



DHIKR THERAPY AND DEEP BREATHING RELAXATION TECHNIQUES AS ANXIETY THERAPY IN PATIENTS WITH POST-PULMONARY TUBERCULOSIS TREATMENT

Authors:

Wachidah Yuniartika^{1,*}, Sulastri¹, Fatima Nur Janah¹, Agustaria Budi Nugroho²

¹Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah
Surakarta, Indonesia

²Disease Prevention and Control Unit, Baki Community Health Center, Sukoharjo
District, Central Java, Indonesia

Corresponding email : wachidah.yuniartika@ums.ac.id

About the Author

1. 1st Author : Wachidah Yuniartika, S.Kep., Ns., M.Kep, Sp.Kep.K
Affiliation : Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah Surakarta
Mailing address : Jl. A. Yani Pabelan Kartasura Surakarta
Email of author : Wachidah.yuniartika@ums.ac.id
Orcid ID : <https://orcid.org/0000-0001-9235-3505>
Google Scholar URL : <https://scholar.google.com/citations?user=Fr57ESwAAAAJ&hl=en>
Phone number : 085229244223
- 2nd Author : Sulastri, S.Kp., M.Kes.
Affiliation : Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah Surakarta
Mailing address : Jl. A. Yani Pabelan Kartasura Surakarta
Email of author : sulastri@ums.ac.id
Orcid ID : <https://orcid.org/0000-0003-0373-2277>
Google Scholar URL : <https://scholar.google.com/citations?user=rAEAOIoAAAAJ&hl=id>
Phone number : 081329939699
- 3rd Author : Ns. Fatimah Nur Janah Amini, S.Kep.
Affiliation : Department of Nursing, Faculty of Health Science, Universitas Muhammadiyah Surakarta
Mailing address : Jl. A. Yani Pabelan Kartasura Surakarta
Email of author : fatimahnurjanahamini@gmail.com
Orcid ID : <https://orcid.org/0000-0002-9139-496X>
Google Scholar URL : -
Phone number : 085727618474
- 4th Author : Agustaria Budi Nugroho, S.Kep., Ns.
Affiliation : Disease Prevention and Control Unit, Baki Community Health Center, Sukoharjo District,
Central Java, Indonesia
Mailing address : Jl. A. Yani Pabelan Kartasura Surakarta
Email of author : p2ml_baki@yahoo.com
Orcid ID : <https://orcid.org/0000-0001-5804-1890>

Google Scholar URL : -
Phone number : 081380558922

ABSTRACT

Patients with post-tuberculosis disease having difficulties in conducting activities cause them to be anxious about their condition. Rehabilitative efforts that are likely to provide include dhikr therapy and deep breathing relaxation. Dhikr and deep breathing relaxation are beneficial for drawing closer to Allah SWT, reducing anxiety, and being relaxed. This study aimed to determine the effectiveness of dhikr therapy and deep breathing relaxation to reduce anxiety in patients with post-tuberculosis treatment. This research is quantitative with a pre-test and post-test with a control group design, conducted at the Baki Sukoharjo Health Center from August to October 2022. The sample consisted of 60 respondents. Inclusion criteria are as follows: Patients with post-tuberculosis treatment, suffering from moderate and mild anxiety, Muslim, age > 60 years, not suffering from complications, and not receiving anxiety medication therapy. The results showed that the mean of the intervention group was 32.20, and the post-test was 17.30, with P-value was 0.001. The pre-test of the control group obtained a mean of 37.77 and the post-test was 24.73, with P-Value was 0.005. Dhikr therapy as an intervention group and deep breathing therapy as a control group can reduce anxiety.
Keywords: Anxiety, Dhikr Therapy, Deep Breathing Relaxation, Tuberculosis.

ABSTRAK

Penderita penyakit pasca tuberkulosis yang mengalami kesulitan dalam melakukan aktivitas menyebabkan mereka merasa cemas terhadap kondisinya. Upaya rehabilitatif yang mungkin diberikan antara lain terapi dzikir dan relaksasi nafas dalam. Dzikir dan relaksasi nafas dalam bermanfaat untuk mendekatkan diri kepada Allah SWT, mengurangi rasa cemas, dan membuat rileks. Penelitian ini bertujuan untuk mengetahui efektivitas terapi dzikir dan relaksasi nafas dalam untuk menurunkan kecemasan pada pasien pasca pengobatan tuberkulosis. Penelitian ini bersifat kuantitatif dengan desain pre-test dan post-test with control group design yang dilakukan di Puskesmas Baki Sukoharjo pada bulan Agustus sampai Oktober 2022. Sampel berjumlah 60 responden. Kriteria inklusi adalah sebagai berikut: Pasien pasca pengobatan tuberkulosis, menderita kecemasan sedang dan ringan, beragama Islam, usia >60 tahun, tidak menderita komplikasi, dan tidak mendapat terapi obat kecemasan. Hasil penelitian menunjukkan bahwa rata-rata kelompok intervensi adalah 32,20, dan post-test adalah 17,30, dengan P-value adalah 0,001. Pre-test kelompok kontrol memperoleh rerata 37,77 dan post-test 24,73, dengan P-Value 0,005. Terapi dzikir sebagai kelompok intervensi dan terapi nafas dalam sebagai kelompok kontrol dapat menurunkan kecemasan.
Kata kunci: Kecemasan, Terapi Dzikir, Teknik Napas Dalam, Tuberkulosis.

INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*, spreading through the air. Tuberculosis is one of the most significant causes of death worldwide. Compared to the coronavirus (COVID-19) pandemic spread, tuberculosis remained the leading cause of death from an infectious agent with the highest ranking after HIV/AIDS (WHO, 2020). Numerous factors, including low socioeconomic status, poor sanitation, overcrowding, unemployment, poor nutritional status, low education level, no income or less than the minimum wage, smoking, alcohol use, and other illnesses like HIV/AIDS or diabetes mellitus, are to blame for the rising number of cases of pulmonary tuberculosis. (Jauhar et al., 2018). The physical effects of tuberculosis include a weak body, chest pain, diaphoresis, coughing, weight loss, and high body temperature. Simultaneously, the impact on mental status occurs problems such as feeling weary and bored, lack of support, pain, anger, helplessness, pessimistic, and lack of enthusiasm for life (Nuraeni, 2015). The main key to successful TB treatment is early detection and complete treatment. If TB cases are diagnosed late and receive treatment too late, this can increase the possibility of transmitting the bacteria to humans around the pulmonary TB sufferer and making the disease worse. (Widhi et al., 2023)

The research by WHO in 2020 explains that cases in Indonesia have an estimated 843,000 cases. Generally, TB cases increased in 2021 to 845,000, and 357,199 cases have been notified (Kemenkes RI, 2020). The Central Java Health Office recorded the number of patients with Tuberculosis in Central Java from January to June 2021, with 23,919 people (Dinas Kesehatan Jawa Tengah, 2019).

The Tuberculosis case detection rate in 2021 in Sukoharjo Regency was still low, at 18.03%. It decreased from the previous year to 36.4% in 2020. The achievement of tuberculosis case detection at the Baki Health Center decreased to 8.4 % in 2021 and 17% in 2020. Previous research shows that TB clusters mostly occur in areas with low social determinants. (Dyah W,S et al, 2022)

Changes in the decrease occur in patients with post-tuberculosis, such as experiencing weight loss and difficulty in conducting activities, causing patients to fear their condition. Excessive fear is not balanced with positive thoughts and activities. Thus, psychological stress issues may arise (PPNI, 2016). Emotional influences occur in patients with tuberculosis because of high psychological pressure, which causes stress that leads to pressure and a threat to the patient's life; consequently, anxiety arises (Nuraeni, 2015).

This anxiety arises when the patient is uncomfortable and fears recurrence. Recurrence can occur due to the presence of germs left over from the previous infection that developed again. The cause of this anxiety arises from a lack of exposure to information about post-treatment care and the fear of transmitting the disease to family and others (Peni et al., 2019). The main infectious agent, *Mycobacterium TB*, is an aerobic rod that grows slowly, has an acid-fast growth rate, and is heat-sensitive when exposed to sunlight. (Wijaya & Putri, 2013). Bacteria can survive at low room temperatures and live for a long time when temperatures are between 4°C to -70°C. Bacteria are susceptible to the stimulation of solar heat (Kemenkes RI, 2014). The patient's anxiety causes confusion, worry, tension, sleeping problem, and concentration difficulty (Pachi,A., Bratis, D., Moussas, G., & Tselebis, 2013).

Counseling is one of the integrated discharge planning programs with the Directly Observed Treatment Shortcourse (DOTS) program with a family and community approach that can be carried out by both the health center and the hospital. The promotion, prevention, and rehabilitation of this intervention are the main areas of focus during its execution. Nurses need to be able to determine the state of physical health of patients with pulmonary tuberculosis during and after treatment and must use creativity when offering interventions, to reduce complaints in these patients (Jauhar et al., 2018). Reducing anxiety requires independent action in the rehabilitative role of the nurse to conduct nursing care employing an approach both to the patient and his family. Rehabilitative efforts that can be provided include dhikr therapy. Dhikr, or remembrance of Allah SWT, has a comprehensive range; all activities or actions are accomplished to seek Allah SWT's blessing. Dhikr therapy has a function that is entirely effective in reducing anxiety levels because the previous research focused on the effect of prayer guidance and dhikr on the anxiety of patients with pre-surgery (Widyastuti et al., 2019). Previous research shows that dhikr can turn stress into positive stress and reduce the stress level of patients with pulmonary tuberculosis (H. E Nihayati et al., 2019).

In addition, deep breathing relaxation is a type of exercise that tries to enhance health and is one of the non-pharmacological treatments. Recent studies have shown the beneficial effects of deep breathing relaxation on health outcomes that affect emotional control in patients with pulmonary tuberculosis (Hartanti et al., 2016). Deep breathing relaxation exercises can also improve mental health, by regulating emotions, increasing control, and maintaining emotional balance. Thus, the patient's emotions are not excessive and do not occur at high-intensity levels (Namuwali, 2017). The mechanism of deep breathing relaxation is a state in which the processes of inspiration and expiration occur at a respiratory rate of 6-10 times per minute, increasing cardiopulmonary strain. Deep breathing relaxation therapy can be accomplished independently, is easy to do, does not take long, and can reduce the adverse effects of pharmacological therapy (Masnina, 2018).

Based on the results of a preliminary study at Puskesmas Baki, Sukoharjo Regency, there were 110 patients with post-tuberculosis, while the number of tuberculosis contact investigations reached 50

patients. This research is urgent due to numerous studies on anxiety during treatment, but there has not been any research on anxiety after Tuberculosis treatment. After six months of treatment, patients with tuberculosis are considered finished. Therefore, patients are anxious about the recurrence of disease symptoms. The initial study revealed that, in 10 patients with post-tuberculosis treatment, six patients experienced anxiety during the COVID-19 pandemic. They feared tuberculosis would recur in the presence of COVID-19 because the symptoms they experienced were almost the same. This anxiety arises when the patients are uncomfortable and fear recurrence. Recurrence can occur due to germs remaining from the previous infection that grew again. The cause of this anxiety arises due to a lack of exposure to information about post-treatment care and fear of transmitting the disease to family and others. This study aimed to determine the effectiveness of dhikr therapy and deep breathing relaxation to reduce anxiety in patients with post-tuberculosis treatment.

METHOD

Qualities of participants and research methodology

This type of research is quantitative research, pseudo-experiment (Quasy Experimental) which aims to determine the effect of therapy dhikr with deep breathing in reducing anxiety in post-tuberculosis treatment sufferers. This research uses a Quasi-Experimental research plan with a Two Group PreTest and PostTest Design, this means that the researchers used two groups which were divided into one experimental group using dhikr therapy and one control group using deep breathing therapy.

Sampling procedures

Research place at Puskesmas Baki Sukoharjo from August to October 2022. The individuals included in this research were Patients with Post Tuberculosis Treatment, with a total of 110 respondents. In the experimental research, at least 30 respondents obtained a sample of 60 respondents (Sugiyono, 2017), with the allocation of the dhikr therapy intervention group of 30 respondents and deep breathing relaxation with the remained as the control group. Furthermore, adding 10% of each respondent to overcome dropout. The study's sampling strategy employed consecutive sampling using the following criteria:

- a. Inclusion Criteria
 - 1) Patients with post-tuberculosis treatment
 - 2) suffering from moderate and mild anxiety
 - 3) Muslim
 - 4) age > 60 years
- b. Exclusion Criteria
 - 1) Have comorbidities
 - 2) Receiving anxiety medication therapy
- c. Dropout Criteria
 - 1) Died
 - 2) Respondents who did not attend therapy according to schedule

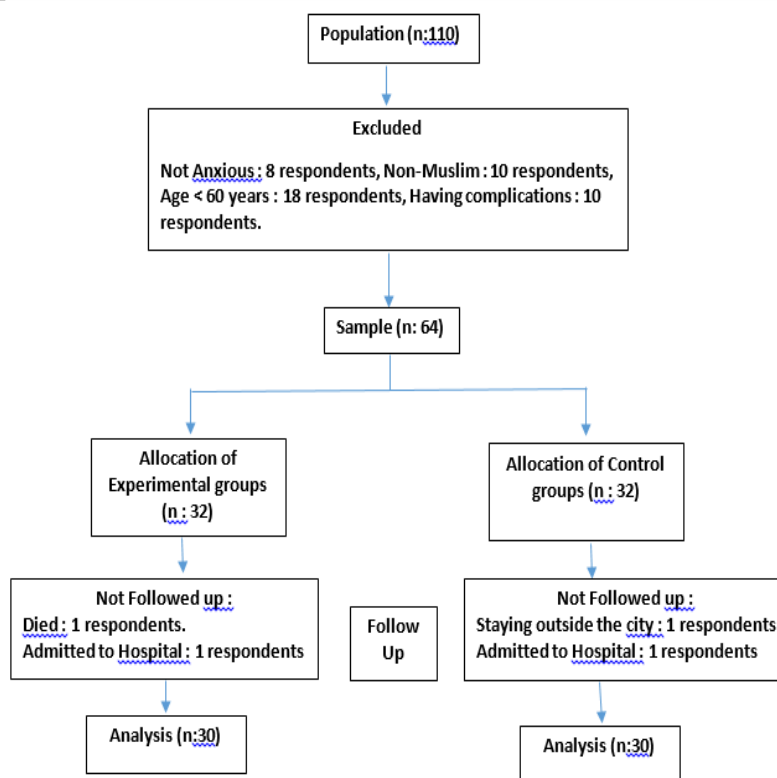


Figure 1. Sample Selection Chart

Intervention (applies to experimental studies)

Dhikr Therapy Intervention and Deep Breathing Relaxation

The stages of this deep breathing relaxation therapy technique involve the respiratory system. The media employed are videos and booklets using religious classical music. Relaxation therapy is conducted when the process of inspiration and expiration occurs using a respiratory frequency of 6-10 times per minute and is accomplished every day for 12 weeks. For the first time, the researchers taught the patients how to do deep breathing relaxation by showing videos and distributing booklets door to door to the patient's homes. Afterward, in the second meeting, the patients were asked to do it alone at home every day for 12 weeks with family assistance and provided a checklist if they had completed it. At the last meeting, the researchers visited the patient to evaluate and conduct a post-test. The stages of Creating a tranquil setting, making an effort to be calm and relaxed, and practicing deep breathing relaxation inhale deeply from the nose and take in air into the lungs. in the count, and slowly exhale air via the oral cavity as as your lower and upper extremities become more relaxed, motivate breathe in a regular rhythm three times, Breathe in through your nose once more, then out through your mouth. slowly, let the palms and feet relax, try to stay concentrated, suggest to repeat the procedure until completely relaxed, repeat for 15 minutes, and alternate short rest every five breaths. Subsequently, commit Istighfar (seeking forgiveness) to Allah SWT, and guide the patients to self-development. At this stage, patients are conditioned to cultivate their positive potential while relaxing to soothing music. Ask them to pray and examine the patients' feelings and complaints after therapy (Wardani, 2015)(Imawan, 2022)(Aisyatin Kamila, 2022)(Smeltzer & Bare, 2013).

Dhikr therapy utilizes booklet media, accomplished after every obligatory prayer for ten weeks. Initially, the patients were gathered into one group and received religious information from the ustad (Islamic teacher). Subsequently, they memorized the dhikr recitation together and distributed booklets and checklists. Respondents were asked to do the Dhikr that had been taught after every obligatory prayer (five times) for ten weeks. In the last meeting, the researchers visited patients,

door to door to evaluate and conduct a post-test. The stages and readings of the Dhikr are as follows:

| No | Recitation total | Dhikr Therapy Intervention |
|----|------------------|--|
| 1 | 3 Times | <p>Surah Al- Fatihah</p> <p>بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ In the name of Allah, Most Gracious, Most Merciful.</p> <p>الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ Praise be to Allah, the Cherisher and Sustainer of the worlds;</p> <p>الرَّحْمَنِ الرَّحِيمِ Most Gracious, Most Merciful;</p> <p>مَلِكِ يَوْمِ الدِّينِ Master of the Day of Judgment.</p> <p>إِيَّاكَ نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ Thee do we worship, and Thine aid we seek.</p> <p>اهْدِنَا الصِّرَاطَ الْمُسْتَقِيمَ Show us the straight way,</p> <p>صِرَاطَ الَّذِينَ أَنْعَمْتَ عَلَيْهِمْ غَيْرِ الْمَغْضُوبِ عَلَيْهِمْ وَلَا الضَّالِّينَ The way of those on whom Thou hast bestowed Thy Grace, those whose (portion) is not wrath, and who go not astray.</p> |
| 2 | Once | <p>Surah Al-Ikhlās</p> <p>بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ In the name of Allah, Most Gracious, Most Merciful.</p> <p>قُلْ هُوَ اللَّهُ أَحَدٌ Say: He is Allah, the One and Only;</p> <p>اللَّهُ الصَّمَدُ Allah, the Eternal, Absolute;</p> <p>لَمْ يَلِدْ وَلَمْ يُولَدْ He begetteth not, nor is He begotten;</p> <p>وَلَمْ يَكُنْ لَهُ كُفُوًا أَحَدٌ And there is none like unto Him.</p> |
| 3 | Once | <p>Surah Al-Falaq</p> <p>بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ In the name of Allah, Most Gracious, Most Merciful.</p> <p>قُلْ أَعُوذُ بِرَبِّ الْفَلَقِ Say: I seek refuge with the Lord of the Dawn </p> <p>مِنْ شَرِّ مَا خَلَقَ "From the mischief of created things;</p> <p>وَمِنْ شَرِّ غَاسِقٍ إِذَا وَقَبَ From the mischief of Darkness as it overspreads;</p> <p>وَمِنْ شَرِّ النَّفَّاثَاتِ فِي الْعُقَدِ From the mischief of those who practice secret arts;</p> <p>وَمِنْ شَرِّ حَاسِدٍ إِذَا حَسَدَ From the mischief of the envier when he envies;</p> |

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah, Most Gracious, Most Merciful.

قُلْ أَعُوذُ بِرَبِّ النَّاسِ ﴿١﴾

Say: I seek refuge with the Lord and Cherisher of Mankind,

مَلِكِ النَّاسِ ﴿٢﴾

the King (or Ruler) Of Mankind,

إِلَهِ النَّاسِ ﴿٣﴾

The Allah (for judge) of Mankind,

مِن شَرِّ الْوَسْوَاسِ الْخَنَّاسِ ﴿٤﴾

From the mischief of the Whisperer (of Evil), who withdraws (after his whisper),-

الَّذِي يُوسْوِسُ فِي صُدُورِ النَّاسِ ﴿٥﴾

(The same) who whispers into the hearts of Mankind,

مِنَ الْجِنَّةِ وَالنَّاسِ ﴿٦﴾

Among Jinns and among men.

4 Once Surah An-Nas

اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ لَا تَأْخُذُهُ سِنَّةٌ وَلَا نَوْمٌ لَهُ مَا فِي

السَّمَوَاتِ وَمَا فِي الْأَرْضِ مَنْ ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِلَّا بِإِذْنِهِ يَعْلَمُ

مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْفَهُمْ وَلَا يُحِيطُونَ بِشَيْءٍ مِّنْ عِلْمِهِ إِلَّا بِمَا شَاءَ

وَسِعَ كُرْسِيُّهُ السَّمَوَاتِ وَالْأَرْضَ وَلَا يَئُودُهُ حِفْظُهُمَا وَهُوَ الْعَلِيُّ

الْعَظِيمُ ﴿٢٥٥﴾

Allah. There is no god but He,-the Living, the Self-subsisting, Eternal. No slumber can seize Him nor sleep. His are all things in the heavens and on earth. Who is there can intercede in His presence except as He permitteth? He knoweth what (appeareth to His creatures as) before or after or behind them. Nor shall they compass aught of His knowledge except as He willeth. His Throne doth extend over the heavens and the earth, and He feeleth no fatigue in guarding and preserving them for He is the Most High, the Supreme (in glory).

5 Once The Throne Verse

Table 1. Dhikr Therapy for Anxiety. (Al-Fatihah, n.d.)(Al-Baqarah, n.d.)(An-Nas, n.d.)(Al-Falaq, n.d.)(Al-Ikhlash, n.d.)

Measurement and data collection;

This study used the GAS (*Geriatric Anxiety Scale*) questionnaire, consisting of 25 questions with the interpretation of minimal anxiety (0-18), mild anxiety (19-37), moderate anxiety (38-55), and severe anxiety (56-75) (Christine E Gould, Daniel L Segal, Brian P Yochim, Nancy A Pachana, Gerard J Byrne, 2014)(Daniel L Segal, Andrea June, Matthew Payne, Frederick L Coolidge, 2010). Independent t-tests and paired t-tests were performed in this study.

Data analysis;

The results of the validity test that was carried out at the Kartasura Health Center showed that The reliability test's findings revealed a Cronbach alpha value of 0.912 and the validity test of the calculated R value was in the range of 0.374-0.877. this value is above the R table value of 0.361, so it is said to be valid and reliable. The characteristics of the respondents are presented proportionally. The Kolmogorov-Smirnov test was used to check for data normalcy. Its purpose is to choose the appropriate test type. The Kolmogorov-Smirnov test findings indicated that the data

had a normal distribution (p -value > 0.05). To determine the effect of Dhikr therapy and deep breathing techniques using the Paired T-Test. Known as the partial test, the T-Test examines the independent effects of each variable on the dependent variable separately. Significant differences were assessed as $p < 0.05$. SPSS 21 was used to analyze all of the data. (SPSS® Statistics 21).

RESULTS AND DISCUSSION

Results

Table 1 displays the results of the distribution of the intervention group based on age. Most respondents were in the age range of 60-65, with 17 respondents in total (56.7%). Based on gender characteristics, the results showed that most respondents were male, which obtained 16 respondents (53.3%). Based on the last education characteristics, most respondents had an elementary school education, which obtained 12 respondents (40.0%). Based on the length of time after treatment characteristics, most respondents had between 7-12 months of treatment, which obtained 12 respondents (40.0%).

In addition, based on age characteristics, the distribution results in the group under supervision indicated that most respondents were in the 60-65 age range, which obtained 22 respondents (73.3%). Based on gender characteristics, most respondents were female, which obtained 17 respondents (56.7%). Based on the latest education characteristics, most respondents were from senior high schools, which obtained 13 respondents (43.3%), and undergraduates were 2 (6.7%). Based on the length of time after treatment characteristics, most respondents had between 7-12 months of treatment, which were 11 respondents (36.7%).

Table 2 describes the results of the GAS (Geriatric Anxiety Scale) questionnaire results in the oversight and intervention groups. For the Therapy group in the pretest, it was found that 20 (66.7%) respondents had mild anxiety, while 10 (33.3%) respondents with moderate anxiety. In the post-test, the results obtained were 18 (60.0%) respondents with minimal anxiety and 12 (40.0%) respondents with mild anxiety.

In comparison, in the control group, the pretest Findings indicated that 11 (36.7%) respondents had mild anxiety, and 19 (63.3%) respondents had moderate anxiety. The results of the posttest showed that 8 (26.7%) respondents had minimal anxiety, 18 (60.0%) respondents had mild anxiety, and 4 (13.3%) respondents had moderate anxiety.

Table 4 presents the study's findings. The mean in the pretest results of the GAS questionnaire in the intervention group was 32.20 utilizing a standard deviation of 9,813, while the mean in the post-test of the GAS questionnaire was 17.30 utilizing a standard deviation of 6,428. In the pretest results of the GAS questionnaire for the control group, the mean was 37.77, with a standard deviation of 7.838. In contrast, the mean on the post-test results of the GAS questionnaire was 24.73, with a standard deviation of 9.392.

| No. | Characteristics | Intervention Group | | Control Group | | <i>P</i> |
|--------|-----------------|--------------------|------|---------------|------|----------|
| | | Freq (N=30) | % | Freq (N=30) | % | |
| Age | | | | | | |
| 1 | a. 60-65 | 17 | 56.7 | 22 | 73.3 | 0.85 |
| | b. 66-70 | 8 | 26.7 | 7 | 23.3 | |
| | c. 71-75 | 5 | 16.7 | 1 | 3.3 | |
| Gender | | | | | | |
| 2 | a. Female | 14 | 46.7 | 17 | 56.7 | 0.48 |
| | b. Male | 16 | 53.3 | 13 | 43.3 | |

| | | | | | | |
|--------------------------------|-----------------------|----|------|----|------|------|
| Latest Education | | | | | | |
| 3 | a. No Education | 1 | 3.3 | 3 | 10.0 | 0.60 |
| | b. Elementary School | 12 | 40.0 | 6 | 20.0 | |
| | c. Junior High School | 6 | 20.0 | 6 | 20.0 | |
| | d. Senior High School | 10 | 33.3 | 13 | 43.3 | |
| | e. Undergraduate | 1 | 3.3 | 2 | 6.7 | |
| Length of Time After Treatment | | | | | | |
| 4 | a. 1-6 months | | | | | 0.44 |
| | b. 7-12 months | 11 | 36.7 | 9 | 30.0 | |
| | c. 13-18 months | 12 | 40.0 | 11 | 36.7 | |
| | d. 19-24 months | 4 | 13.3 | 6 | 20.0 | |
| | | 3 | 10.0 | 4 | 13.3 | |

Table 2. Distribution of Respondent Characteristics of the Control Group and the Intervention Group

| Geriatric Anxiety Scale | Intervention Group | | | | Control Group | | | |
|-------------------------|--------------------|------|-------------|------|---------------|------|-------------|------|
| | Pre-test | | Post-test | | Pre-test | | Post-test | |
| | Freq (N=30) | % | Freq (N=30) | % | Freq (N=30) | % | Freq (N=30) | % |
| a. Minimal anxiety | 0 | 0 | 18 | 60.0 | 0 | 0 | 8 | 26.7 |
| b. Mild anxiety | 20 | 66.7 | 12 | 40.0 | 11 | 36.7 | 18 | 60.0 |
| c. Moderate anxiety | 10 | 33.3 | 0 | 0 | 19 | 63.3 | 4 | 13.3 |
| d. Severe anxiety | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 3. Pre-test and Post-test Geriatric Anxiety Scale Distribution Frequency in the Control Group and Intervention Group

In this investigation, a normality test was first conducted using the One sample Kolmogorov-Smirnov test analysis, which was obtained as follows:

| Groups | | <i>p-value</i> | Conclusion |
|--------------|----------------------|----------------|----------------------|
| Intervention | <i>Pre-Test GAS</i> | 0,753 | Normally Distributed |
| | <i>Post-Test GAS</i> | | |
| Control | <i>Pre-test GAS</i> | 0,428 | Normally Distributed |
| | <i>Post-test GAS</i> | | |

Table 4. Normality Test Results in the Intervention and Control Groups

The findings of this study's analysis are in Table 4. The significant value within the group that received intervention was 0.753, and in the control group, the significance value was 0.428. The conclusion from the data above is that the control group's and the intervention group's data are distributed normally because the significance value is $>\alpha$ 0.05, which indicates the data is normally distributed.

| Group | Analysis | | Mean \pm SD | <i>Correlation</i> | <i>p-value</i> |
|--------------|---------------|----|--------------------|--------------------|----------------|
| | Information | N | | | |
| Intervention | Pre-Test GAS | 30 | 32.20 \pm 9.813 | 0.805 | 0.001 |
| | Post-Test GAS | 30 | 17.30 \pm 6.428 | | |
| Control | Pre -Test GAS | 30 | 37.77 \pm 7.838\ | 0.502 | 0.005 |
| | Post-Test GAS | 30 | 24.73 \pm 9.392 | | |

Table 5. The Results Of Different Tests In The Two Groups And The Effect Of Dhikr Therapy And Deep Breathing Techniques On The Anxiety Of Elderly With Tuberculosis.

The analysis results using the intervention's Paired T-Test and control groups acquired p values of 0.001 and 0.005 $<\alpha$ 0.05, indicating the effect of providing Dhikr Therapy and deep breathing techniques on reducing anxiety in the elderly suffering from pulmonary tuberculosis.

Discussion

Anxiety Level

Anxiety is an uncomfortable feeling, and physiological symptoms can justify it. If it is with anxiety problems, there will be a sense of suffering full of meaning, and problems with function arise due to anxiety (T. Purwanto, 2015). The results of this study indicate that there are differences in the pre-test and post-test respondents' anxiety levels. In the control group, the pre-test results showed that 19 respondents had a moderate level of anxiety, while 11 other respondents had a mild level of anxiety. The pre-test results in the intervention group showed that 10 respondents had moderate anxiety levels, while the other 20 had mild anxiety levels.

Anxiety Level

Anxiety is an uncomfortable feeling, and physiological symptoms can justify it. If it is with anxiety problems, there will be a sense of suffering full of meaning, and problems with function arise due to anxiety (T. Purwanto, 2015). The study's findings show that the pre- and post-tests differ from one another. respondents' anxiety levels. In the control group, the pre-test results showed that 19 respondents had a little case of anxiousness, while 11 other respondents had a mild level of anxiety. The pre-test results in the group receiving intervention demonstrated that 10 respondents had moderate anxiety levels, while the other 20 had mild anxiety levels.

The post-test results showed that in the control group, there was a change in the level of anxiety. Among other things, eight respondents had a minimum level of anxiety, 18 had a mild level of anxiety, and four had a moderate level of anxiety. In comparison, in the intervention group, there was a significant change in anxiety levels. 18 respondents had minimal anxiety levels, while 12 had mild anxiety. It shows that there is a change in the level of anxiety after being provided with dhikr and deep breathing therapy intervention. throughout essence, anxiety is a normal emotion that everyone has encountered throughout their lifetime. It is accepted that anxiety is a normal component of life. Anxiety is a typical emotion in nature, characterized by fear or a loss of confidence.that is unclear in basis or form. Anxiety nearly everyone will experience at some time in their lives. Anxiety is a normal reaction to stressful situations in people's life. Anxiety frequently appears alone or in combination with other symptoms of various emotional disorders (Amrullah et al., 2021). Psychological support has an essential role in the process of experiencing health problems. The form of support provided by the family is in the form of advice when parents experience a downturn, pray for parents, provide spiritual strength, and meet their needs. Support from friends, mentors, and administrators can also intensify parents' motivation to deal with illness (Kafindi et al., 2021).

Dhikr Therapy

Based on Table 2. in the intervention group that used Dhikr therapy, it was discovered that Pre-test findings revealed that the majority of responders had mild anxiety, which obtained 20 (66.7%) respondents in total, and the post-test showed that most respondents experienced anxiety at least 18 (60.0%) respondents. Dhikr therapy is significantly effective in reducing anxiety following previous research that *murottal* (Recorded Qur'an Recitation), dhikr, and deep breathing relaxation are effective in reducing anxiety in postoperative patients. The reason is that *murottal* and dhikr can induce the release of endorphins from the neurological system. These hormones reduce vital signs of anxiety, create a pleasant atmosphere, and reduce anxiety. In the meanwhile, deep breathing exercises and relaxation methods can soothe and ease discomfort in order to ease physical stress, increase lung ventilation, and can increase blood oxygen (Malikul Mulki & Sunarjo, 2020). The researchers conducted the dhikr therapy after every obligatory prayer for 10 weeks. The dhikr begins by reciting the *basmalah* (In the name of Allah). Afterward, it proceeded with reciting al-

Fatihah three times. In addition, Al-Ikhlās, Al-Falaq, An-Nas, and the Throne verse are recited once. With the results of the research p-value of 0.001, dhikr therapy has the effect of increasing molecular signals and neurotransmitters to release endogenous opiates such as enkephalins, which can cause sensations of euphoria and pleasure as calming body responses (Anjastya & Yuniartika, 2022).

Spirituality is very important in helping or recovering from mental health problems. The spirituality approach is a therapy in holistic nursing that has an important role in helping people to overcome mental stress such as anxiety. (Sri Suyani, 2023). Spiritual motivation will trigger the limbic system to produce more spiritual aspects from the power stored by the brain obtained from previous or spiritual experiences practice (Muhammad Saleh Nuwa, 2021). Uncontrolled stress conditions will induce anxiety disorders, and poorly managed anxiety disorders can exacerbate depression. Islamic spiritual mindfulness is one of the educational actions that supports building self-awareness that the problems individuals are currently experiencing are Allah's scenario, and Allah is the most capable of dealing with them. It is hoped that Islamic spiritual mindfulness can bring about a feeling of always being watched over by God, introspection, acceptance, surrender (surrender), asking for the help of God Almighty (prayer) and enthusiasm coming out of the conscience to encourage doers to do good deeds. It has been demonstrated that Islamic spiritual therapy, which incorporates mindfulness, is beneficial in reducing depression and other psychiatric diseases, and reducing stress. Dhikr is a form of Islamic spiritual healing (Munif et al., 2019).

Beliefs and religious activities are conducted among the community, including patients with depression, anxiety, and non-depression. However, the severity of the disease is significantly inversely proportional to religious activity. The results of research on religious involvement help patients with chronic disease problems to cope better. In other words, religious involvement can protect patients from anxiety; if they suffer from depression, it might help reduce the anxiety severity. Patients regularly report religious therapy as an effective coping behavior. However, social support can help patients with anxiety chronic disease (Imawan, 2022). Numerous spiritual therapies can be applied to anxiety management, one of which is the psycho-spiritual therapy of dhikr with deep breathing. One of the therapies that can be applied to reduce anxiety levels is spiritual therapy. Spiritual therapy is required because physical and psychological disorders are caused by material-biological and spiritual factors (Amrullah et al., 2021). Spiritual factors contribute to the client's healing process, even those who are religious are better at coping with suffering, and the healing process is faster. The spiritual factor is also intended to increase the patient's feeling of peace. Dhikr contains elements of spirituality or religion that can generate self-confidence and faith in people who are ill. Thus, the body's resistance increases and accelerates the healing process (H. E Nihayati et al., 2019).

Every human who listens to the holy Qur'an verses or commits Dhikr will acquire tranquility of mind. The human voice is the most accessible and effective healing instrument, because it is physically present in the Qur'anic recital. The Qur'an is played with a constant rhythm and performed at a calm and leisurely pace, and It will induce serenity. The Quran has been proven significantly cause physiological and psychological changes. Previous studies also uncovered consistent results that reciting verses from The Qur'an can boost endorphin production and lower stress chemicals, and increase body relaxation (Hudiyawati et al., 2022). Dhikr includes approaching oneself to Allah SWT and having people surrender to Him. Therefore, a positive outlook and hope arise. Belief in Allah SWT can relieve when individuals experience pain or problems. They believe granting their demand can help them fortify their mind, soul, and body. Thus, the physiological response decreases because the nervous system is reduced, and there is a decrease in anxiety (Suparyadi et al., 2021). Dhikr, as a form of worship in Islam, is a religious relaxation, by saying the word Allah or *Ahad* continuously, slowly, and rhythmically can generate a relaxation response. The repetition of this word, accompanied by a belief in Allah's love, His

protection, and other magnificent characteristics, will create a sense of calm and security (S. Purwanto, 2016).

Repetitively reciting the name and the grandeur of Allah SWT is part of the treatment process known as Dhikr therapy. which is accompanied by the awareness of Allah SWT to heal pathological conditions. As defined by WHO, mental health consists of four dimensions: physical, psychological, social, and spiritual health. Therefore, a holistic (comprehensive) approach must be made to deal with anxiety. Dhikr therapy positively impacts cognitive, affective, and spiritual aspects. On the cognitive aspect, reciting dhikr provides a positive understanding. On the affective aspect, the positive understanding arises because dhikr fosters optimism that every problem can be overcome. In addition, dhikr is referred to Islamic relaxation technique to calm tense feelings. Regarding the spiritual aspect, Dhikr raises awareness to surrender to Allah SWT (Widyastuti et al., 2019).

Dhikr therapy is a form of relaxation that can be used to enhance the parasympathetic nervous system's activity while decreasing the sympathetic nervous system's. Parasympathetic nerves can reduce oxygen consumption, breathing, pulse, and produce relaxation. Dhikr therapy can reduce oxygen consumption by controlling several predictor factors, such as anxiety and fear. The amalgamation of pharmacological therapy and Dhikr is more potent in reducing the pain intensity of ACS patients, although most of the patients are in the control group. given morphine (Pangestika et al., 2020).

Deep Breath Therapy

Table 2 in the control group employing deep breathing therapy found that the pre-test results of most 19 (63.3%) respondents had moderate anxiety, and the post-test obtained most respondents had mild anxiety, which obtained 18 (60.0%) respondents. A person with anxiety can be caused by dangers to one's bodily integrity because of diminished capacity to accomplish daily activities life. Furthermore, Damage is one of the dangers to the body systems' integrity to personal identity, self-worth, and cohesive social interaction (Alfikrie et al., 2020). Thus, it is necessary to deal with reducing anxiety, namely deep breathing relaxation. Accomplishing deep breathing relaxation can suppress the sympathetic nerves by suppressing the tension experienced by a person. Cardiopulmonary stretching will reciprocally increase baroreceptors. Thus, stimulating parasympathetic nerves can reduce anxiety (Puspitasari et al., 2021). It is believed that the deep breathing relaxation method reduces anxiety by releasing tense muscles. While the brain lowers oxygen-balanced demand, respiratory relaxation techniques can prevent the production of lactic acid in muscles by boosting oxygen availability. The body will get warmer as a result of the blood vessels becoming more elastic, circulation and blood flow becoming more consistent, and the heart's workload increasing, which will lessen anxiety and the sense of comfort. (Dedi K et al, 2023)

Researchers employ Deep Breathing Therapy with the stages that the patient should stand up with both arms open. Simultaneously, the patients take a deep breath from the nose and slowly exhale the air through the mouth while feeling the upper and lower extremities. It is conducted 6-10 times per minute, repeated for nearly 15 minutes, and completed with *Istighfar* recitation. Deep Breathing Therapy is more effective in increasing ventilation than the control group (singing therapy and diaphragmatic breathing exercises). This therapy positively impacts reducing shortness of breath in patients with pulmonary tuberculosis. Therefore, it can also be used as anxiety therapy (Ubolnuar et al., 2019). As in this study, the results of the T-Test P-value showed 0.005 that Deep Breathing therapy was effective in reducing anxiety. The effect of Deep Breathing Therapy program for hospitalized patients with tuberculosis is highly effective in reducing anxiety and depression. People with Tuberculosis report that irreversible dyspnoea episodes increased closely related to

anxiety. Anxiety and/or depression are significant risk factors for relapse. A deep breathing exercise program combined with health education is a stress management technique that significantly reduces anxiety (Marufan et al., 2021). Patients with a medical diagnosis of Tuberculosis have been given three physiotherapy treatments by therapeutic modalities. One of which is breathing exercises and practical coughing exercises, as well as activity training and functional ability to obtain good results and significant changes such as reducing shortness of breath (Nihayati et al., 2019)

LIMITATION OF THE STUDY

This study has important implications because the results really help nurses, Tuberculosis Cadres, or other health workers to determine more effective interventions for tuberculosis sufferers after treatment, especially the elderly to reduce anxiety. Dhikr therapy was carried out in research using group therapy and receiving religious counseling from Islamic religious experts (Ustad) besides being able to reduce anxiety as well as therapy to get closer to Allah and social therapy. This study has a number of advantages, one of which is that it is a quasi-experimental study that employed quite stringent sample selection procedures to minimize respondent bias. In addition, previous studies have discussed the treatment of pulmonary tuberculosis, but in this study the focus was on anxiety after treatment. But it's important to recognize some of this study's limitations.. Other factors that affect anxiety in the elderly after tuberculosis treatment such as losing a partner, losing a job. The need for the role of the closest person in accompaniment after post treatment of pulmonary tuberculosis. Additionally, in order to statistically support the findings, more samples must be used.

CONCLUSIONS AND SUGGESTIONS

Conclusion

The findings of this investigation that both groups showed a result in reducing anxiety in patients with post-treatment pulmonary tuberculosis. The effect of Dhikr therapy as an Intervention group and Deep Breathing therapy as a control group can reduce anxiety. However, these results are more significant than Dhikr therapy in reducing patients' anxiety with post-treatment Pulmonary Tuberculosis than Deep Breathing Therapy.

Suggestion

1. Regarding Academic Establishments
Can be utilized by instructors and students as an extra source of knowledge and reference regarding providing dhikr and deep breathing therapy to reduce anxiety in post-tuberculosis treatment sufferers.
2. To the Society
Can Offer Details Regarding dhikr therapy and deep breathing to reduce anxiety
3. For More Researchers
Can be used as guidance and more details in subsequent studies.

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ETHICAL CONSIDERATIONS

This research has been approved by the Health Research Ethics Committee of Dr. Moewardi Surakarta Hospital with code number: 993/VII/HREC/2022.

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