



Effectiveness of therapeutic back massage in promotion of sleep and reduction of pain MONG post CABG patients

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Abstract

Sleep and rest are human needs essential to all individual physical and physiological wellbeing. Pain, stress anxiety, and sleep disorders are common after surgery. Poor level of sleep on the post-operative period may be due to several factors including pain from surgical incision, presence of thoracic drain, pain caused by prolonged time in bed, and high anxiety levels. Massage therapy (MT) is a technique that promotes the manual mobilization of several structures from both muscle and subcutaneous tissue, by applying mechanical force to tissues. Quasi experimental pre-test, post-test control group research design was used in this study. Purposive sampling technique was used to obtain 60 samples that were undergone CABG surgery.

Keywords: massage therapy (Mt), CABG (Coronary artery by pass Graft), Sleep

Introduction

Sleep and rest are human needs essential to all individual physical and physiological wellbeing. About one third of us spent in sleeping. The purpose of sleep is a mystery. However it is necessary to health and a sense of wellbeing. Sleep can be defined as a normal state of altered consciousness during which the body rests. It is characterized by decreased responsiveness to the environment on a person can be aroused from it by external stimuli.

Complementary therapy as an adjuvant therapy may have the potential to improve pain management and palliative acute postoperative pain. Several complementary therapies can increase the effectiveness of medical treatment and enhance patient comfort. For example Soothing music, reflexology, mind body technique, herbal medicines.

Massage therapy used to promote muscle relaxation and to reduce pain, stress and anxiety, which help patients improve their quality of sleep and speed recover. In addition, Massage therapy may enhance patient mobility and recovery from surgery, which allows patients to perform daily activities and take part in physiotherapy treatment and rehabilitation.

Statement of the Problem

A study to assess the effectiveness of therapeutic back massage in promotion of sleep and reduction of pain among post CABG patients admitted in Sree Mookambika Medical college Hospital, kulasekharam.

Objectives of the study

- To assess the pre-test level of sleep among post CABG patients in experimental and control group.

- To assess the pre-test level of pain among post CABG patients in experimental and control group.
- To determine the effectiveness of therapeutic back massage in improving the level of sleep and reduction of pain among post CABG patients in experimental group.
- To find out the association between the level of sleep and the selected demographic variables like age, sex, number of post op days, habits, bed time rituals.
- To find out the association between the level of pain and the selected demographic variables like age, sex, number of post op days, habits, bed time rituals.

Hypotheses

- H1- There is a significant improvement on level of sleep among post CABG patients in experimental group than in control group.
- H2-There is a significant reduction in the level of pain among post CABG patients in experimental group than in control group.
- H3-there is significant association between the level of sleep and the selected demographic variables like age, sex, number of post op days, habits, duration of sleep, bed time rituals
- H4- There is a significant association between pain and the selected demographic variables like age, sex, number of post op days, and duration of sleep, habits, and bed time rituals.

Data collection procedure

Methodology

Research approach: Quantitative approach.

Research design: quasi experimental pre-test, post-test control group research design.

Setting: The study was conducted in Sree Mookambika medical college hospital at Kulasekharam.

Population: post CABG patients in Sree Mookambika medical college hospital Kulasekharam, Kanyakumari district.

Tool

Section A: It deals with demographic variables such as age, sex, personal habits, number of postoperative days, bed time rituals, duration of sleep..

Section B: Section B consist of daily sleep diary. It is used to assess the level of sleep.

Section C: Section C consists of modified Barber Surgical Pain Scale. It is used to assess the Level of Pain among post CABG patients.

The data collection period was one month. The study was conducted in Sree Mookambika institute of medical science with 60 samples. 30 patients were in experimental group and 30 patients were in control group. Before starting the study the investigator obtained permission from hospital authority for conducting the study. The subjects were explained and oral

consent was taken.

Purposive sampling was used to select the sample. The area selected was male and female post-operative cardiac ward. The clients who were waiting for CABG were screened with Sleep Assessment Questionnaire and the clients who had decreased sleep was selected. Then after CABG patient was shifted from intensive care unit to post-operative ward, the researcher conducted pre-test for Sleep by using Sleep Diary and pain by using barber pain scale. Then the researcher gave therapeutic back massage for the clients in experimental group for 3 days. Then post test was conducted on 4th day morning by using barber pain scale and sleep diary was collected from the clients of both experimental and control group. 4th day pain score was taken for analysis.

Results

Section A

This section displays the demographic variables of the subjects selected by the investigator.

Table 1

Demographic variable	Experimental group		Control group	
	F	%	F	%
Age group				
30-40 yrs	2	6.7	1	3.3
41-50 yrs	10	33.3	8	26.7
51-60 yrs	18	60	21	70
Sex				
Male	25	83.3	23	76.7
Female	5	16.7	7	23.3
Habits				
Smoking	7	23.3	7	23.3
Alcohol	10	33.3	9	30
Tobacco use	4	13.3	5	16.7
None	9	30	9	30
No. of post OP day				
3 rd post Op day	8	26.7	6	20
4 th post op day	12	40	14	46.7
5 th post OP day	10	33.3	10	33.3
Rituals				
Milk	4	13.3	2	6.7
Fruits	2	6.7	0	0
Drugs	7	23.3	2	6.7
Water	17	56.7	26	86.7
Duration of sleep				
0-2 hrs	4	13.3	6	20
3-5 hrs	9	30	9	30
6-8 hrs	17	56.7	15	50

Section B

This section deals with,

- Assess the pre-test level of sleep among post CABG patients in experimental and control group.

- Effectiveness of therapeutic back massage in improving the level of sleep by the post-test level of sleep in experimental group.

Table 2:

Study group	Pre test		Day 1		Level of sleep		't'	df	t value
	Mean	SD	Mean	SD	Mean	SD			
Experimental Group	3.86	1	5.2	0.924	1.33	0.479	15.23*	29	2.045
Control group	4.73	1.17	5	0.870	0.266	0.739	1.975	29	2.045

Effectiveness of therapeutic back massage on level of sleep among post CABG patients in experimental and control group. N=60

Table 3

Study group	Pre test		Day 2		Level of sleep		't'	df
	Mean	SD	Mean	SD	Mean	SD		
Experimental Group	3.866	1	6.2	0.846	2.33	0.802	15.93*	29
Control group	4.733	1.172	5.133	0.819	0.4	0.855	2.562	29

Effectiveness of therapeutic back massage on level of sleep among post CABG patients in experimental and control group.

Table 4

Study group	Pre test		Day 3		Level of sleep		't'	Df	t value
	Mean	SD	Mean	SD	Mean	SD			
Experimental Group	3.866	1	7.4	0.813	3.533	1.008	19.19*	29	2.045
Control group	4.733	1.172	5.03	0.718	0.3	1.118	1.469	29	2.045

Effectiveness of therapeutic back massage in reducing pain among post CABG patients in experimental and control group. N=60

Table 5:

Study group	Pre test		Post test		Reduction in postoperative pain		't'	df	t value
	Mean	SD	Mean	SD	Mean	SD			
Experimental Group	25.1	4.04	10.4	6.13	14.7	7.571	10.63*	29	2.045
Control group	24.63	3.428	24.7	3.38	0.066	0.365		29	2.045

Recommendations

1. Studies can be done to determine the other therapeutic benefits of massage therapy on level of sleep and pain.
2. A study can be conducted by including more number of variables.
3. Nurse researcher can do studies related to effect of massage therapy to improve quality care.

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