good Cronbach alpha 0.73 (17).

Data analysis

Sleep quality variables were measured before and after treatment on day 6. Statistical analysis used univariate and bivariate analysis. Univariate analysis shows the frequency distribution of respondents based on their demographic status. Differences in sleep quality before and after intervention between two groups were analyzed by t-test analysis.

Ethical approval

Participants provided written informed consent procedures to participate in this study. The hospital also successfully accepted this study with IRB number 147/UN.19.5.1.1.8/UEPKK/2018.

RESULTS

The results consist of data on the characteristics among respondents and the effectiveness of SEFT on sleep quality in both groups analyzed by t-test analysis.

Table 1. Respondent characteristics

Characteristics		Counts (*n*=30)	
		n	%
Age:			
	(36-44 years)	17	56.7
	(45-55 years)	13	43.3
Gender:			
	Male	4	23.3
	Female	26	86.7
Education level:			
Primary high school		11	36.7
Junior high school		15	50.3
Senior high school		4	13.3

Most of the respondents were older adults (41-60 years old), about 17 people (56.7%), female 26 people (86.7%), and education level of junior high school 15 people (50.3%). The demographic data of respondents are shown in

Table 2. A score of sleep quality in the pre and post-test among respondents

Variables	Mean	*n*	SD	Min	Max	p-value
Intervention group						
-Pretest	12.33	15	1.543	10	15	0. 007
-Posttest	8.93	15	2.165	5	17	
Control group						
-Pretest	13.40	15	2.052	10	12	0.026
-Posttest	13.20	15	1.781	10	17	

In the pre-test, the average sleep quality score among respondents in the experimental group was 12.33, then 8.93 after the post-test with a p-value < 0.007. Meanwhile, the pre-test score for sleep quality among respondents in the control group was 13.40, then became 13.20 after the post-test with a p-value of 0.026. There is a significant difference between sleep quality before and after SEFT therapy in both groups (intervention and control groups). Still, sleep quality in the intervention group was better than in the control group. The data can be read in table 2.

DISCUSSION

Most of the respondents in this study were aged 36-45 (late adulthood). The cancer incidence was quite high in Indonesia's late adult age group (18). In addition, most of the respondents were female. This is in line with data from the global cancer observatory, which states that most cancer patients in Indonesia are women with breast cancer (2).

The sleep quality among respondents in the two groups before the treatment was categorized as moderate sleep quality disorder. This is because, at the beginning of the pre-test, some respondents experienced cough and post-op pain, and it was the first time they were treated; thus, they were impacted too late to start sleeping and often woke up at night.

The sleep quality had decreased for two groups, but the intervention group was better than the control group. These data are in line with a study that shows SEFT therapy's effect on postoperative patient sleep quality scores (19). Tapping at specific points on the SEFT can be an energy mediator in the body's meridians (20,21). Energy flow in every organ or cell of the human body will increase the ability of psychological adaptation (22).

Furthermore, the combination of physical, emotional, and spiritual through tapping with spiritual blend in prayer (23–25), remembrance, and breathing regulation, makes the body more relaxed and has an impact on reducing anxiety and increasing alpha waves in the brain to enter the early sleep phase (3,15,19). Releasing catecholamines stimulates the sympathetic nerves' ability to regulate the body's circadian rhythm and induces paradoxical sleep in the brainstem (3,10). That process plays an important role in enhancing sleep quality in cancer patients.

CONCLUSION

SEFT therapy was effective in improving sleep quality among cancer patients. Through SEFT therapy, patients feel more relaxed and calm; another impact on improving sleep quality. Improving the quality of sleep in cancer patients can reduce fatigue, the main side effect of undergoing therapy. SEFT can be used as an alternative for nursing care to overcome sleep problems in cancer patients in hospitals without side effects. This study was conducted in an inpatient room so that the control of visitors and noise from other patients may affect the results of the patient's sleep quality. Therefore, health professionals should focus on the environmental conditions of the patient's hospitalization before applying SEFT therapy in clinical settings.

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