



## The Effect of Al-Qur'an Therapy on Insomnia Problems on Medical Students

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### ABSTRACT

**Background :** Sleep disturbance is a need for sleep and sleep time that is not met (about 7 to 8 hours a day) resulting from difficulty falling asleep, maintaining sleep or getting up too early. Adolescence and adulthood are the ages with the highest risk of insomnia and of course have a negative impact on the performance of daily activities. One method that has developed is using Murattal Al-Qur'an therapy. This study is aimed at looking at the effectiveness of murottal Al-Qur'an therapy in reducing insomnia problems in Medical Students

**Methods:** This study used a pre-experimental design with a one group pre-posttest without control design and used simple random sampling.

**Results:** The level of mild insomnia was 19.4%, moderate insomnia was 63.2%, severe insomnia was 17.4% and there were no respondents who did not have insomnia before the intervention. After the intervention, it was found that severe insomnia reduced to 12.7%, moderate insomnia to 45.3%, mild insomnia to 34.0% and non-insomnia to 8.0%.

**Conclusion:** It was found that murottal therapy was effective in reducing insomnia after the intervention.

**Keywords :** *Insomnia, Quran Therapy, Students*

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### I. INTRODUCTION

Insomnia can be defined as a disorder / symptom in which a person has difficulty initiating sleep, or maintaining sleep or sleep quality is poor and accompanied by difficult conditions. Insomnia sufferers experience excessive sleepiness during the day due to insufficient quantity and quality of sleep.<sup>1</sup> The prevalence of insomnia has a range of about 10% to 40%.<sup>2</sup> Insomnia can be caused by various factors, namely internal and external factors. Internal factors include hormones, drugs, and psychology. It could also be due to external factors such as mental pressure, an uncomfortable bedroom atmosphere, noise or changes in time due to having to work at night. In addition, coffee and tea which contain stimulants to the central nervous system, tobacco containing nicotine, body care drugs containing amphetamines, are examples of materials that can cause difficulty sleeping.<sup>3</sup> Classification of insomnia differs based on its etiology, duration and severity.

Based on the etiology, Insomnia is classified into 2, namely primary (Insomnia disorder) and secondary (Comorbid Insomnia). Primary insomnia is not caused by a psychological or medical condition. Secondary insomnia is generally caused due to poor mental and medical conditions that affect the quality and quantity of

sleep. Other sleep disorders or drug consumption are also the cause of secondary insomnia.<sup>9</sup> A study by Adeleyna (2018) concluded that 20-40% of adults experience insomnia and 17% have serious problems.<sup>2</sup> WHO (World Health Organization) itself noted that since 2021, Approximately 18% of the world's population has experienced a sleep disorder.<sup>1</sup> In Indonesia, the prevalence of insomnia is around 10% of the total 238 million population, which means that there are 28 million Indonesians experiencing insomnia.<sup>1</sup>

Various attempts were made to overcome insomnia complaints, including taking sleeping pills or doing relaxation therapy. One of the relaxation therapies is music therapy that can be used to listen to the Qur'an or Murottal. Murottal is one of the music with a frequency of 50 db which has a positive influence on the listener

An effective audio therapy for insomniacs is murrottal Al-Qur'an audio therapy. The results of research at the University of Padjadjaran showed that the sound produced by reading the Koran had the same effect as the effect of listening to an audio therapy by slowing down brain waves as well as the effect produced by relaxation music. intended to provide an alternative method to reduce the problem of insomnia in a person, namely the Qur'anic therapy method.

This study uses a pre-experimental design by designing a one group pre-posttest without control, which is done by giving a pretest (initial observation) first before the intervention is given, after that the intervention is given, then the posttest (final observation). The research will use the type of simple random sampling. The population of this study were students of the Indonesian Muslim University, Faculty of Medicine, class of 2019. The sample of this study were students of the Muslim University of Indonesia, Faculty of Medicine, class of 2019 who experienced insomnia and met the criteria for inclusion.

This research was conducted on 155 students of the UMI Makassar medical study program. Data collection was done by distributing google form questionnaires to respondents. Respondents were given Murottal Al-Qur'an therapy before going to bed (about 10 minutes) until the respondent.

## Univariate Analysis

### 1. Characteristics of Respondents

**Table 1.1 Description of the Gender Characteristics of Respondents**

Characteristics of Respondents	n	(%)
Gender		
Man	28	18.1
Women	127	81.9
Age		
17	1	0,6
18	17	11,0
19	57	36,8
20	65	41,9
21	13	8,4
22	2	1,3

Source: Primary Data, 2022

Table 1.2 Criteria for the Distribution of Insomnia to Respondents

Intervention Group	Insomnia Criteria			
	No Insomnia <u>n (%)</u>	Mild Insomnia <u>n (%)</u>	Moderate Insomnia <u>n (%)</u>	Severe Insomnia <u>n (%)</u>
Pre	0 (0.0)	40 (19.4)	134 (63.2)	38 (17.4)
Post	17 (8.0)	72 (34.0)	96 (45.3)	27 (12.7)

Source: Primary Data, 2022

Table 1.3 Cross-tabulation (Crosstab) of Insomnia Levels by Gender

Gender	Insomnia Level	Intervention			
		Pre-Intervention		Post-Intervention	
		n	%	n	%
Man	No Insomnia	0	0%	2	4,7%
	Mild Insomnia	9	20,9%	11	25,6%
	Moderate Insomnia	24	55,8%	22	51,2%
	Severe Insomnia	10	23,3%	8	18,6%
Women	No Insomnia	0	0%	15	8,9%
	Mild Insomnia	30	17,8%	61	36,1%
	Moderate Insomnia	110	65,1%	74	43,8%
	Severe Insomnia	29	17,2%	19	11,2%

Source: Primary Data, 2022

Table 1.4 Cross-tabulation (Crosstab) of Insomnia Levels with Age

Insomnia Rate During Intervention	Age						
	17	18	19	20	21	22	
<b>n</b>	0	5	17	12	4	1	
Mild	%	0,0%	15,2%	19,1%	16,7%	26,7%	50,0%
<b>n</b>	0	18	61	46	8	1	
Pre Intervensi	%	0,0%	54,5%	68,5%	63,9%	53,3%	50,0%

	<b>n</b>	1	10	11	<b>14</b>	3	0
	Severe						
	<b>%</b>	100,0%	30,3%	12,4%	<b>19,4%</b>	20,0%	0,0%
	<b>n</b>	1	2	<b>10</b>	4	0	0
	No						
	<b>%</b>	100,0%	6,1%	<b>11,2%</b>	5,6%	0,0%	0,0%
	<b>n</b>	0	13	24	<b>31</b>	2	2
	Mild						
<b>Post Intervensi</b>	<b>%</b>	0,0%	39,4%	27,0%	<b>43,1%</b>	13,3%	100,0%
	<b>n</b>	0	16	<b>40</b>	28	12	0
	Severe						
	<b>%</b>	0,0%	48,5%	<b>44,9%</b>	38,9%	80,0%	0,0%
	<b>n</b>	0	2	<b>15</b>	9	1	0
	Moderate						
	<b>%</b>	0,0%	6,1%	<b>16,9%</b>	12,5%	6,7%	0,0%

Source: Primary Data, 2022

### Bivariate Analysis

**Table 1.5 Bivariate Analysis of Murottal Effects Before and After Intervention**

<b>Group Intervention</b>	<b>n</b>	<b>Mean ± Std.Deviation</b>	<b>p-value</b>
Pre- Intervensi	155	18,00 ± 4,21	0,00
Post-Intervensi	155	15,00 ± 5,43	

Source: Primary Data, 2022

## DISCUSSION

The description of the characteristics of the respondents obtained in the form of gender and age. The results showed that the age distribution of the respondents in this study ranged from 17 to 22 years. The age with the highest frequency was 20 years, as many as 65 people (41.9%). The results of this study are in line with the research of Kaur and Bhoday (2017) which states that in early adulthood, namely 18-25 years, the circadian system that controls sleep patterns tends to experience physiological changes. This age on weekdays (productive) more often experience a lack of sleep, while at the end of the week have a longer sleep time. This results in irregular sleep patterns, which will cause sleep problems, one of which is insomnia.

The results of the frequency distribution of respondents' characteristics by gender show that respondents who experience insomnia are dominated by 127 women (81.9%), while male respondents are 28 people (18.1%). Research conducted by Gunanti and Diniari (2016) that respondents with female respondents experienced more complaints of sleep disturbances (66.7%) compared to male respondents. In another study conducted by the National Sleep Foundation, 57% of women experienced insomnia at least a few nights a week.

The results showed that respondents tended to experience insomnia problems in the moderate category for both men and women with a percentage of 63.2%. The light category also dominates with a percentage of

19.4% while the heavy category is 117.4%. However, it is certain that none of the respondents did not experience sleep disturbances before the intervention was carried out for a week.

Not much different from the results obtained in the post-intervention where moderate-intensity insomnia still dominates (45.3%), mild (34.0%), severe (12.7%) and not insomnia (8.0%). The results obtained can be assumed that there is a slight decrease in the percentage of sleep disturbances in respondents after the intervention, but more in-depth research is needed on this matter. -Qur'an.3 According to Fatimah and Noor (2019) that listening to murottal Al-Quran significantly reduces insomnia levels in elderly individuals.<sup>4</sup>

Statistically, to see the effect of Murottal Al-Qur'an therapy on the category of insomnia experienced by respondents, it showed that there was a significant relationship or a large influence before and after the intervention process took place ( $p < 0.05$ ). Similar research results were found by Mahlufi, (2020); Aprilini, Mansyur, & Ridfah, (2019) that Al-Qur'an murottal therapy is effective for the elderly and students.<sup>9</sup> Other similar studies have shown that Al-Qur'an murottal therapy is effective for preoperative laparotomy, hemodialysis, pressure reduction patients. diastolic blood pressure in pre-eclampsia pregnant women, and stress levels in aborted patients.<sup>9</sup>

In contrast, negative results were found in studies with different respondents, namely children with autism found by researcher Anah, et al (2018).<sup>10</sup> This study is also in line with research by Permana and Ishak, (2017), which states that listening to murottal Al-Qur'an and its translation does not effective for improving sleep quality in first year female students at MTs in Yogyakarta.<sup>6</sup>

On the other hand, the effect of murottal Al-Qur'an therapy was clearly seen in male respondents compared to female respondents in dealing with sleep problems. This is based on women who are indeed individuals who pay attention to every symptom or situation related to the effects of environmental changes that occur. 3 Mallapalli and Carter (2017) explain that different hormonal and physical change factors in women's time phases such as puberty, pregnancy and menopause can affect the quality of life. Sleep in women. 4 Puberty is the main reason found by Zhangetal (2016) where ovarian hormones during the menstrual cycle in women cause unstable emotions, stress more easily because they have poor coping strategies so they are prone to insomnia.<sup>4</sup>

This study also shows that murottal therapy is very influential on the age group of 20 years and over in reducing the risk of insomnia. In another study, it was found that there was an effect of listening to murottal Al-Quran in reducing insomnia in students. 4Age 19-25 years is the age of late adolescence which is a transition period from one stage to the next with various kinds of problems that affect emotions, body and behavior. <sup>10</sup>

Risk factors that affect insomnia can be in the form of age, gender, socioeconomic and other factors such as divorce, anxiety, depression, medical illness, and so on. The older a person is, the higher the risk of insomnia he experiences, while the female gender will be more at risk of experiencing insomnia. Someone with low socioeconomic or low education has the highest risk of insomnia. Other factors that contribute to insomnia include are anxiety, coffee consumption, and stress. Insomnia, one of which can be caused by anxiety, final semester exams cause anxiety for students which will have an impact on sleep disorders or insomnia

In the research of Suarti Ningsih et al (2018), it is said that most respondents consume 1 cup of coffee in one day, previous research stated that consumption of 3 cups of coffee a day (containing 300 mg of caffeine) will only cause side effects, one of which is insomnia. significant difference between stress and insomnia.<sup>4</sup>

## CONCLUSION

Based on the results of the research above, it can be concluded that the research is as follows:

1. The results of this study indicate that the characteristics of students who experience the majority of insomnia are female as much as 81.9% ( $n = 127$ ).
2. The highest level of insomnia experienced by medical students at the Muslim University of Indonesia was in the moderate insomnia category 63.2% ( $n=134$ ).
3. Statistical results from the Wilcoxonp-value test ( $0.00 < 0.05$ ) so that it was found that murottal therapy was effective against insomnia levels after the intervention

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