



MUROTAL INFLUENCE ON SLEEP QUALITY IN VERTIGO PATIENTS AT RSU MAYJEN H.A.THALIB KABUPATEN KERINCI IN 2020

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ABSTRACK

Vertigo causes a person to experience sleep quality problems. Which sleep and rest are one of the physiological needs that are needed by humans. Sleep is a state of unconsciousness, decreased perception of the environment. The purpose of this study was to determine the effect of murottal on sleep quality in vertigo patients at RSU Mayjen H.A.Thalib Kabupaten Kerinci. This study used a Pre Experiment One Group Pretest-Posttest research design. The sampling technique used was purposive sampling with 8 vertigo patients as respondents at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020. Murottal is performed for 3 consecutive nights before going to bed at night. The results showed a murottal effect on sleep quality in vertigo patients with p value $< \alpha$ ($0,011 < 0,05$). The conclusion shows that murottal listening is effective for improving sleep quality in vertigo patients.

Keywords: *Murrotal Influence, Vertigo Patients, Sleep Quality*

INTRODUCTION

Vertigo is caused due to balance disturbances in the inner ear (balance apparatus or vestibular part) or possibly in the brain. The most common form of vertigo is benign paroxymal positional vertigo (BPPV), which is the illusion of movement caused by sudden head movements or head movements in certain direction. These type are generally severe and manageable. Another cause of vertigo is inflammation of the inner ear (labyrinthitis) which is characterized by sudden episodes of vertigo and sometimes accompanied by hearing loss. The most common cause is a viral or bacterial infection (Zullies Ikawati, 2010).

Based on the study of recurrent spontaneous vertigo with intercal headshaking nystagmus from Lee SU, et.al (2018) in the Departement of Neurology, Seoul National University College of Medicine, South Korea, the prevalence rate of peripheral vertigo (BPPV) in the United States is around 64 out of 100.000 people with tendency to occur in women

(64%). In medical terms, reccurent spontaneous vertigo (RSV) is experienced at last 12 seconds from the primary phase. However, usually 2-5 seconds.

In Indonesia, the incidence of vertigo is very high, around 50 % from 40-50 years old to parents who are 75 years old. According to research conducted by Enjtep, it shows that most vertigo sufferers experience disturbances in the brain space that regulates balance and 28,3 % of them experience minor rock disease (debris) on the balance device (Doni Asmada, 2018).

With the occurrence of vertigo, it causes a person to have trouble sleeping patterns. Which sleep and rest are one of the physiological needs that are needed by humans. Sleep is a state of unconsciousness, decreased perception of the environment. During sleep there is a recovery process which is beneficial to restore a person's condition to its original state, so that the body that was previously exhausted will be refreshed (Riyadi and Widuri, 2015 in Jaenudin, et al, 2017).



Management methods that aim to improve sleep quality are generally divided into pharmacological and non-pharmacological therapies. Pharmacological therapy has an immediate effect. However, the use of these drugs has a long term harmful effects on health. Thus, an effective and safe non-pharmacological therapy is needed to improve sleep quality, especially in patients with physical disease problems such as vertigo (Stanley, 2006 in Sasongko, et al, 2016).

Murottal therapy with a slow and harmonious tempo can reduce stress hormones, activate the natural endophrine hormone (serotonin). This mechanism increases feelings of relaxation, reduces fear, anxiety, and tension and improves the body's chemical system thereby lowering blood pressure, slowing down breathing, heart rate, pulse and brain wave activity. Therefore murottal therapy has the potential to pulse, and brain wave activity. Therefore murottal therapy has the potential to improve sleep quality (Heru, 2008 in Sasongko Research, et.al, 2016).

The general objective of this study was to determine the existence of murottal effects on sleep quality in vertigo patients in RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020.

MATERIAL AND METHODS

The type of research used in this study is the One Group Pretest-Posttest Experiment. The population in this study were vertigo patients in RSU Mayjen H.A.Thalib Kabupaten Kerinci Tahun 2020 with 62 people. The sample in this study were 8 people using purposive sampling technique. The tools used un this study were a headset and a mobile phone to play murottal videos and observation sheets. Murottal is performed for 3 consecutive nights before going to bed at night. Statistical analysis used frequency distribution for univariate and Paired t Test for bivariate.

RESULTS

A. Characteristics of Respondents

Table 1

Characteristics of Respondents Based on Age of Respondents

Characteristics of Respondents	f	%
Age		
25-30 year	2	25,0
31-35 year	1	12,5
> 35 year	5	62,5

Based on table 1, it explains that of the 8 respondents who suffered from

vertigo more that some are > 35 years old as many as 5 respondents (62,5%).

Table 2

Characteristics of Respondents Based on Gender of Respondents

Characteristics of Respondents	f	%
Gender		
Male	3	37,5
Female	5	62,5



Based on table 2, it explains that of the 8 respondents who suffered from vertigo more than half were female 5 respondents (62,5%).

Table 3**Characteristics of Respondents Based on Respondents Occupations**

Characteristics of Respondents	f	%
Profesi		
PNS	2	25,0
Farmer	2	25,0
IRT	3	37,5
etc	1	12,5

Based on table 3, it explains that of the 8 respondents who suffered from vertigo, half of them have jobs as farmers as many as 3 respondents (37,5%).

Table 4**Characteristics of Respondents Based on Respondents Education**

Characteristics of Respondents	f	%
Education		
SD	1	12,5
SMP	2	25,0
SMA	3	37,5
PT	2	25,0

Based on table 4, it explains that of the 8 respondents who suffered from vertigo, half of them had high school education as many as 3 respondents (37,5%).

B. Univariate Analysis**1. Average Sleep Quality in Vertigo Patients Before Listening to Murottal at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020****Table 5****Average Sleep Quality in Vertigo Patients Before Listening to Murottal**

Sleep Quality	Mean	Standar Deviasi (SD)	Min-Maks
pretest	1,25	0,463	1-2

Based on table 5, it explain that the average sleep quality of vertigo patients before listening to murottal 1,25.

2. Average Sleep Quality in Vertigo Patients After Listening to Murottal at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020



Table 6
Average Sleep Quality in Vertigo Patients Before Listening to Murottal

Sleep Quality	Mean	Standar Deviasi (SD)	Min-Maks
posttest	1,88	0,354	1-2

Based on table 6, it explain that the average sleep quality of vertigo patients after listening to murottal 1,88.

C. Bivariate Analysis

1. The Effect of Murottal on Sleep Quality in Vertigo Patients at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020

Table 7
The Effect of Murottal on Sleep Quality

Sleep Quality	Mean	Standar Deviasi (SD)	Standar Error Mean	95 % CI	P Value
Pretest					
Posttest	0,625	0,518	0,183	1,058-0,192	0,011

Based on table 7, the Paired T Test results show that there is a significant difference in sleep quality before and after given murottal listening intervention with p value=0,011 < 0,05. So it can be concluded that there is a murottal effect on sleep quality in vertigo patients at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020.

DISCUSSION

1. Sleep Quality in Vertigo Patients Before Listening to Murottal at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020

Vertigo is a type of disease characterized by the illusion of movement and is not a form of migraine. If you feel yourself spinning, it is called subjective vertigo. If the environment is rotating, it is called objective vertigo (Zullies Ikawati, 2010).

Dizziness or vertigo is caused by a disturbance in the body's balance system which results in a mismatch between the actual body position and what is perceived by the central nervous system (Bashiruddin, 2008 in Akbar, 2013).

Based on the research result of Faisal Mahlufi (2016) with the title of research on the effect of murottal therapy on the sleep quality of insomnia sufferers in the elderly in Southeast Pontianak sub-district in 2016 it was found that the most respondents experienced mild insomnia before being given intervention as many as 11 respondents (64,70%), moderate insomnia 4 respondents (23,53 %) and severe insomnia 2 respondents (11,76%).

Meanwhile, based on research by Ricky Riyanto, et al (2020) with the title of research on murottal therapy in an effort to improve sleep quality in the elderly, it was found that before the murottal intervention the subject woke up murottal at night as



many as 7 times and the length of sleep before the 3 hour sleep intervention carried out.

With the occurrence of vertigo, it causes a person to have trouble sleeping patterns. which sleep and rest are one of the physiological needs that are needed by humans. sleep is a state of unconsciousness, decreased perception of the environment during sleep there is a recovery process which is useful to restore a person's condition to its original state, so that the body that was previously exhausted will be refreshed (Riyadi and Widuri 2015 in Jaenudin, et al, 2017)

2. Sleep Quality in Vertigo Patients After Listening to Murottal at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020

Management methods that aim to improve sleep quality are generally divided into pharmacological and non-pharmacological therapies. Pharmacological therapy has an immediate effect. However, the use of these drugs has a long term harmful effects on health. Thus, an effective and safe non-pharmacological therapy is needed to improve sleep quality, especially in patients with physical disease problems such as vertigo (Stanley, 2006 in Sasongko, et al, 2016).

Murottal is a sound recording of the Al-Qur'an song by a Qori (Al-Qur'an reader) the physical chanting of the Qur'an which contains elements of the human voice, the human voice is an amazing healing instruments and one that is most easily accessible (Heru 2008 in Novela Ragil, 2018).

Based on the research of Jaenudin, et al (2017) with the title of research on the effect of listening to the Qur'an on the quality of sleep of the final year students of the 2012 nursing undergraduate study program at STIK Immanuel Bandung, it shows that the quality of sleep of the final year student of the undergraduate nursing program at STIK Immanuel Bandung

shows that most respondents 61,11 % namely good sleep quality and as much as 38,89% of respondents experienced poor sleep quality.

Murottal therapy with a slow and harmonious tempo can reduce stress hormones, activate the natural endorphine hormone (serotonin). This mechanism increases feeling of relaxation, reduces fear, anxiety, and tension and improve the body's chemical system thereby lowering blood pressure, slowing down breathing, heart rate, pulse and brain wave activity. Therefore therapy has the potential to improve sleep quality (Heru, 2008 in Sasongko's Research, et al, 2016).

3. The Effect of Murottal on Sleep Quality in Vertigo Patients at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020

Listening to the Qur'an also helps sleep quality because when listening to the Qur'an the impulses will be transmitted to the thalamus and then forwarded to the prefrontal area (the meaning of events, the meaning contained in the Al-Qur'an). The impulses will proceed to the hypothalamus (emotional memory center) and amygdala (emotional center) after which the stimuli are transmitted to the hypothalamus.

The hypothalamus secretes several hormones and controls the work of the endorphins. Endorphins or happiness hormones are called endogenous opiates because they originate in the body and have effect such as heroin and morphine. This substance is related to natural pain relievers and functions to respond happy and calm so that it can help in the sleep process and achieve good sleep functions to respond to stress that makes it happy and calm so that it can help in the sleep process and achieve good sleep quality (Jaenudin Ahmad, et.al, 2012).

This is supported by the research of Sasongko Priyo, et.al (2016) with the title of research on the effect of murottal Al-Qur'an therapy on the quality of sleep of the elderly in the Councilorata Cilacap



Social Rehabilitation Unit, showing that there are significant differences in the average sleep quality before and after treatment in the intervention group. This is indicated by the results of p value = 0,000 < 0,05.

CONCLUSION

Based on the results of research conducted on 8 respondents, it can be concluded that the average sleep quality of vertigo patients before listening to murottal is 1,25. Meanwhile the average sleep quality of vertigo patients after listening to murottal was 1,88. The results of the Paired T Test showed that there was a significant difference in sleep quality before and after giving murottal listening intervention with p value = 0,011 < 0,05. So it can be concluded that there is a murottal effect on sleep quality in vertigo patients at RSU Mayjen H.A.Thalib Kabupaten Kerinci in 2020.

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