The Differences of Sleeping Quality of the Elderly People Between Progressive Muscle Relaxation Interventions and Spiritual Therapy (Zikir)

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ABSTRACT
Sleeping quality of the oldest people is often disturbed, 60.1% of the old people experience insomnia. The aim of this research is to analyze the quality difference of sleeping for the oldest people between the progressive muscle relaxation intervention and spiritual therapy (zikir) at Public Health Center Belimbing Area. This research is experimental quasi with pre and post test design. The study was carried out from April to October 2020. The sample in this study was the elderly people who came to the Elderly integrated service post (Posyandu) with a total of 40 people. The Sleeping Quality in this study used the Sleep Quality Questionnaire (SQQ)). The intervention was carried out for 1 month. The statistical test used is Wilcoxon. It was found a significant effect of the progressive muscle relaxation therapy and spiritual therapy (zikir) on the average of the sleeping quality score of the elderly people in the Public Health Center Belimbing area. For Nursing staff, the progressive muscle relaxation therapy and spiritual therapy (zikir) may be used as non-pharmacological therapies, especially for the elderly people in improving the sleeping quality, helping elderly people who experience insomnia at home.

Keywords: Relaxation, Muscle, Progressive, spiritual Therapy. Sleeping Quality

1. INTRODUCTION
The elderly people is the final period in human life where a person begins to experience changes in his life characterized by physical, psychological and social changes. So that there is a decrease, weakness, increased susceptibility to disease, environmental changes, and physiological changes that occur⁴. One of the consequences that interfere with the elderly people due to physiological changes is the disruption to the quality of sleep. The disorder of the sleeping quality occur due to certain biological changes that make difficult to sleep, such as loss of circadian rhythm control in the sleep process⁵. One technique that can be used to overcome the problem of sleeping disorders without the use of medication is with progressive muscle relaxation techniques ⁶.

Relaxation was first introduced by Edmund Jacobson as a therapeutic technique that can help to reduce anxiety as well as stress. ⁷ said that the progressive muscle relaxation therapy is a technique that focuses on relaxation of a group of muscles in a relaxed state. The research conducted by ⁸ in the Belimbing region, 60.1% of elderly people have experienced insomnia. Furthermore, there is a meaningful relationship between lifestyle with insomnia, anxiety. Progressive muscle relaxation therapy now has been a the cheapest therapy. It has no side effects, it is easy to do, and can make the body and mind feel calm, relaxed⁹.

From the above problems, the researchers will combine other therapies to improve sleeping quality non-pharmacologically, namely the progressive muscle relaxation therapy with spiritual therapy (zikir) on the quality of sleep, especially done in Public Health Center Belimbing".

2. RESEARCH METHODS
The research is an experimental quasi with a pre and post test design⁷. The aim of the research is to find effect of the progressive muscle relaxation therapy and spiritual Therapy (zikir) on the sleeping quality on oldest people. The study was conducted in April to November 2020. The population in this study was the elderly people in public health center Belimbing. Samples were the elderly people who came to the integrated service post (Posyandu) when the research was being conducted. The Data collection techniques are carried out with deep interview with the elderly people. Before the intervention of the study, the screening was carried out in the form of...
measurement of vital signs in the form of: Blood pressure, temperature, pulse and nutritional status. Furthermore, it was only measured sleep quality using questionnaires namely the sleep quality questionnaires. After 1 month of intervention (1 time a week), for each treatment group. To see progress in sleep quality measured each week as Postest (Time Series). Other data collected include factors that affect the sleeping quality such as: Age, Disease, Emotion / Psychological, Environment, Drugs, Food and minimum and activity causes fatigue. Data processing used computerization. Data processing is carried out in several stages, namely: (Editing), (Coding), Entering Data, Cleaning Data (Cleaning). Analysis uses univariate analysis: To determine the sleeping quality before and after being given therapy in 2 treatment groups. Bivariate analysis: to determine the effect of therapy on the sleeping quality. The statistical test used is the Wilcoxon test with the significance value used p ≤ p value 0.05, because the data does not distribute normal

3. RESULTS

The average of the sleeping quality score before being done the progressive muscle relaxation therapy and spiritual therapy (zikir) on the following table.

Table 1. The Average of the Sleeping Quality Score Before Being Done Progressive Muscle Relaxation Therapy and spiritual Therapy (zikir)

<table>
<thead>
<tr>
<th>Sleeping Quality Score</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive Relaxation Therapy</td>
<td>8,250</td>
<td>3,431</td>
<td>1</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>Spiritual Theraphy(Zikir)</td>
<td>6,850</td>
<td>4,671</td>
<td>1</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Difference</td>
<td>1,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 above shows the results of the sleeping quality score of respondents before being done the progressive muscle relaxation therapy as much as 8,250 with a deviation standard as much as 3,431, while the sleeping quality score in the respondents who being done the spiritual therapy (zikir) amounted to 6,850 with a defiation standard as 4,671. There is a difference of score in pre test as much as 1.4

The average of the sleeping quality score after being done the progressive muscle relaxation therapy and spiritual therapy (zikir) as shown on the table below.

Table 2. Average of The Sleepping Quality Score After Being Done The Progressive Muscle Relaxation Therapy and spiritual Therapy (zikir)

<table>
<thead>
<tr>
<th>Sleeping Quality Score (post test)</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive Relaxation Therapy</td>
<td>4,250</td>
<td>1,962</td>
<td>1</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>Spiritual Theraphy(Zikir)</td>
<td>4,750</td>
<td>2,572</td>
<td>1</td>
<td>11</td>
<td>40</td>
</tr>
<tr>
<td>Difference</td>
<td>0,5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows the results of the sleeping quality score after being given the progressive muscle relaxation therapy as much as 4,250 with a deviation standard as much as 1,962 while the sleeping quality score in the respondents who got the spiritual therapy (zikir) amounted to 4,750 with a defiationstandard as much as 2,572. There is a difference in the value of the sleeping quality on pre test as much as 0.5.

The Differences in average of the sleeping quality Before and After given progressive muscle relaxation therapy shown in the table below.

Table 3. Difference in Average of The Sleepping Quality Before and After Being Given Progressive Relaxation Muscle Therapy

<table>
<thead>
<tr>
<th>Progressive Relaxation Therapy</th>
<th>Mean</th>
<th>SD</th>
<th>Min-Max</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skort of sleeping quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre test</td>
<td>8,250</td>
<td>3,431</td>
<td>1-14</td>
<td>0.001</td>
</tr>
<tr>
<td>Post test</td>
<td>4,200</td>
<td>1,962</td>
<td>0-8</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>4,050</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 3 The average of the sleeping quality score before being given treatment is 8,250 with a deviation standard as 3,431. After being given the treatment, the value of the sleeping quality score decreased to 4,200 with a deviation standards much as 1,962. There is a decrease in
the sleeping quality as much as 4,050. Statistical test results obtained the value of \( p = 0.001 \) (\( P<0.05 \)). It is concluded that there is an effect of progressive muscle relaxation therapy on the sleeping quality before and after the therapy.

### Table 4. Difference in Average of Quality of Sleeping Quality Before and After Being Given spiritual Therapy (zikir)

<table>
<thead>
<tr>
<th>Sleeping Therapy (zikir)</th>
<th>Mean</th>
<th>SD</th>
<th>Min-Max</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>6,850</td>
<td>4,671</td>
<td>1-20</td>
<td>0.002</td>
</tr>
<tr>
<td>Post test</td>
<td>4,750</td>
<td>2,572</td>
<td>1-11</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>2,100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 4. The average of the sleeping quality score before being given treatment is 6,850 with a deviation standard value of 4,671. After being given treatment, the value of the sleeping quality score decreased to 4,750 with a deviation standard value of 2,572. There is a decrease in the sleeping quality score of 2.1, with a value of \( p = 0.002 \) (\( P<0.05 \)).

### Table 5. Difference in Average of the Sleeping Quality of Elderly that Given Progressive Muscle Relaxation Therapy and spiritual Therapy (zikir)

<table>
<thead>
<tr>
<th>Sleeping Quality</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>n</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive Relaxation</td>
<td>24.48</td>
<td>489.50</td>
<td>20</td>
<td>0.028</td>
</tr>
<tr>
<td>Therapy (zikir)</td>
<td>16.53</td>
<td>330.50</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>2,100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5, showing the Mean Rank of the sleeping quality in the group that intersieved progressive muscle relaxation therapy by 24.48 compared to group that given spiritual therapy, the sleeping quality is 2.10. Statistically the Mann Whitney test obtained a value of \( p = 0.028 \) (\( P<0.05 \)), then it can be concluded that there is a significant difference in the average of sleeping quality of elderly that given progressive muscle relaxation therapy with spiritual therapy (zikir). It said that progressive muscle relaxation therapy has a greater effect on the sleeping Quality, than spiritual therapy (zikir.)

### 4. DISCUSSION

#### 4.1 The effect of progressive muscle relaxation Therapy to the Sleeping Quality of elderly

Based on the analysis of data on the average quality of sleep before being given treatment 8,250 with a standard of deviation value of 3,431. After being given treatment the value of the sleeping quality score decreased to 4,200 with a standard of deviation is 1,962. There is a decrease in the quality of sleeping score as much as 4,050, Statistically the test result obtained a value of \( p \) namely 0.001. It can be said that there is an effect of progressive muscle relaxation therapy on the quality of sleeping for the elderly before and after the intervention. In further analysis, progressive relaxation therapy intervention had more effect on elderly Sleep Quality than spiritual therapy (zikir) intervention with \( p=0.028 \).

The study conducted \(^{[1]}\) shown that progressive muscle relaxation exercises for one week regularly will prove that progressive muscle relaxation exercises have a good results that can reduce complaints from insomnia, this must be combined between thinking and circumstances in a calm and relaxed condition.

According to the research done by \(^{[8]}\) stated that progressive muscle relaxation exercises is effective enough to shorten sleep latency, prolonge sleep duration, improve sleep efficiency, reduce sleep disturbances, activity disorders during the day thereby increasing the satisfied response to the sleeping quality.

Based on the results of interviews after evaluating the implementation of progressive muscle relaxation therapy from most elderly people say their sleep becomes better and wakes up only once, the effects of progressive muscle relaxation therapy have a positive impact on the elderly because this therapy is easy and can be done independently and does not cause side effects that can be painful for the elderly. This progressive muscle relaxation therapy works on certain muscles ranging from straining the muscles of the lower
hand, back and biceps, shoulder, forehead, eye, jaw, mouth, back and front neck, back, chest, abdominal, thigh and calf then the elderly relax again so as to make the body muscles relax and provide a comfortable body sensation.

This therapy is useful to reduce sleep disorders so that it can improve sleep quality, stress, anxiety, hyperension and reduce tension in the muscles. According to [2] this therapy focuses on specific muscle groups and practices relaxing the muscles so that they can manage stress, relieving tension from the body and mind.

4.2 Effect of spiritual Therapy (zikir) on the Quality of Elderly Sleep

Based on the analysis, the average sleep quality score was met before being given a treatment of 6.850 with a standard deviation value of 4.671. After being given the average treatment the value of sleep quality score decreased to 4.750 with a standard deviation of as much as 2.572. there is a decrease in the sleeping quality score namely 2.1. Statistical test results obtained the value of \( p = 0.002 \) (\( P < 0.0 \)). Then it can be concluded that there is an influence of spiritual therapy (zikir) on the quality of sleep of the elderly before and after the intervention.

Spiritual therapy (zikir) means remembering God, remembering this is not just mentioning the name of God in the mouth or in the mind and heart. But the dhikr in question is to remember His Substances, Attributes and Deeds and then give life and death to Him. So as not to be afraid or daunted to face all kinds of dangers and trials [8].

The advantages of this religious relaxation in addition to benefiting from relaxation also benefit from the use of beliefs such as adding faith, and are likely to gain experience-knowledge of transcendence. Dhikr as a form of worship in Islam is religious relaxation, by saying Allah’s lafadz or Sunday continuously slowly and rhythmically will be able to cause a relaxation response [9].

Based on the characteristics of responde, there are 40% of elderly aged 60 years and above, this condition also affects the quality of sleep lassia disturbed, such as serig bagun ala day, and if you wake up difficulty sleeping, often urinate, many feel hot at night. In accordance with the stated by [10] that with the increasing number of ages in the elderly all systems in the body undergo changes ranging from biological systems.

Psychosocial and psychological, this can affect basic human needs, namely the needs of sleep patterns in the elderly if not met by the elderly with susceptible sleep disorders. Furthermore, it is said that most elderly people are at high risk of sleep disorders due to various factors, namely pathological processes related to the age of 65 years or more can cause 50% to experience sleep disorders; These factors can also be caused by lifestyle, emotional stress, physical and environmental diseases.

In the evaluation of some respondents said there are changes felt by the elderly who experience sleep disorders stating that the sleep patterns of the elderly become satisfied and the sleep becomes sound things due to physiological factors and psychological factors become relaxed, the mind becomes calm and comfortable this is due to the effects of the method of remembrance therapy is also done also increase themselves to the creator.

5. CONCLUSION

1. Average quality of the sleeping on elderly people before being given a progressive muscle relaxation intervention of 8.25.
2. Average quality score of elderly sleep before being given spiritual therapy (zikir) intervention of 6.85.
3. Average quality of aged sleep after being given progressive muscle relaxation intervention of 4.2 (decreased score by 4.05).
4. It is known that the average of sleeping quality for elderly after being given spiritual therapy (zikir) namely 4.75.
5. There is a significant influence on progressive muscle relaxation thery on the average of sleeping quality in the working area of public health center Belimbing (\( P =0.001 \))
6. There is a significant influence on spiritual therapy (zikir) on the average of sleeping quality for elderly in the working area of public health center Belimbing (0.002)

REFERENCES


