

Influence Relaxation Muscle Progressive to Sleep Quality Patient with Cancer Breast

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ABSTRACT

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Sufferer cancer breast experiences various physical problems able influence the quality of Sleep. Quality Sleep sufferer cancer breast can influence the system of immunity body, cognitive ability, and daily activity life. One intervention non pharmacology for overcoming disturbance in Sleep is the relaxation of muscle progression. Study This aims to identify the influence of relaxation muscle progress on the quality of Sleep sufferer cancer boobs. Research design using quasi-experiments. A draft study using one group pretest and post-test control group design involving 16 Respondents sufferer cancer breast. The sampling method used is non-probability sampling with a consecutive sampling technique. Quality data collection Sleep use questionnaire Pittsburg Quality Sleep Index (PSQI). Research results by the Man Whitney test obtained statistical test results p value = 0.001 ($P < 0.05$), indicating an influence on exercise relaxation muscle to quality Sleep sufferer cancer. With study expected that exercise relaxation muscle progress can be used as a method of easy relaxation for increased quality Sleep sufferer cancer breast so that can be applied in everyday life.

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1. INTRODUCTION

Quality Sleep covers the evaluation of quality Sleep in a subjective manner, sleep latency, length of time sleep, efficiency sleep, distraction sleep, use of drugs, and dysfunction afternoon day. If he needs to Sleep enough and the quality of his Sleep well, then his health status increase in stamina and energy awake as well as can fulfillment in maintaining activity in life every day [1]. Quality Sleep can be known with assessment, including subjective and objective data. Subjective data, good Sleep or foul, can be evaluated with the perception of the sufferer's cancer breast about his sleep parameters, and objective data can be seen from inspection, physical and diagnostic. Difficulty in Sleep is a problem common and significant in someone who experiences the disease of breast cancer [2]. Breast cancer is one type with sufficient prevalence and can happen to men and women.

In Indonesia, cancer breast occupies order patients first take care stay throughout House sick (17.64%) in 2015, while in 2016, the number sufferer cancer breasts in women as many as 4708 people (19.38%) and 62 people (0.31%) cancer breasts in men [3]. Sleep in breast cancer patients can cause disturbance as much as 3.9 times compared to patients who do not experience pain. The amount of sufferer cancer breast feels several level painful starts, from light until great, of I until chronic disease caused by cancer That Alone or painful post-surgery, where research latest report an incidence of 47% pain post-mastectomy 2-3 years after surgery [4].

Therapy pharmacology has a Lot used for treating disturbance sleep. However, the potency effect side limits the intervention period long. one alternative besides treatment through therapy pharmacology to overcome sleep disturbance is with Do action Progressive Muscle Relaxation (PMR) exercises, where progressive muscle relaxation is something therapy modality to use get sensation to relax by contracting something group muscle and stop contraction become relax [5].

2. METHODS

A study was conducted in March -June 2023. The research was carried out at a hospital located in Banjarmasin. The research design used is a quasi-experimental pre and post-test with the control

group with population whole patient cancer breasts and each - each amount sample 8 respondents group intervention and eight respondents group control, which is taken with the total sampling method. Data analysis used Wilcoxon signed rank test and Mann test Whitney test. Quality sleep in research is measured using the Pittsburgh sleep quality index (PSQI).

3. RESULTS AND DISCUSSION

1) Frequency Of Quality Sleep Before Treatment

Group	Quality Sleep	F	%
Experiment	Very good	0	0
	Good	2	25
	Not enough	4	50
	So lacking	2	25
	Total	8	100
Control	Very good	1	12.5
	Good	4	50
	Not enough	3	37.5
	So lacking	2	25
	Total	8	100

Based on the results study, before the treatment response to respondents to the quality of their Sleep feel, in groups experiment, almost half of the respondents considered the quality of Sleep not enough, as much as 4 (25%). Likewise, group control respondents consider quality Sleep as good as 50%.

2) Frequency Of Quality Sleep After Treatment

Group	Quality Sleep	F	%
Experiment	Very good	1	12.5
	Good	4	50
	Not enough	3	37.5
	So lacking	0	0
	Total	8	100
Control	Very good	2	25
	Good	3	37.5
	Not enough	2	25
	So lacking	1	12.5
	Total	8	100

Based on the results study, after he did treatment, response respondents to the quality of their Sleep feel, in groups experiment with the amount quality slept very well several 2 (25%), suitable as much as 3 (37.5), Less as much as 2 (25%), and significantly less 1 (12.5%). Whereas group control quality slept very well, as many as 2 (23%), suitable as much as 3 (37.5%), less as much as 2 (25%).

3) The effect of PMR (Progressive Muscle Relaxation) on quality Sleep

Quality Sleep	Treatment		Control	
	Pre- Intervention	Post- Intervention	Pre- Intervention	Post- Intervention
Very good	0	1	1	2
Good	2	4	4	3
Not enough	4	3	3	2
Very less	2	0	2	1
<i>Wilcoxon signed the rank test</i>	$p = 0.001$		$p = 0.404$	
<i>Mann Whitney test</i>	$p = 0.001$			

The table above shows differences in results pre and post-test in each group. The pretest and post-test results in the group treatment and control obtained results that increased sleep quality. Based on statistical test results Wilcoxon Signed Rank Test (with significance $p=0.05$) was found to exist enhancement of sleep quality with significance in the group treatment, $p=0.001$ for group treatment, while in the group control obtained $p=0.404$, so enhancement of sleep quality is not significant. From these data, in group treatment, there is a difference before and after giving progressive muscle relaxation intervention. The results of the Mann-Whitney Test were used to know the difference in score stress between group treatment and group control after getting progressive muscle relaxation intervention. This showed with $p=0.001$, meaning a significant difference score exists between group treatment and control.

Discussion

Influence Progressive muscle relaxation to Quality Sleep

Research shows the effect of progressive muscle relaxation on stress has a significant influence. PMR is therapy relaxation with movement tightening and relaxing one muscle part of the body at one time to give a feeling of relaxation physically. Movement tightens and relaxes in a manner progressive group muscle. This is done in a manner in a row. At the moment, perform attention PMR patient directed for differentiate feelings experienced moment group muscle diluted and compared when muscles in condition tense [6]. PMR affects relaxation, and the ability management self can reduce tension, muscle, and stress, lower blood pressure, increase tolerance to activity every day, and improve immunity so that the quality of DM patients is increasing [7]. Pretest results with the use Pittsburgh Sleep Quality Index (PSQI) questionnaire for respondents with cancer breasts in the group treatment in the study almost entirely own quality less Sleep Good as many as 4 people. In groups of control, 4 people with quality Sleep well, and 3 with quality Sleep. Research results This shows no meaningful difference in the quality of Sleep good in group treatment nor group control before given progressive muscle relaxation exercises. Results of the pretest group intervention nor group control showed quality average value Sleep ok.

Post-test results after giving intervention progressive muscle relaxation, in the group treatment obtained respondents with amount quality slept very well some 2 (25%), suitable as much as 3 (37.5%), Less as much as 2 (25%), and significantly less 1 (12.5%). Whereas group control quality slept very well, as many as 2 (23%), suitable as much as 3 (37.5%), and less as much as 2 (25%). Results obtained from the study This shows quality sleeping in group treatment experience improvement. This aligned according to [8], where the client is expected to manage the condition body to the stress after doing PMR. The ability to manage this stress expected client can manage stress will impact the stability of the emotional client. This is also appropriate; Prasetyo [9] says relaxation can reduce subjective tension and influence other physiological processes. Relaxation muscles walk together with a response autonomous from nerve parasympathetic. Relaxation muscle walks together with mental relaxation. Feeling worried subjective can be reduced or removed with suggestions. No direct or delete and remove component autonomic from feeling it.

In research, This respondent did progressive muscle relaxation (PMR) exercises routine. 2 times in the morning and evening for 3 days. The results are that respondents feel more relaxed, their body becomes stiff, and easy to start sleeping. Respondents feel happening declined symptoms and experienced stress previously, so the quality of Sleep respondent increased and was No disturbed again. This happens Because moment does moment perform attention PMR patient directed for differentiate feelings experienced moment group muscle diluted and compared when muscles in condition tense attention patient directed For differentiate feelings experienced moment group muscle diluted and compared when muscles in condition tense so that give feeling relaxation physically. When conducting PMR patient Research results in This processed and analyzed using the Wilcoxon sign rank test obtained results that progressive muscle relaxation intervention against quality Sleep patients obtained results that happen enhancement quality sleeping in group treatment and group control. Change quality Sleep significantly in the group treatment, while the group control obtained increased quality Sleep No significant. From these data, in group treatment, There is enhancement before and after giving progressive muscle relaxation intervention in patients. Mann-Whitney Test results showed a difference in significant scores between group treatment and group control.

Research results This supports research conducted by [10], which stated that There is a decline rate of stress after given where progressive relaxation happens subtraction in excitement physiological be marked with decline pulse heart Then happen enhancement relaxation. Other supporting research is of [11] mentioned that the progressive relaxation effect could significantly lower the stress rate. According to [12], relaxation muscle effectively reduces tension muscles in the body, changes the activity system nerves sympathetic, and declines pulse, blood pressure, and neuroendocrine function in people who experience anxiety. Then researchers have recommended that PMR can be a relaxation method for chemotherapy patients to reduce anxiety.

Research results are also supported by [13] that PMR can reduce depression, anxiety, and length of stay in patients with breast cancer after undergoing radical mastectomy. Studying others by [14] gives PMR training to student meter end can reduce level worry in face task en. A study about the PMR itself was also carried out by [15] on the respondents with schizophrenia, which obtained results that declined number anxiety and increased quality of life. Likewise, research conducted by [16] showed that PMR training has a meaningful influence on functional status physical, psychological, and social in patients with moderate cancer operate chemotherapy, so PMR is beneficial as a therapy complementary to reducing problem physique nor psychological from patient That alone.

4. CONCLUSION

Based on the respondent's responses before giving intervention to the quality of their Sleep feel, in the group experiment, almost half of the respondents considered the quality of Sleep not enough, as much as 4 (25%). Likewise, group control respondents consider quality Sleep as good as 50%. Response respondents after the intervention to quality their Sleep feel, in groups experiment almost half respondents consider quality Sleep not enough as much as 4 (25%). Likewise, group control respondents consider quality Sleep as good as 50%. Based on statistical test results Wicoxon Signed Rank Test (with significance $p=0.05$) was found exists enhancement quality Sleep with significance in the group treatment, p This showed with $p=0.001$ for group treatment, while in the group control obtained $p = 0.404$, so enhancement quality Sleep No significant. From these data, in group treatment, There is a difference before and after giving progressive muscle relaxation intervention.

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