The Effect of Benson Relaxation Therapy and Murotal Surah Ar-Rahman on Anxiety in Patients With Diabetes Mellitus in The area of The Holy Ghost Sanctuary

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***Abstract**.*

Diabetes mellitus is a chronic disease that often causes psychological stress, one of which is anxiety. Anxiety in people with diabetes can worsen health conditions and hinder the healing process. Non-pharmacological therapies such as benson relaxation therapy and Surah Ar-Rahman's murotal therapy are suspected to have the potential to lower anxiety levels based on several previous study results. The purpose of this study is to determine the effect of benzon and murottal therapy on the anxiety level of patients with diabetes mellitus. This study uses a quasi-experimental design with a pre test and post test control group design approach in one intervention group. There were 52 respondents, of which each group would get 26 respondents who were selected through purposive sampling techniques. Benson and murotal therapy interventions were given for 7 consecutive days with a duration of 10-15 minutes. Anxiety levels were measured before and after the intervention using the Depression Anxiety and Stress Scale questionnaire with a total of 21 questions. The results and discussion were obtained based on the Sapiro Wilk test and the T-test with the Paired Samples Test. The results of the analysis showed that the relaxation therapy of benson and murotal Surah Ar-Rahman had a significant effect on the anxiety level of Diabetes Mellitus patients in the Kaliwungu Health Center area, with a p-value of 0.001 (p<0.05). Meanwhile, the results of the comparison of the intervention group and the control group were with a p-value of >0.0001. The results of this study strengthen the theory that relaxation and spirituality-based nonpharmacological interventions are able to influence psychological responses, particularly in lowering anxiety levels.

***Keywords:** Benson Relaxation Therapy; Murotal Surah Ar-Rahman and Diabetes Mellitus.*

I.   INTRODUCTION

Research conducted by Sari (2022) shows that the benzon relaxation technique is effective in overcoming anxiety in people with diabetes mellitus. This intervention was carried out on 18 respondents aged 60 to 86 years with a duration of between 10 to 30 minutes per day for 7 consecutive days. Another study by Mulia (2020) proved that there was an effect between benzon relaxation on reducing anxiety and blood glucose levels conducted on 16 respondents. Similar results were found in a study by Utami & Rahmawati (2025) on 40 patients with type 2 diabetes mellitus at the Bobotsari Health Center showing a 32.5% decrease in anxiety levels after being given Benson therapy for 7 consecutive days. In addition, a previous study by Astuti & Agus P (2018) revealed that the administration of murotal therapy Al-Qur'an Surah Ar-Rahman was able to stabilize blood sugar levels in patients because it had a positive sensation that could provide a relaxing effect by relieving anxiety, boredom, fatigue, depression, and stress. This is supported by a study conducted by Mukhtar (2022) on 15 patients with diabetes mellitus showing a significant decrease in anxiety levels after being given Surah Ar-Rahman murottal therapy. Prior to the intervention, 2 (13.3%) patients experienced moderate anxiety, 10 (66.7%) patients experienced severe anxiety, and 3 (20%) patients experienced very severe anxiety. After therapy, 2 (13.3%) patients experienced moderate anxiety and 13 (86.7%) patients experienced mild anxiety. These results suggest that murottal therapy is effective and worthy of consideration as a nursing intervention to reduce anxiety in diabetic patients.

Several studies have shown that the combination of benzon relaxation therapy with murotal may have a positive impact on anxiety reduction in DM patients. This is strengthened based on research conducted by Eroglu and Gok Metin (2022), which stated that 30 out of 61 respondents proved that the

combination of the two therapies was effective in reducing anxiety levels in patients with diabetes mellitus (DM) as well as improving their overall quality of life. The results of another study conducted by Rosada & Pakarti (2024) stated that the combination of benzon relaxation with Qur'anic murotal therapy was proven to be effective in lowering blood sugar levels in 2 patients with diabetes mellitus at the Banjarsari Inpatient Health Center, North Metro District. This is because benzon relaxation is able to inhibit the stress feedback pathway and provide a relaxation effect on the patient's body. This spiritual approach is not only beneficial for mental health but also helps lower blood sugar levels. In a study by Purwasih (2017), it was said that the combination of benson relaxation and Surah Ar-Rahman murottal therapy given to 30 respondents twice a day, in the morning and evening for 7 days, was proven to significantly reduce blood glucose levels in patients with diabetes mellitus.

A preliminary study, which was previously conducted by researchers in January 2025 using the DASS (Depression Anxiety Stress Scale) questionnaire, found the conclusion that 7 out of 13 patients with diabetes mellitus in the Kaliwungu Health Center area experienced excessive anxiety disorders. This is due to the sense of responsibility or burden that sufferers feel, considering the cost of treatment that is not cheap and concerns about the impact of diabetes that can affect their daily activities. Sufferers often feel pressured by the treatment routine that must be undertaken, coupled with the obligation to maintain a strict diet and lifestyle. These factors lead to increased psychological stress, which if not properly managed, can worsen the physical and mental condition of sufferers. Psychologically, a decrease in anxiety can affect the quality of life of sufferers because it increases mood and confidence in dealing with the disease experienced. Therefore, it is necessary to take appropriate action to deal with this problem. Based on this background, researchers are interested in combining benson relaxation therapy with Surah Ar-Rahman murotal as a safer alternative therapy to reduce anxiety in patients with diabetes mellitus (DM), which is expected to contribute to the management of anxiety in DM patients in Indonesia. General Purpose To find out the effect of the administration of Benson Relaxation Therapy and Murotal Surah Ar-Rahman on the anxiety of patients with Diabetes Mellitus in the Kaliwungu Health Center area, Kudus City.

Special Purpose Describe the characteristics of respondents consisting of age, gender, education, and occupation. To determine the level of anxiety before and after the Benson and Murotal Surah Ar-Rahman relaxation therapy was carried out in patients with diabetes mellitus at the Kaliwungu Health Center in the intervention group. To determine the level of anxiety before and after the Benson and Murotal Surah Ar-Rahman relaxation therapy was carried out in patients with diabetes mellitus at the Kaliwungu Health Center in the control group. To find out the difference in anxiety levels before and after the intervention of Benson and Muratal Surah Ar-Rahman relaxation therapy in patients with diabetes mellitus at the Kaliwungu Health Center in the intervention group. To find out the difference in anxiety levels before and after the intervention of Benson and Surah Ar-Rahman relaxation therapy in patients with diabetes mellitus at the Kaliwungu Health Center in the control group. To find out the difference in anxiety levels between the intervention group and the control group at the Kaliwungu Health Center.

II.   METHODS

This study is a quantitative research with a quasi-experimental design using a pretest–posttest control group design approach. This design aims to analyze the effect of Benson relaxation therapy and Surah Ar-Rahman murottal therapy on anxiety levels in patients with diabetes mellitus. Anxiety levels were measured before and after the intervention. The number of respondents involved in this study was 52 people. This research will be carried out from November 20 to 26, 2026 for 7 days in the Kaliwungu Kudus Health Center area. The population in this study is all diabetes mellitus patients who have participated in the Chronic Disease Management Program (Prolanis) in the past year, which is 211 patients based on Prolanis outpatient data at the Kaliwungu Kudus Health Center. The number of samples was determined using the Isaac and Michael formula with an error rate of 10% because the number of populations was known. Based on the results of the calculation, a sample of 51.5 respondents was obtained which was then rounded to 52 respondents. All respondents were divided into two groups, namely the intervention group and the control group, each totaling 26 respondents. The determination of the group was carried out based on the sequence

number of respondents' participation, where the sequence numbers 1 to 26 were included in the intervention group, while the sequence numbers 27 to 52 were included in the control group.The sampling technique used is purposive sampling, which is the selection of respondents based on certain criteria in accordance with the research objectives.

Inclusion criteria included patients who were diagnosed with diabetes mellitus and experienced anxiety, able to communicate well, did not experience hearing loss, were not undergoing antidepressant drug therapy, and did not experience cognitive impairment. If there are respondents who resign during the study, additional respondents will be added until the sample number is met.The dependent variable in this study was the level of anxiety, while the independent variable was Benson's relaxation therapy and the murottal of Surah Ar-Rahman. Operationally, anxiety is defined as an emotional response characterized by feelings of tension, anxiety, and excessive worry experienced by patients with diabetes mellitus. Anxiety levels were measured using the Depression Anxiety and Stress Scale 21 (DASS-21) instrument. Benson relaxation therapy and murottal Surah Ar-Rahman are given with the aim of lowering sympathetic nerve activity and increasing parasympathetic activity, thereby inducing calmness and lowering anxiety scores. The intervention was carried out twice a day for seven days with a duration of 10–15 minutes per session. Compliance with the implementation of therapy was monitored using an observation sheet in the form of a checklist.Data collection was carried out using the DASS-21 questionnaire consisting of 21 statements, with the anxiety subscale including several symptoms such as feelings of fear for no apparent reason, muscle tension, panic tendencies, and excessive physiological reactions such as heart palpitations and difficulty breathing. Each statement is assessed using a four-point Likert scale, i.e. never, rarely, often, and very often. The questionnaire was given twice to each respondent, namely before the intervention (pretest) and after the intervention (posttest).

The questionnaire is filled out by the researcher by reading and explaining each question to the respondents to ensure good understanding.Before the univariate and bivariate analysis tests are carried out, a normality test is carried out first as a prerequisite for conducting data analysis. The normality test was carried out before the data was processed based on the proposed research models. The data normality test aims to detect the distribution of data in one variable that will be used in the research. Good and feasible data to prove these research models are normal distribution data. The normality test used is the *Shapiro Wilk* test. The test criteria are that H0 is accepted if p-value is >0.05 and H0 is rejected if p-value is <0.05. Data analysis was carried out univariate and bivariate. Univariate analysis was used to describe respondent characteristics as well as anxiety levels before and after the intervention, which were presented in the form of frequency distributions, mean values, minimum and maximum values, and standard deviations. Bivariate analysis was used to determine the effect of relaxation therapy Benson and murottal Surah Ar-Rahman on anxiety levels in patients with diabetes mellitus. The paired t-test was used to analyze differences in anxiety levels before and after the intervention within each group, while the independent sample t-test was used to compare the average change in anxiety levels between the intervention group and the control group, assuming normal distributed data. The significance level used in this study was $p < 0.05$.

III.   RESULT AND DISCUSSION
Respondent Characteristics

This study involved 52 respondents with diabetes mellitus with anxiety who were divided into 2 groups, namely 26 respondents in the intervention group and 26 respondents in the control group. The respondent characteristic data is presented as follows.

Table 1. Frequency Distribution of Respondents by Age, Gender, Education, and Occupation (n=52)

Characteristics of DM Patient Respondents	Intervention Groups		Control Group	
	f	%	f	%
Age				
19 - 44 years old	0	0%	3	5.8%
45- 59 years old	6	11.5%	15	28.8%
> 60 years old	20	38.5%	8	15.4%

Gender

	Male	7	13.5%	8	15.4%
	Women	19	36.5%	18	34.6%

Education

	No School	2	3.8%	2	3.8%
	SD	11	21.2%	12	23.1%
	Junior High School	8	15.4%	7	13.5%
	High School	4	7.7%	3	5.8%
	Bachelor	1	1.9%	2	3.8%

Jobs

	Farmer	9	17.3%	7	13.5%
	Merchant	3	5.8%	2	3.8%
	Labor	3	5.8%	5	9.6%
	Self-employed	3	5.8%	2	3.8%
	Housewives (IRT)	8	15.4%	10	19.2%
	Quantity	**26**	**100%**	**26**	**100%**

Based on table 1, it can be seen that out of a total of 52 respondents, the highest age category in the intervention group was in the age range >60 years as many as 20 people (38.5%), while in the control group the most in the age range of 45-59 years there were 15 people (28.8%). The majority of respondents in the intervention group and control group were female, 19 people (36.5%) and 18 people (34.6%) respectively. The highest level of education in the intervention group and the control group was both at the elementary school (SD) level with 11 people (21.2%) and 12 people (23.1%) respectively. As well as the most jobs pursued by respondents in the intervention group, namely farmers with 9 people (17.3%) and in the control group the most pursued the work of housewives with 10 people (19.2%).

Univariate Analysis and Bivariate Analysis

Before the comparative analysis test, a normality test was carried out using *Shapiro Wilk* which is presented in the following table.

Table 2. Normality Test with *Shapiro Wilk* (n=52)

Groups	Categories	n	p	Remarks
Intervention	Before	26	0,296	Normal Distributed
	After		0,286	Normal Distributed
Controls	Before	26	0,113	Normal Distributed
	After		0,073	Normal Distributed

Based on table 2, it can be seen that the intervention group before the relaxation therapy of benson and murotal Surah Ar-Rahman was p = 0.296 and after the therapy was p = 0.286. Meanwhile, for the control group in the pre-intervention, p = 0.113 and post-intervention was p = 0.073. Thus, it can be concluded that both groups, both the intervention group and the control group, had normally distributed data at the time before and after the intervention ($p > 0.05$).Univariate Analysis and Bivariate Analysis using the T-Test are presented in the table as follows.

Table 3. Univariate Analysis and Bivariate Analysis of Anxiety Levels Before and After Giving Benson and Murotal Surah Ar-Rahman Relaxation Therapy in the Intervention Group and Control Group of Diabetes Mellitus Patients with *T-Test* (n=52)

Groups	n	Categories	Red	Min-Max	SD	T	p-value
Intervention	26	Before	18,38	12-24	2,714	-15,036	0,001
		After	10,38	4-16	2,994		
		Differences	8,00		2,713		
Controls	26	Before	18,54	14-24	2,370	-1,995	0,057
		After	18,15	12-22	2,461		
		Differences	0,38		0,983		
Comparison of Anxiety between the Intervention Group and the Control Group						-10,221	<0.001

Based on Table 3, it is known that there was a decrease in the mean level of anxiety measured using the DASS score in the intervention group, from 18.38 with a standard deviation of 2,714 interventions to

10.38 with a standard deviation of 2,994 after the intervention. At the initial measurements, the lowest DASS score in the intervention group was 12 and the highest was 24. After being given therapy, the lowest score decreased to 4 and the highest score to 16. The mean difference in anxiety scores before and after the intervention in this group was 8.00 with a standard deviation of 2.713. In the control group, there was also a decrease in the average anxiety score, namely from 18.54 with a standard deviation of 2.370 to 18.15 with a standard deviation of 2.461. Before treatment, the lowest DASS score in the control group was 14 and the highest was 24, while after treatment the lowest score was 12 and the highest was 22. The mean difference in anxiety scores before and after in the control group was 0.38 with a standard deviation of 0.983. Therefore, the p-value results were obtained from the comparison between the two groups, which was <0.001. It can also be known that the data of the intervention group is p = 0.001 which means <0.05, so the hypothesis is accepted. Therefore, it can be concluded that there is an effect of relaxation therapy of benson and murotal Surah Ar-Rahman on the anxiety of DM patients in the intervention group in the Kaliwungu Health Center area. Meanwhile, the control group data obtained p = 0.057 meaning >0.05 so the hypothesis was not accepted. Therefore, it can be concluded that there was no effect of relaxation therapy of benson and murotal Surah Ar-Rahman on the control group in the Kaliwungu Health Center area.

Discussion

Differences Before and After Benson and Murotal Ar-Rahman Relaxation Therapy in the Intervention Group and Control Group on Anxiety Level in Patients with Diabetes Mellitus

Based on the analysis of the data in table 3, it is known that the average DASS value on the first day of measurement in the intervention group was 18.38, while in the control group it was 18.54. This value is included in the category of very severe anxiety, which has the risk of interfering with daily activities, a decrease in quality of life, and triggering the appearance of more severe physiological symptoms. This condition shows that before the intervention, most of the respondents were in a less stable psychological state and required special treatment. This is in line with literature research by Rahmawati & Rosyid (2025) which suggests that high anxiety levels can result in increased physical tension, impaired concentration, as well as decreased social functioning. This impact can affect patient compliance in undergoing treatment as well as the ability to adapt to chronic diseases such as Diabetes Mellitus. In the intervention group, the maximum value of 24 was in the category of very severe anxiety, while the minimum value of 12 was in the category of moderate anxiety. This range of values shows that there is variation in the level of anxiety between respondents, but in general it is still at a level that requires clinical attention. In the control group, the maximum value of 24 was also in the category of very severe anxiety, while the minimum value of 14 was in the category of moderate anxiety. Both categories are at risk of causing emotional instability and increased stress responses, which if left untreated can worsen the patient's physical and psychological condition.The average DASS value on the last day of measurement in the intervention group was 10.38, while in the control group it was 18.15. A considerable decrease in the intervention group showed an improvement in psychological condition after receiving treatment.

This data showed significant changes in the intervention group after being given Benson Relaxation Therapy and Murotal Surah Ar-Rahman. This is in accordance with previous research by Self-Sufficient (2023) who also found that the Benson Relaxation Technique and Murotal Surah Ar-Rahman were effective in lowering the activation of the sympathetic nervous system, providing a sense of calm, and improving emotional regulation. With a decrease in the activity of the sympathetic nervous system, the body is in a relaxed state characterized by decreased muscle tension, more regular breathing frequency, and stability of heart rate. In the intervention group, the maximum value of 16 was included in the category of severe anxiety, while the minimum value of 4 indicated normal conditions without anxiety. This indicates that some respondents have achieved an adaptive psychological state after undergoing regular therapy. In the control group, the maximum value of 22 was in the category of very severe anxiety, while the minimum value of 12 was in the category of moderate anxiety. This suggests that the control group did not experience much change before and after the measurement. Thus, it can be concluded that the Benson Relaxation and Murotal Surah Ar-Rahman therapies in the intervention group resulted in a significant reduction in anxiety levels, whereas the control group did not show much change because they received only simple education without

direct therapy. This condition confirms that nonpharmacological interventions carried out directly and continuously have an important role in helping to reduce anxiety in Diabetes Mellitus patients.

The Effect of Benson and Murotal Surah Ar-Rahman Relaxation Therapy on Anxiety in Diabetes Mellitus Patients

Based on the analysis of the data, it was obtained that the average anxiety level in the intervention group before being given Benson Relaxation Therapy and Murotal Surah Ar-Rahman was 18.38 with a standard deviation of 2.714. This value shows that most of the respondents were in the category of moderate to high anxiety before receiving treatment, which illustrates the presence of a significant psychological burden in Diabetes Mellitus patients. After the intervention, the average anxiety level decreased significantly to 10.38 with a standard deviation of 2.994. This decrease indicates a change in emotional state towards a more stable and calm direction, and shows the effectiveness of therapy in helping patients manage perceived anxiety. Meanwhile, the average anxiety level in the control group before the intervention was 18.54 with a standard deviation of 2.370 and after the intervention was 18.15 with a standard deviation of 2.461 which only decreased by 0.39. This relatively small decrease suggests that without direct therapy, changes in anxiety levels are less likely to be clinically meaningful.In the initial measurements, it was found that most respondents experienced symptoms of irritability, especially in irritability with a score of 92 points. This high score reflects the dominance of negative emotional responses in the form of feelings of irritability, tension, and lack of emotional control, which are physiologically related to increased activity of the sympathetic nervous system and the release of stress hormones.

After a week-long intervention of benson relaxation therapy combined with the murotal of Surah Ar-Rahman, the score on this aspect decreased to 58 points and was no longer the aspect with the highest score. This change shows an improvement in the emotional condition of the respondents, especially in terms of controlling irritability. The decrease in score indicates that the intervention provided is able to trigger a relaxation response, which is a physiological state characterized by a decrease in sympathetic activity, an increase in parasympathetic activity, and a reduction in the secretion of stress hormones such as cortisol and adrenaline. Theoretically, Benson's relaxation therapy through focused breathing techniques and autosuggestions, which is reinforced with auditory stimulation in the form of murotal Surah Ar-Rahman, can induce a sense of calm, peace, and resignation. This condition helps stabilize emotions, improve self-control, and reduce psychological tension. Thus, the decrease in scores on the "irritability" aspect reflects the success of the intervention in lowering anxiety levels and improving respondents' emotional regulation, which can further support better psychological adaptation in dealing with Diabetes Mellitus.Therefore, the researcher concluded that there was a significant influence on anxiety levels in Diabetes Mellitus patients after being given Benson Relaxation Therapy and Murotal Surah Ar-Rahman in the intervention group. This is evidenced by the significance of the value $p = 0.001$ ($p < 0.05$) which means that statistically there is a strong influence between the two variables.

In other words, the research hypothesis is acceptable because the intervention has been shown to be able to significantly reduce anxiety. In the control group, anxiety levels did not experience significant changes. This difference occurred because the intervention group received Benson Relaxation Therapy and Murotal Surah Ar-Rahman for 15 minutes each session for 7 consecutive days, while the control group only received health education about the therapy without direct therapy. This shows that the practice of therapy directly has a greater impact than just providing information.Research by Self-Sufficient (2023) showed that the administration of Benson Relaxation Therapy and Murotal Surah Ar-Rahman had a significant effect on reducing anxiety in patients with Diabetes Mellitus. These findings are in line with the results of the research obtained, thus strengthening the scientific evidence regarding the effectiveness of the combination of the two therapies. Both of these interventions can effectively decrease the activity of the sympathetic nervous system (*fight-or-flight*) and improve parasympathetic tone. This condition triggers a decrease in heart rate, breathing rate, and blood pressure, so that threat perception and anxiety levels are reduced. With the creation of more relaxed physiological conditions, the body is in a state of homeostasis that supports psychological recovery. Other studies by Tri Hapsari (2022) revealed that this therapy can consistently reduce anxiety and stress responses if done regularly.

The mechanism of action of this therapy involves autosuggestion combined with relaxation techniques, thereby stimulating the relaxation center in the brain. The activation of the relaxation center allows for the modulation of stress hormones and helps neutralize the stress response in the individual, so that the patient is able to control emotions, increase calm, and improve the overall quality of life.Based on the results of the discussion, the researcher argues that benson relaxation therapy combined with Surah Ar-Rahman murotal is an effective, simple, and applicable non-pharmacological intervention in reducing anxiety levels in patients with diabetes mellitus, because it is able to have a physiological and psychological impact simultaneously, namely suppressing stress responses, stabilizing emotions, and increasing calm and resignation in patients. Therefore, researchers believe that this combination of therapies should be recommended as part of a holistic nursing intervention in an effort to improve the quality of life of Diabetes Mellitus patients.

IV.   CONCLUSION

The characteristics of respondents in the age category were in the age range of 50–65 years as many as 24 (46.2%) people. The majority of respondents were female, namely 37 people (71.2%). The highest level of education was elementary school (SD) with 23 people (44.2%), and the most occupations pursued by respondents were housewives (IRT) as many as 18 people (34.6%). The average level of anxiety in the intervention group before being given Benson Relaxation Therapy and Murotal Surah Ar-Rahman was 18.38 and after being given the intervention was 10.38. The average level of anxiety in the control group before treatment was 18.54 and after treatment was 18.15. There was a significant reduction in anxiety levels of 8.0 in the intervention group after being given Benson Relaxation Therapy and Murotal Surah Ar-Rahman. Meanwhile, the control group showed only a slight decrease in the level of anxiety, which was 0.39. The difference in anxiety levels in the intervention group was known to have a significance value of 0.001 which means p=<0.05, so the hypothesis was accepted. Meanwhile, the difference in anxiety levels in the control group was known to have a significance value of 0.057 which means that p = >0.05 so that the hypothesis was not accepted.Thus, this study shows that there is a significant influence of Benson Relaxation Therapy and Murotal Surah Ar-Rahman on the anxiety of Diabetes Mellitus patients in the Kaliwngu Health Center area.

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