The Effect of Benson Relaxation Therapy on Sleep Quality in Elderly

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OPEN ACCESS

Proceeding STIKep PPNI Jawa Barat

Website :
https://proceedings.stikep-ppnijabar.ac.id/index.php/psj

Volume 1 (1), 174-179

Article info

Received : December 28, 2024
Revised : April 22, 2025
Accepted : May 02, 2025
Published : May 19, 2025

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Citation
Lucya, V., & Bintang, O. (2025) The effect of Benson relaxation therapy on sleep quality in elderly. *Proceeding STIKep PPNI Jawa Barat*, 1(1), 174-179.

Abstract

Objective: The decline in physical function commonly experienced by the elderly can affect various aspects of life, including sleep quality. Poor sleep can lead to further health complications and decreased quality of life, making early intervention essential. This study aimed to examine the effect of Benson relaxation therapy on sleep quality in elderly individuals.

Method: This study used a quasi-experimental two-group pre-test and post-test design involving 60 elderly participants, divided equally into control and intervention groups. Purposive sampling was applied, and sleep quality was measured using the Pittsburgh Sleep Quality Index (PSQI). Data were analyzed using paired and independent t-tests to determine significant differences.

Results: The findings revealed a significant improvement in sleep quality among the intervention group following Benson relaxation therapy. The proportion of participants with good sleep quality increased by approximately 8.2%. The intervention group showed statistically significant improvement with a p-value of 0.000 ($p < 0.05$), while the control group did not show significant change, with a p-value of 0.161.

Conclusion: Benson relaxation therapy has a positive effect on improving sleep quality in the elderly. It is recommended as a non-pharmacological intervention to support better rest and enhance overall well-being in older adults.

Keywords: Benson relaxation therapy, elderly, sleep quality, non-pharmacological intervention, Pittsburgh Sleep Quality Index (PSQI)

INTRODUCTION

As the elderly age, they experience quite complex problems with changes experienced biologically, psychosocially, emotionally, spiritually and socially (Senja & Prasetyo, 2021). Changing sleep needs can lead to sleep disorders (Senja & Prasetyo, 2021). Sleep disorders are a condition that affects several factors, such as the amount, duration or quality of a person's sleep. Elderly people need long sleep and short deep sleep (Hasibuan & Hasna, 2021). The prevalence of sleep disorders in the elderly is quite high in Indonesia, namely around 67%. These disorders can affect the sleep quality of the elderly (Hastuti et al., 2019). According to basic health research Riskesdas (2018) the prevalence of sleep quality in West Java is 39.6%. Every year it is estimated that around 20% - 50% of elderly people report poor sleep quality (Anita, 2018). Poor sleep quality for the elderly is the inability to restore their physical condition to normal, which results in balance disorders which result in weakness, headaches, sleepiness and fatigue (Ernawati, 2022). Poor sleep quality will cause delays in the process of thinking and activities, lack of focus and concentration, and disruption

of short-term memory (Anggraeni et al., 2023). Pharmacological and non-pharmacological therapy is one of the efforts made to reduce sleep quality disorders. In pharmacological therapy for elderly people who experience sleep disorders, sleeping pills can be given. Pharmacological therapy can cause side effects that are dangerous for the health of the elderly. The results of the study showed that there was an increase in the mortality rate in elderly people who used sleeping pills [8]. Non-pharmacological therapy for elderly people who experience sleep disorders can be done with clean sleep therapy, sleep management therapy, psychological therapy, Cognitive Behavioral Therapy (CBT) and relaxation therapy (Astuti, 2013).

Benson's relaxation therapy is a breathing exercise technique that involves religious belief factors. Long breaths can provide sufficient energy that the body needs to cleanse the blood and prevent damage to brain tissue due to lack of oxygen so that O2 is sufficient in the brain and the body becomes relaxed (Manurung, 2019). Benson relaxation therapy is a therapy that combines relaxation techniques with strong good beliefs. The component that will be used in this therapy is religious belief. This is done by saying words or sentences according to each person's beliefs repeatedly, accompanied by an attitude of resignation. The mention of words with beliefs in the Islamic religion is a healing and solution to physical, spiritual and social illnesses for someone who is Muslim (Rosyanti & Hadi, 2022). This research uses a letter in the Islamic holy book, namely Surah Al-Baqarah verse 255, which is called the chair verse. The combination of breathing relaxation and a religious belief approach is able to relax the body from tension. In a relaxed state, there will be a decrease in the hormones cortisol and adrenaline which have the effect of improving sleep quality (Fateme et al., 2019).

METHOD

Study Design

This research was a Quasi Experimental, with a two group pretest-posttest with control group design.

Sample

The population in this study were elderly at Public Community Service (PKM) in Sukajadi area, Bandung City, Indonesia Samples were calculated using G*Power Software version 3.1.9.4. The number of samples in this study was 60 respondents who were divided into two groups. 30 elderly in control group and 30 elderly in intervention group. Purposive sampling was use to sellected the participants. The inclusion criteria was elderly aged ≥60 years old and able to communicate, cooperative, willing to take part in activities from the beginning to the end of the session, elderly who are Muslim. The exclusion criteria was elderly who had hearing loss.

Instrumen

The instrument used in this research was the Pittburgh Sleep Quality Index (PSQI) questionnaire. The PSQI questionnaire is an international standard tool and has been translated into several languages and proven to have good validity and reliability for measuring sleep quality. The PSQI was developed by Buysse, Reynolds, Monk, Berman, & Kupfer in 1989. The PSQI questionnaire consists of 19 questions that measure 7 assessment components, namely subjective sleep quality, sleep latency, sleep duration, effective sleep duration in bed (habitual sleep efficiency), sleep disturbances, use of sleeping pills and impaired concentration during the day. The PSQI questionnaire is widely used in research in Indonesia, but is more widely used in adult and elderly age groups (Sukmawati & Putra, 2019). The higher the score, the worse the sleep quality. A person is said to have good sleep quality if the score is 1-5, light 6-7, moderate 8-14 and poor sleep quality if the score reaches 15-21.

Procedure Intervention

The therapy sessions were conducted in a quiet and comfortable environment with minimal distractions. Participants were instructed to sit or lie down in a relaxed position and gently close their eyes. They were guided to take slow, deep breaths through the nose, hold for a moment, and exhale slowly through the mouth for 2–3

minutes to initiate relaxation. Participants were then encouraged to silently repeat a calming word or phrase such as "peace," "relax," or "calm" while maintaining steady breathing. If distracting thoughts occurred, they were gently redirected to their chosen word. A body scan technique was also used, guiding relaxation from head to toe. Each session lasted 10–20 minutes and was conducted over two weeks, followed by a post-test.

Data Analysis

Data analysis in this study used SPSS 23.0 for Windows. Analysis of the data used in this research is by looking for the frequency distribution of demographic data which determines the mean, median and standard deviation. The paired simple t-test is used to measure two data that are related to each other in a group, and the data is taken from the same population and the Independent Sample t-Test is used to test the difference in the average of two samples taken from two unpaired populations.

RESULT

Description of Respondent Characteristics

The results of the characteristics of research respondents in the study are presented in the following table**.**

Table 1 The demographic data of the respondents (N = 60)

Variabel	Intervension Group (N=30) F (%)	Control Group (N=30) F (%)
Age		
Mean (±SD)	67.30 (±6.176)	68.33 (±5.862)
Range	60 - 79	60 -80
Gender		
Male	7 (23.3%)	6 (20 %)
Female	23 (76.7 %)	24 (80 %)
Marital status		
Merried	6 (20 %)	13 (43.3 %)
Widow	18 (60 %)	13 (43.3 %)
Widower	6 (20 %)	4 (13.4 %)
Educational Level		
No School	1 (3.3 %)	2 (6.7%)
Elementary School	18 (60 %)	16 (53.3 5)
Junior High School	4 (13.3 %)	4 (13.3 %)
Senior High School	5 (16.7 %)	7 (23.3%)
College	2 (6.7%)	4 (13.3 %)
Occupation		
No Job	18 (60 %)	21 (70 %)
Retired	4 (13.3 %)	4 (13.3 %)
Self-Employed	8 (26.7 %)	5 (16.7 %)

Table 1 showed that the average age of respondents was 67 years old in the intervention group and 68 years old in the control group. Majority of the respondents were female intervention group (76.7%), and control group (80%). The marital status in the intervention group was more widowed by 60%. Educational level data in this study shows that of the two groups majority graduated from elementary. Based on work data, there is more unemployment in the control group than in the intervention group, where in the control group it is 70% and in the intervention group it is 60%.

Table 2 Sleep Quality Scores before and after Benson Relaxation Intervention (N=60)

	Intervension Group		Control Group	
	Mean ± SD	Range	Mean ± SD	Range
Pre test	11.30	7-18	10.20	6-15
Post test	8,03	5-13	10,13	6-15

Based on table 2 shows the mean score of Pre Test and Post Test in intervention group were obtained from a 11.30 to 8.03. The control group obtained a mean score of the Pre Test was 10.20 to 10.13. It can be concluded that sleep quality in the intervention group decreased more than the control group.

Table 3 Sleep Quality of the Responden (N=60)

Sleep Quality	Intervension Group		Control Group	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Good	-	5 (8.2)	-	-
Moderate	26 (42.6)	18 (29.5)	25 (41)	24 (39.3)
Light	2 (3.3)	-	2 (3.3)	2 (3.3)
Poor	2 (3,3)	7 (11.5)	3 (4.9)	4 (6.6)

Based on Table 3, the pre-test results in the intervention group showed that 3.3% of participants had light sleep quality, 42.6% had moderate sleep quality, and 3.3% had poor sleep quality. In the post-test, 8.2% achieved good sleep quality, 11.5% had poor sleep quality, and 29.5% had moderate sleep quality. In the control group, the pre-test results indicated that 4.9% of participants had light sleep quality, 41% had moderate sleep quality, and 3.3% had poor sleep quality. Meanwhile, the post-test results for the control group showed that 6.6% had light sleep quality, 39.3% had moderate sleep quality, and 3.3% had poor sleep quality.

Table 4 Differences in Sleep Quality Scores Before and After Intervention [n=60]

	Mean Difference	Std. Deviation	95% CI		t	p-value
			Lower	Upper		
Intervention Group (n=30)	3.267	1.143	2.840	3.693	15.658	0.000
Control Group (n=30)	.067	.254	-.028	.161	1.439	0.161

The data was analyzed using the Paired Sample t-Test. In the intervention group, the difference between the average pre-test and post-test scores was 3.267, with a p-value of 0.000. In the control group, the average difference between the pre-test and post-test scores was 0.67, with a p-value of 0.161.

DISCUSSION

The results of this study indicate a significant improvement in sleep quality among elderly participants following Benson relaxation therapy. The intervention group showed a reduction in Pittsburgh Sleep Quality Index (PSQI) scores, reflecting better sleep quality, compared to the control group. This finding aligns with prior research suggesting that relaxation therapies can be effective non-pharmacological interventions for managing sleep disturbances in older adults (Utami et al., 2021). Elderly individuals often face multiple challenges to achieving good sleep quality, including physiological changes, chronic illnesses, and psychological factors such as anxiety or depression (Hastuti et al., 2019) (Senja & Prasetyo, 2021). Poor sleep quality is associated with various negative outcomes, such as impaired cognitive function, increased fall

risk, and reduced quality of life(Anggraeni et al., 2023) (Ernawati, 2022). This underscores the importance of effective interventions like Benson relaxation therapy to address sleep disturbances in this population.

Benson relaxation therapy is based on eliciting the relaxation response—a physiological state of deep rest characterized by reduced metabolic rate, decreased heart rate, and lower stress hormone levels (Ningrum, 2020). By combining deep breathing exercises with a religious or personal belief system, this therapy helps decrease cortisol and adrenaline levels, which are known to disrupt sleep (Fateme et al., 2019)(Rosyanti & Hadi, 2022). As a result, the therapy not only addresses physical tension but also provides psychological comfort and spiritual fulfillment. These elements may be particularly beneficial for elderly individuals, as religious practices and beliefs are often a source of coping and resilience in this population (Manurung, 2019)(Rosyanti & Hadi, 2022). The observed improvement in sleep quality in this study may also be attributed to the consistent and cooperative participation of the elderly in the intervention sessions. The importance of regularity in practice has been emphasized in previous studies, which found that sustained application of relaxation techniques leads to long-term benefits in managing sleep disorders (Sukmawati & Putra, 2019)(Utami et al., 2021).

Moreover, the incorporation of a religious component, such as recitation from Islamic scripture, has been shown to enhance the effectiveness of relaxation techniques by fostering a sense of inner peace and reducing anxiety (Hamid & Rachimah, 2022)(Manurung, 2019). Despite the promising results, the study has some limitations. The intervention was conducted over a relatively short duration of two weeks, and long-term adherence and outcomes were not assessed. Future studies should explore the sustained effects of Benson relaxation therapy and its application across diverse cultural and religious contexts. Additionally, the study focused exclusively on elderly Muslims, which may limit the generalizability of the findings to non-Muslim populations or individuals with different spiritual practices.

CONCLUSION

The therapy's combination of deep breathing and religious belief effectively reduces tension and induces relaxation, making it a promising non-pharmacological approach for managing sleep disturbances in the elderly. Regular implementation of Benson relaxation therapy could enhance sleep patterns and overall well-being in this population.

Acknowledgement

The researcher expresses heartfelt appreciation to the elderly participants who took part in this study, as well as to the staff and administrators of the facility for their support and cooperation. Special thanks are extended to academic mentors and colleagues for their guidance throughout the research process.

Conflict of Interest

The author declares no conflict of interest in relation to the conduct, authorship, or publication of this study.

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