



## Klenengan Music Therapy on Sleep Quality in Elderly Patients at Pratama Barokah Clinic

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### Abstract

**Introduction:** Aging is the process of growing old. It occurs eventually in every living thing provided, of course, that an illness or accident does not kill it prematurely. Elderly is a decrease in function of each body system. This reduction include physical, psychological, social and spiritual changes. In psychological changes there is a decrease in the sleep quality system, which is one of the health problems experienced by the elderly, namely insomnia. Non-pharmacological therapy that can be done to overcome sleep quality problems is music therapy. Klenengan Music Therapy can restore, relax, improve emotions, physical, psychological and health.

**Methods:** This research used pre experimental research method with one group pretest and posttest design. Total population of this study were 50 peoples. The study sample consist of 37 peoples . Data analyzed with Wilcoxon ( $\alpha$ ) with statistical test  $5\% = 0.05$

**Result:** The results showed that most of the elderly with poor sleep quality before treatment (pretest) with < 6 hours of sleep time as many as 25 respondents (68%) and most of the good quality of sleep after treatment (post test) were 23 respondents (62%).

**Conclusion:** This Study highlight that Klenengan Music therapy can be use for non-pharmacological therapies to improve sleep quality in elderly patients.

**Keywords:** Klenengan, Music Therapy, Sleep Quality.

### Introduction

Naturally humans will experience the process of growing old and old age is the lifespan of the last human being (Azizah, 2011). The World Health Organization (WHO) predicts the proportion of the elderly population aged over 60 years to double from 11% in 2000 to 22% in 2050. In 2000 the elderly population numbered 605 million, will reach 2 billion people in 2050 (WHO, 2012).

The age limit of elderly people in Indonesia is 60 years and above. The process of aging or aging is a natural process, where aging is not a disease but a process of declining human immunity. Problems in the elderly are the responsibility of all parties, not

only the government but also the community, as stated in Article 8 of Law No.31/1998 on the elderly said that both the government and the community manifest efforts to improve the social welfare of the elderly (Hugroho, 2008).

The elderly often experience health problems in their lives caused by a decrease in body function. The process that resulted in a decline was biological, psycho, socio, cultural and spiritual. In psychological changes there is a decrease in the quality of sleep system, one of the health problems experienced by elderly insomnia disorders (Mickey Stanley, 2007).

The impact of sleep disturbances on the elderly include reduced appetite, weakness, easy accidents, falls, emotional instability, difficulty concentrating and difficulty in making decisions (Wold, 2004).

The results of the preliminary study were carried out by observing and interviewing in October 2017 on 10 elderly people at Klinik Barokah Sumenep, where 7 (70%) elderly said that their sleep was not sound even though they slept long while 3 (30%) of the other elderly said that sleep well even if you only take a nap. Sleep needs of each person vary, old age requires 6-7 hours of sleep per day (Hidayat, 2008).

Some of the factors that influence sleep quality in the elderly include retirement, spouse death, increased medication, inability to perform routines they can do before going to bed, inability to feel comfortable, noise, pain, and uncomfortable beds so that the elderly This sleep disturbance causes the elderly to feel unwell while sleeping even though they sleep for a long time (according to survey results).

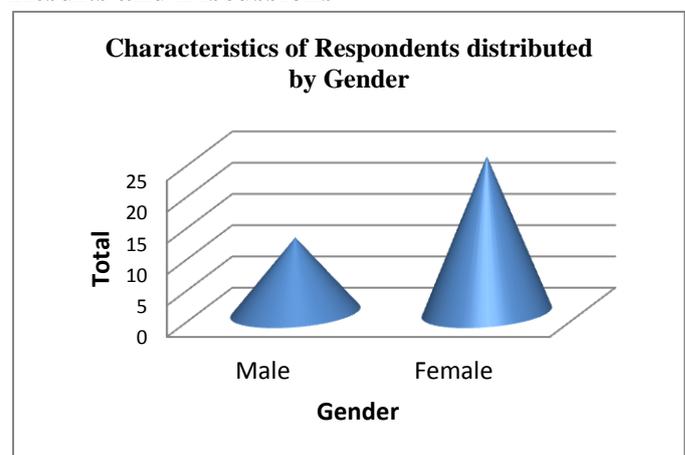
The form of solution in dealing with sleep quality disorders consists of pharmacological and non-pharmacological therapies. Pharmacological therapies that can be used include drugs, but bilan is used continuously will experience dependence (Soemardini et al, 2013). While non-pharmacological therapies include regulating sleep patterns, psychological therapy and relaxation therapy. Relaxation can be done using music, where the use of music therapy can relax, calm emotions, physical, psychological and spiritual calm (Djohan, 2006).

According to Trilia (2013) shows that music therapy has proven effective in helping to improve sleep quality in elderly who experience sleep quality disorders. Supriyadi, (2010) also revealed that music therapy has proven effective in improving the quality of sleep in the elderly. Based on the description and results above, it is obtained the extent of the effectiveness of music therapy in improving sleep quality

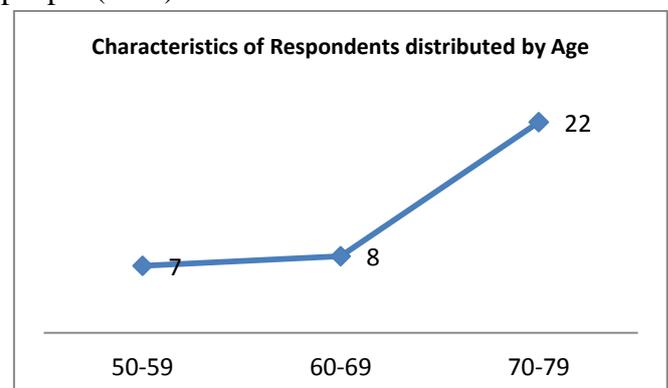
## Material and Methods

This study was Pre Experimental research, conducted One Group Pretest and Post test design. The population were all elderly who experienced a decrease quality of sleep at Pratama Barokah Clinic Ambunten. The sampel obtained 37 elderly patients who experienced a sleep disorders. Sampling technique used purposive sampling with inclusion criteria for elderly who experienced sleep disorders, the elderly who joined prolanis at Pratama Barokah Clinic Ambunten, elderly who could read and write, elderly who was health, and elderly who wanted to join with this study. Dataset was analize with Wilcoxon ( $\alpha$ ) 5% = 0.05 by using the statistical program.

## Results and Discussions



Based on graph 1, shows that the gender of the respondents is mostly female as many as 25 people (68%) and a small portion are male as many as 11 people (32%).



Based on graph 2, shows that most of the elderly patients are 70-59 years old as many as 22 people (59%), and a small percentage of those aged 50-59 are 7 people (19%).

**Table 1** Distribution of Sleep Quality Before Treatment

No	Sleep Quality	F	(%)
1	Good (6-7 Hours)	12	32
2	Bad (< 6 Hours)	25	68
Total		37	100

Based on table 1, shows that most of the elderly with poor sleep quality before treatment (pretest) with sleep time < 6 hours were 25 respondents (68%) and respondents with good sleep quality before treatment (pretest) as many as 12 respondents (32%) on elderly at Pratama Barokah Clinic.

**Table 2.** Sleep Quality After Treatment (post test)

No	Sleep Quality	F	(%)
1	Good (6-7 Hours)	23	62
2	Bad (< 6 Hours)	14	38
Total		37	100

Based on table 2 shows that most of the good sleep quality after the treatment (post test) were 23 respondents (62%) and respondents with poor sleep quality after treatment (post test) as many as 14 respondents (38%) in the elderly at the Pratama Barokah Clinic.

Wilcoxon test results before and after the administration of Klenengan Music therapy for 30 minutes in the elderly at the Pratama Barokah Clinic, using MP3 obtained P value <  $\alpha$  (0.022 < 0.05). It can be concluded that there is an effect of giving klenengan music therapy to the elderly at Pratama Barokah Clinic, who has good sleep quality before being given music therapy with 12 respondents (32%) and poor sleep quality 25 respondents (68%). Respondents who were given mental music therapy who had good sleep quality 23 respondents (62%) and poor sleep quality 25 respondents (38%). Short sleep duration affects the sleep quality of respondents. In PSQI there is a component of sleep duration. The results showed the majority of 12 respondents only slept for less than < 6 hours at night before being given klenengan music therapy. And after being given klenengan music therapy 23 respondents who slept for 6-7 hours.

### 1. Elderly Sleep Quality Before being treated by Klenengan Music Therapy

Based on the results of the study on the quality of sleep of the elderly who before being given Klenengan Music therapy overall were at the highest PSQI score with a bad score of 25 people (68%). Sleep quality is a measure where a person is easy to start sleeping and to maintain sleep, a person's sleep quality can be described by the length of sleep. Complaints felt during sleep or after waking up.

Adequate sleep needs are determined other than by the factor of the number of hours of sleep (quantity of sleep) also by the factor of sleep satisfaction (sleep quality). Some factors that affect the quantity and quality of sleep are physiological factors, psychological factors, environment and lifestyle. Biological factors have an impact on decreasing daily activities, weakness, fatigue, decreased endurance, and instability of vital signs, whereas psychological factors have an impact on depression, anxiety, and difficulty concentrating (Pottror and Perry, 2005).

Maryam (2008) said that the problems that occur in the elderly are one of them is the quality of sleep. Elderly habits or patterns of sleep can change so that the elderly feel uncomfortable with themselves. Many elderly people experience sleep quality, namely insomnia, sleep which is intermittent, often wake up at night, and wake up too quickly from sleep. Insomnia can arise because of the fear of death or mental stress, the emergence of anxiety, depression and a noisy environment that can interfere with the pattern of sleep of the elderly.

The results of the study according to Wijayanti (2012), explained that before music therapy, the quality of sleep was experienced by many elderly people in the orphanage, namely 20 elderly (71%) who had moderate insomnia and 28 elderly (29%) who experienced mild sleep. Sleep quality is sleep difficulties that occur repeatedly. Symptoms such as not being able to sleep, often waking up at night due to nightmares, restlessness during sleep, or drowsiness during the day due to lack of sleep.

Elderly people who experience disturbed sleep time become quickly forgotten, disorientation or confusion. Difficulty in sleeping or staying asleep is a problem that often occurs in the elderly. Management of the elderly who have trouble sleeping can be maintaining a daily schedule, waking up at the usual time, following the rules of sleep, exercising every day but avoiding too much exercise, limiting the hours of naps 1 to 2 hours at the same time every day, taking a shower use warm water, avoid drinks containing caffeine and alcohol, do relaxation techniques such as deep breathing, massage, reading and listening to music (Asmadi, 2008).

Everybody's sleep quality is different. This is because the activities carried out in the morning and afternoon are different. Many elderly people often complain that it is difficult to sleep at night. This happens because the aging process and anxiety are increasing. Klenengan music is one of the non-pharmacological treatments which causes little side effects. Silent music can reduce symptoms of insomnia in the elderly.

## **2. Elderly Sleep Quality After Given Klenengan Music Therapy**

Based on the results of the study showed that the respondents who after being given Kalenengan Music therapy for 30 minutes were mostly in the PSQI value well as many as 23 people (62%).

Intervention of giving music with 30 minutes can have an influence on the quality of sleep. Changes in sleep quality in the elderly after obtaining a 7-day long intervention in music performed with a long duration of therapy for 30 minutes for each intervention this is in line with the results of the study of Yudianto (2011) which states that tin therapy is given for a certain period of time significant effect on the quality of elderly sleep.

The provision of tin music in the elderly was found to have a significant increase in the quality of sleep before 4-5 hours and after 6-7 hours of klenengan music was given. This shows that giving canned music can improve sleep quality. Purwadi (2006) revealed that kalenengan music is music produced from an instrument called karawitan.

Djohan, (2006) music therapy is an activity that uses music can help the occurrence of deficiencies in physical, emotional, cognitive and social aspects in individuals who experience health problems. Music therapy is humanistic, with the help of musical instruments clients are also encouraged to interact, improvise, listen or actively play music.

The research conducted by Widyastuti (2013) found that the quality of sleep scores 6-7 hours after being given music therapy no one experienced a severe sleep quality score, as many as 16% of the elderly experienced mild sleep quality scores and 68.8% of the elderly experienced a score moderate sleep quality. Another study from Wijayanti (2012) showed the level of sleep quality after music therapy with a percentage of 8 elderly (29%) who did not experience sleep quality, 18 elderly (64%) who experienced mild sleep quality, 2 elderly (7%) who experience moderate sleep quality.

According to Potter and Perry (2006), music therapy is the skill of using a musical instrument by a therapist to improve, and maintain and restore mental, biological, emotional and spiritual health. According to Bussy, (1989) Measurement of sleep quality using the PSQI questionnaire (Pittsburgh Sleep Quality Index) is an effective tool used to measure sleep quality and measurement patterns in the elderly. The existence of this measuring tool makes it easy for researchers to measure the quality of sleep of the elderly with a component of sleep quality in a subjective manner, the start time.

Music can be beneficial to reduce symptoms of sleep quality. After doing the klenengan music therapy the symptoms of sleep quality were reduced as seen from the good SPQI value of 23 people. Klenengan music is widely known by ambunten people as one of the favorite music of the elderly. On the other hand this music can be useful for the elderly to reduce sleep quality.

## **3. Klenengan music therapy for sleep quality in the elderly at Pratama Barokah Clinic**

The data normality test results using the Shapiro-Wilk test with a total sample of 37 respondents, where the results of the normality test data Before

and after being given Kalenengan Music therapy to respondents are before the sig value of 0.000 ( $> 0.05$ ) and after the sig value of 0.000 ( $> 0.05$ ) which states that the distribution of data is not normal, so that the test that can be carried out an alternative test of the paired sample T test is the Wilcoxon Test.

Based on the results of statistical tests of the Wilcoxon Test before and after Giving Kalenengan Music Therapy to the elderly at the Pratama Barokah Clinic, Add Agung Tengah Village, Kec. Ambunten obtained a value of  $p = 0.022$ , because the value of  $p < 0.05$ , it can be concluded that there is an effect of giving kalenengan music therapy to the elderly at the Pratama Barokah Clinic, Add Agung Tengah Village, Kec. Ambunten.

Music therapy is a therapy that uses music to solve health problems, music therapy with the power of music can cure health problems (Hidayat, 2006). Music has the power to treat diseases, because when music is applied to therapy, music can improve, restore, and maintain health for individuals (Purwadi, 2006).

Music therapy is the skill of using music or musical elements by a therapist to improve, maintain and restore mental, physical, emotional and spiritual health. Music therapy can also be used to cure a disease by using certain rhythm sounds and one of them is classical music (Potter and Perry, 2006).

Based on statistical analysis, the average score of kalenengan music therapy for respondents before being given therapy (pretest) was (68%) on respondents after being given therapy (posttest) music therapy obtained an average score was (62%), music therapy for the elderly experiencing sleep quality greatly affects the quality of the elderly's sleep. This proves that the provision of music therapy can improve the quality of sleep in the elderly at Pratama Barokah Clinic, Add Agung Tengah Village, Kec. Ambunten. Based on the results of the research and the existing theories, the researchers argue that music therapy can improve the quality of sleep for the elderly.

There is a difference in the quality of sleep quality in the elderly at the Pratama Barokah Clinic, Add Agung Tengah Village, Kec. Ambunten before and

after being given music therapy, this proves that health workers, especially nurses are able to improve the sleep quality of respondents with the provision of music therapy, it can be seen from the value of the average ability of respondents to listen and live the music therapy provided.

### Conclusion

Based on the results of this study, it can be concluded that; The elderly with poor sleep quality before treatment (pretest) with  $< 6$  hours sleep time were 25 respondents (68%). The elderly patients who have good sleep quality after treatment (post test) were 23 respondents (62%). This study highlight that there was an effect Klenengan Music Therapy to quality of sleep on elderly patients.

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