

DIFFERENCES IN SLEEP QUALITY IN PREOPERATIVE PATIENTS BEFORE AND AFTER BEING GIVEN HYDRO-AROMATHERAPY IN THE INPATIENT ROOM

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Keywords

Aromatherapy, Hydrotherapy, Sleep Quality, Pre Operation

ABSTRACT

Introduction

The surgical process can cause psychological stress, continued stress can lead to poor sleep habits. On average, preoperative patients experience disturbances in meeting their sleep needs, such as frequent awakenings in the middle of the night, anxiety about the surgery to be undertaken, and loud noises.

Method(s)

The purpose of this study was to determine the effect of hydro-aromatherapy techniques on poor sleep quality in preoperative patients at RSUD Dr. H. Abdul Moeloek, Lampung Province in 2020. The method used is a quasi experiment with a one group pretest posttest design. The sampling technique used was purposive sampling with a total of 46 respondents. The population in this study were preoperative patients, the statistical test used in this study was Wilcoxon Signed Ranked.

Result(s)

The results showed that the average value of sleep quality before the intervention was 8.72 and the average after the intervention was 3.61. The p-value of 0.000 showed that there was an effect of hydro-aromatherapy on the sleep quality of preoperative patients at RSUD Dr. H. Abdul Moeloek Lampung Province in 2020.

Conclusion(s)

Researchers suggest nurses in overcoming poor sleep quality in preoperative patients can use hydro-aromatherapy as a companion to pharmacological therapy.

INTRODUCTION

Surgery is a unique experience of planned changes in the body and consists of three phases: preoperative, intraoperative, and postoperative. These three phases are collectively called the perioperative period. The preoperative phase begins when the decision to perform surgery is made and ends when the client is transferred to the operating table. Nursing activities included in this phase include assessing clients, identifying potential or actual nursing problems, planning nursing care based on individual needs, and providing preoperative counseling for clients and those

closest to the client (Kozier, Erb, Berman & Snyder, 2011). Surgery is also a healing effort by slicing, cutting, trimming to eliminate disease, repair damaged tissue and change body shape (Tjokronegoro, et al, 2004 in Rompas, Mulyadi & Henry, 2013).

According to Sartika (2013) in Setiani (2017), data obtained from the World Health Organization (WHO) shows that the number of patients undergoing surgery has increased significantly from year to year. It was recorded that in 2011 there were 140 million patients in all hospitals in the world, while in 2012 the data increased by 148 million people. Operations in Indonesia in 2012 reached 1.2

million people. Based on the results of the activity report at RSUD Dr. H. Abdul Moeloek Lampung Province in 2014 obtained surgical data from all specialties as many as 4,308 people. The surgical process can cause psychological stress. Clients are often worried about surgery and its implications and feel that they are powerless over their situation (Potter and Perry, 2010). Stress also causes a person to try too hard to fall asleep, wake frequently during the sleep cycle, or sleep too much. Continued stress can lead to poor sleep habits (Potter and Perry, 2010).

Increasing the quantity and quality of sleep can use pharmacological and non-pharmacological therapy. One of the non-pharmacological therapies for fulfilling sleep needs is hydrotherapy, which is soaking the feet in warm water. Soaking the feet with warm water can improve sleep quality. Soaking in warm water on the feet is a sleep stimulation technique that is done by soaking the feet in warm water at 37°C - 39°C (Utami, 2015 in Putri, Handayani & Huda, 2016).

Hydrotherapy is a therapy with the use of water to heal and relieve various complaints. And for that, water can be used in various ways and its capabilities have been recognized for a long time (Sustrani, et al in Permady, 2015).

Aromatherapy has a positive effect because it is known that a fresh and fragrant aroma can stimulate sensory and receptors in the nose and then provide further information to areas in the brain that control emotions and memory and provide information to the hypothalamus (Koensoemardiyah, 2009 in Diva, Misrawati & Rismadefi, 2015). Lavender is one of the aromatherapy oils that are widely used today, either by inhalation (inhaled) or by massage techniques. Lavender also helps relieve insomnia, anxiety, and depression (Cuncic, 2014 in Diva, Misrawati & Rismadefi, 2015). Lavender aromatherapy also has a sense of comfort, a sense of openness and confidence. Besides, lavender can also reduce feelings of depression, stress, pain, unbalanced emotions, hysteria, frustration and panic (Wheatley, 2005 in Diva, Misrawati & Rismadefi, 2015).

Based on the above phenomenon after hydro-aromatherapy intervention can overcome sleep quality disorders in patients. So that researchers are interested in researching the differences in sleep quality of preoperative patients before and after being given hydro-aromatherapy intervention at Dr. Hospital. H. Abdul Moeloek Lampung province.

METHODS

This research uses Quasy Experiment Design with One Group Pre-Post design. This research was conducted by RSUD Dr. H. Abdul Moeloek and the time used in the research period 07 February to 07 March 2020. The sample of this study was preoperative general surgery patients with a total of 46 respondents who were taken using a non-random sampling technique using a purposive sampling approach.

RESULTS

Table 1. Respondents Characteristics based on Gender

Gender	Frequency	%
Male	25	54,3
Female	21	45,7
Total	46	100%

The highest number of respondents who experience sleep disorders are men with a total of 25 (54.3%)

Table 2. Respondents Characteristics based on Age

Age	Frequency			
	Mean	Median	SD	Min – Max
Result	2,33	2,00	1,097	1 – 4

The statistical frequency of respondents according to age is 2.33 with a standard deviation of 1.097.

Table 3. Respondents Characteristics based on Sleep Quality

Hidro-Aromatherapy	Sleep Quality			
	Mean	Median	SD	Min – Max
Before	8,72	9,00	1,501	5 – 12
After	3,61	4,00	1,422	1 – 7

Hidro-Aromatherapy	Sleep Quality		
	Mean	SD	P-Value
Before	8,72	1,501	0,000
After	3,61	1,422	

The result of measuring sleep quality before being given hydro-aromatherapy was 8.72 with a standard deviation (SD) of 1.501 and the lowest score of sleep quality was 5 and the highest score of sleep quality was 12 (not good sleep quality). Then after being

given hydro-aromatherapy, the mean is 3.61 with a standard deviation (SD) of 1.422 and the score for the lowest sleep quality is 1 (good sleep quality) and the highest score is 7 (bad sleep quality).

it is known that the average score of respondents' sleep quality before hydro-aromatherapy is done is 8.72. And the average score of respondents' sleep quality after hydro-aromatherapy is 3.61. The average difference in sleep quality scores before and after hydro-aromatherapy is 5.11. When the normality test was carried out, the data obtained were not normally distributed. Because the data is not normally distributed, this study uses the Wilcoxon Signed Rank so that a p-value of $0.000 < (0.05)$, it can be concluded that there is an effect of hydro-aromatherapy on the sleep quality of preoperative patients with evidenced changes in the decrease in the average quality. sleep with a difference of 5.11.

DISCUSSIONS

From the results of research conducted at RSUD Dr. H. Abdul Moeloek Lampung Province in 2020 regarding Differences in Sleep Quality in Preoperative Patients Before and After Giving Hydro-Aromatherapy, it is known that the results in table 4.4 are obtained that the average result of sleep quality before intervention is 8.72 with a standard deviation (SD) is 1.501 and the lowest sleep quality score is 5 and the highest sleep quality score is 12. While the average value of sleep quality after the intervention is 3.61 with a standard deviation (SD) is 1.422 and the lowest sleep quality score is 1 and a score of 1. the highest sleep quality is 7.

Based on these results, it can be concluded that there were significant changes in the patients before and after the hydro-aromatherapy intervention was given. The non-parametric test results using Wilcoxon obtained p-value $0.000 < (0.05)$, it can be concluded that there is a difference in the average score of sleep quality before and after hydro-aromatherapy is given, namely 5.11.

According to Potter and Perry (2010), the surgical process can cause psychological stress. Clients are often concerned about surgery and its implications and feel that they are powerless over their situation. Getting good sleep is important for promoting good health and recovering sick individuals. If people get

enough sleep, they feel their energy has been restored. And vice versa, if the patient's sleep quality is poor, it will make the patient feel tired, easily restless and increase blood pressure (Potter and Perry, 2010).

To improve the quality of sleep, patients can use pharmacological and non-pharmacological therapy. One of the non-pharmacological therapies for fulfilling sleep needs is hydro-aromatherapy. The therapy makes the patient feel relaxed and comfortable, so that it can help improve the bad qualities into good ones. Hydrotherapy or foot baths can stimulate the skin nerves on the feet, namely the flexusvenosus of this nerve series, the stimulation is transmitted to the posterior horn and then to the spinal cord, from here it is forwarded to lamina I, II, III dorsal root, then to the ventro basal thalamus and into the spinal cord. the brain stem, which is precisely in the raphe area of the lower pons and medulla, this is where the sophistication effect (want to sleep) occurs (Guyton, 2007 in Putri, Handayani and Huda, 2016). As for aromatherapy, essential oils affect the mind and body simultaneously through the skin and the olfactory system (sense of smell) to balance and heal, making it an ideal, gentle medicine that not only heals but can also be enjoyed and relaxes (Widiastuti and Sucinda, 2019).

This research was supported by previous researchers conducted by Nur Meity Sulistiya Ayu, Denti Kurniasih and Anggraini Sucinda (2019) with the title The Effectiveness of Warm Water Foot Soak With Lavender Aromatherapy on 17 respondents. with the Wilcoxon test results obtained p value $0.000 < (0.05)$.

The results of this study are also supported by research conducted by Huda, Handayani and Putri (2016) with the title The Effect of Warm Water Foot Soak on Preoperative Patients in Dahlia Room, RSU Dr. H. Koesnadi Bondowoso. The results of the study obtained statistical tests using Mann Whitney. The results showed that the p value was 0.03 (p-value < 0.05), so it can be concluded that there is an effect of warm water foot bath therapy in preoperative patients on reducing sleep quality disorders.

There is also a study conducted by Laura, Misrawati & Woferst (2016) with the title The Effect of Lavender Aromatherapy on the Sleep Quality of Postpartum Mothers. The results of the study obtained statistical tests using the dependent t-test. The results showed that the p value was 0.000 (p-value < 0.05), so it can be concluded that there is an effect of lavender

aromatherapy on postpartum maternal patients to decrease sleep quality disorders.

At Dr. Hospital. H. Abdul Moeloek, Lampung Province, has not made the provision of hydro-aromatherapy therapy as an intervention in providing nursing care to treat sleep disorders at the time of preoperative. So that in overcoming sleep quality disorders preoperatively not only by providing pharmacological therapy but can be accompanied by complementary therapies, one of which is hydro-aromatherapy therapy.

According to the researcher, this research is important because it has a very big influence on both physical and psychological states to make a person better, the effect of pressure or as a means of applying physical energy to the network. This form of physical therapy can also help a person to reduce various complaints, help relax muscles and reduce pain, this is what causes a sense of relaxation in the patient's body.

CONCLUSIONS

Based on the results of research that has been done by researchers at RSUD Dr. H. Abdul Moeloek Lampung Province in 2020, it can be concluded that there are differences in the quality of sleep in preoperative patients before and after being given hydro-aromatherapy at RSUD Dr. H. Abdul Moeloek Lampung Province with a p-value of 0.000.

Suggestions on the research that has been done is expected to be an input, especially for RSUD Dr. H. Abdul Moeloek Lampung Province in the field of nursing services in providing comprehensive and quality nursing care and as a consideration in preparing preventive procedures related to increasing the fulfillment of sleep rest needs in nursing practice regarding the application of therapy, namely hydro-aromatherapy.

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