


The Effect Of Dzikir On Reducing Anxiety Levels In Pre-Cataract Surgery Patients At The Puri Cinere Hospital Eye Clinic

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Article Info	ABSTRACT
<p>Keywords: Dzikir, Cataracts, Anxiety.</p>	<p>Cataract is the occurrence of clouding in the lens of the eyeball which causes decreased visual ability to the point of blindness. One measure to prevent cataracts from causing blindness is surgery. Surgery or operations often cause anxiety in patients before surgery. Non-pharmacological therapy that can reduce anxiety levels in preoperative patients is dzikir. This study aims to determine the effect of dzikir on reducing anxiety levels in pre-cataract surgery patients at the Puri Cinere Hospital Eye Clinic. This research uses a quasi-experimental research design, one group pretest and posttest design without control. The population in this study were all patients who would undergo cataract surgery at the Puri Cinere Hospital Eye Clinic with a total sample of 18 people. The sampling technique is purposive sampling. The instrument of this research is the HARS questionnaire. Statistical tests use the Wilcoxon test. The results of the study showed that the anxiety level of pre-cataract surgery patients at Puri Cinere Hospital Eye Clinic before the Dzikir was carried out, the majority experienced moderate anxiety, 11 respondents (61.1%) and after the Dzikir the majority had no anxiety, 14 respondents (77.8%). The results of the Wilcoxon test showed that there was an effect of Dzikir on reducing anxiety levels in pre-cataract surgery patients at the Puri Cinere Hospital Eye Clinic with a p-value = 0.000. It is hoped that the results of this research can provide input for the nursing field in the non-pharmacological management of patients who experience anxiety before cataract surgery.</p>
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INTRODUCTION

Cataracts are an age-related disease resulting from aging processes, congenital conditions at birth, and can also be associated with eye trauma from sharp or blunt objects, long-term corticosteroid use, and systemic diseases such as diabetes or hypoparathyroidism[1]. Cataracts are a degenerative process characterized by clouding of the eye lens, leading to reduced vision and potentially blindness. This clouding occurs due to biochemical reactions that cause lens protein coagulation[2]. The cloudiness of the lens makes it opaque, causing the pupil to appear white or gray. Typically, this cloudiness affects both eyes and progresses over time, making it difficult for light to reach the retina. A cloudy lens scatters incoming light, resulting in blurred vision[3]. Cataracts remain the most dominant eye disease and the leading cause of blindness worldwide[4].

According to data from the Blindness and Vision Impairment Collaborators & Vision Loss Expert Group of the Global Burden of Disease Study[5], cataracts are the leading cause of blindness globally, particularly in individuals aged 50 and above, affecting over 15 million people or 45% of the 33.6 million cases of blindness worldwide. The World Health Organization[6] reports that 30% of global blindness cases due to cataracts originate from Southeast Asia. A survey by the Rapid Assessment of Avoidable Blindness (RAAB) found that cataracts cause 77.7% of blindness in Indonesia, with 1.9% of Indonesians over the age of 50 losing their vision due to cataracts[7]. Data from the Depok Health Profile[8] shows 1,233 cases of cataracts across all age groups, with 566 cases in individuals aged 45-75 in Depok City.

The high prevalence of blindness due to cataracts is attributed to population growth, increased life expectancy, high ultraviolet exposure, unequal distribution of eye health services and professionals, financial constraints, lack of awareness about cataracts, and fear of surgery[9][10]. One preventive measure to avoid blindness from cataracts is surgery[11]. Surgery is an invasive procedure involving opening or exposing the treated body part with an incision, followed by repair and closure [12]. Surgical success in restoring useful vision in cataract patients can reach 95%[9]. Preoperative preparations include mental, physical, and pre-operative room preparations[13]. However, surgical procedures often induce anxiety in patients before surgery[10],

Anxiety is an emotional state and subjective experience related to ambiguous and non-specific concerns due to risk anticipation, prompting individuals to act to counter threats[14]. Preoperative anxiety involves excessive fear and worry about undergoing surgery, stemming from perceived threats[15]. Factors contributing to preoperative anxiety include fear of pain, death, the unknown, disability, and other threats impacting body image, age, gender, knowledge level, personality types A and B, environment, and situation[16]. Anxiety can trigger physiological responses such as increased heart rate, blood pressure, and respiration, uncontrolled hand movements, sweaty palms, restlessness, repetitive questioning, difficulty sleeping, frequent urination, headaches, and blurred vision[17]. Uncontrolled preoperative anxiety can worsen a patient's physiological and psychological state, necessitating management to reduce anxiety[18].

Anxiety management can be pharmacological or non-pharmacological. Pharmacological management includes medication therapy to reduce anxiety, while non-pharmacological approaches include spiritual practices such as prayer, encouraging and reminding patients of prayer times, teaching deep breathing relaxation, listening to Quranic recitations, and dzikir[19]. Dzikir, the practice of remembering Allah or reciting specific phrases to praise and glorify Allah as taught in the Quran and exemplified by the Prophet Muhammad[20], can induce relaxation. The brain, when stimulated, produces endorphins that provide comfort and are absorbed into the body, resulting in feedback that relaxes both body and mind, thereby reducing anxiety[21].

Research by Mastuty et al [22] found that dzikir significantly reduces preoperative anxiety. Similarly, Sari & Nopriani [23] concluded that dzikir and deep breathing therapy significantly reduce preoperative anxiety (p-value 0.000). Sapitri et al [24] also found

significant anxiety reduction with dzikir ($p = 0.000$). These studies support the use of dzikir as an effective non-pharmacological intervention for reducing preoperative anxiety.

Preliminary studies conducted at RS Puri Cinere, a type B hospital with various inpatient and outpatient facilities, revealed that the Eye Clinic is frequently visited. From January to December 2023, 582 patients visited the Eye Clinic, with 302 being cataract patients, averaging 25 per month. The primary cause of cataracts was diabetes mellitus. Some patients experienced delayed surgeries due to anxiety, leading to increased blood pressure and abnormal lab results. Anxiety management included prayer according to individual beliefs. Interviews with eight Eye Clinic patients on September 23, 2023, showed that six (75%) experienced anxiety about surgery, fearing blindness, disability, and pain, resulting in increased vital signs like blood pressure and heart rate. The remaining two patients (25%) did not feel anxious due to prior education from healthcare workers and family support. The anxious patients coped by crying and praying.

METHOD

This study employs a quantitative method with a quasi-experimental design. According to Sugiyono[25], the quantitative method is based on the philosophy of positivism, used to study specific populations or samples. Sampling is done randomly, data collection uses research instruments, and data analysis is quantitative or statistical with the aim of testing established hypotheses. In this study, the design used is a one group pretest-posttest design without control. This design involves one group given a pretest, followed by an intervention in the form of dzikir, and concluded with a posttest. The subjects of this study are all patients who will undergo cataract surgery at the Eye Clinic of RS Puri Cinere, averaging 25 patients per month.

The sample in this study is selected from the population meeting the inclusion and exclusion criteria. The inclusion criteria include cataract patients visiting the Eye Clinic of RS Puri Cinere, conscious, Muslim, and willing to participate in the study. Meanwhile, the exclusion criteria include patients who withdraw or have hearing impairments. The sample size is calculated using formula 9-22 for experimental studies, resulting in a minimum of 16 participants. To avoid dropouts, the sample size is increased by 10%, making a total of 18 participants.

The sampling technique used is purposive sampling, which is based on certain considerations regarding the known characteristics or traits of the population. This study is conducted at the Eye Clinic of RS Puri Cinere, chosen due to the phenomenon of anxiety experienced by patients despite receiving education, as well as the convenience of data collection since the research site is the workplace of the researcher. This study is carried out from September 2023 to January 2024, covering the preparation of the proposal, proposal defense, preparation of research results, and defense of the results.

This study observes several ethical research aspects. The researcher provides an explanation of the purpose and objectives of the study, benefits, and potential side effects to the respondents, and requests written consent. Respondent identities are protected by using initials only, and the confidentiality of respondent information is guaranteed by the researcher.

The data collection tools in this study include a questionnaire on respondent characteristics covering demographic data such as age, gender, education, and occupation. The dzikir tool used is a hand tally counter or prayer beads and dzikir SOP. Additionally, a questionnaire on anxiety levels adapted from the Hamilton Anxiety Rating Scale (HARS) consisting of 14 anxiety symptoms is used.

Data collection is conducted through administrative and technical procedures. The administrative procedure involves observing phenomena at the Eye Clinic of RS Puri Cinere, determining the research title, and preparing the research permit letter. The technical procedure involves selecting the sample according to the inclusion and exclusion criteria, explaining the purpose and objectives of the study to respondents, measuring anxiety levels before the dzikir intervention, providing the dzikir intervention according to SOP, and measuring anxiety levels after the dzikir intervention. After data collection, the next step is data processing, which involves five stages: editing, coding, data entry, tabulating, and cleaning. Data is entered into computer software for analysis. Data analysis in this study involves normality tests, univariate analysis, and bivariate analysis. The normality test is conducted using skewness to assess whether the data is normally distributed. Univariate analysis is performed to describe the distribution of each variable, while bivariate analysis is used to test the differences in anxiety levels before and after the dzikir intervention using the Wilcoxon test.

This research design is expected to answer the research question regarding the effect of dzikir on reducing anxiety levels in preoperative cataract patients at the Eye Clinic of RS Puri Cinere. This study is systematically designed to ensure the validity and reliability of the results obtained, and to provide significant contributions in understanding the impact of dzikir on anxiety in preoperative cataract patients.

RESULTS AND DISCUSSION

Results

Univariate Analysis

Table 1. Characteristics of Respondents Based on Age

Age	Frequency (n)	Percentage (%)
18 - 40 Years	1	5,6
41 - 60 Years	5	27.8
>60 Years	12	66.7
Total	18	100.0

Source: Primary Data, 2023

Table 1. characteristics of respondents based on age shows that of the 18 respondents, 1 respondent was aged 18 - 40 years, 5 respondents were aged 41 - 60 years and 12 were aged >60 years. respondents (66.7%).

Table 2. Characteristics of Respondents Based on Gender

Gender	Frequency (n)	Percentage (%)
Man	8	44.4

Gender	Frequency (n)	Percentage (%)
Woman	10	55.6
Total	18	100.0

Source: Primary Data, 2023

Table 2. characteristics of respondents based on gender shows that of the 18 respondents, 8 respondents were male (44.4%) and 10 respondents were female (55.6%).

Table 3. Characteristics of Respondents Based on Education

Education	Frequency (n)	Percentage (%)
Lower Education (Primary)	0	0
Secondary Education (Junior High School, High School)	0	0
Higher Education (PT)	18	100.0
Total	18	100.0

Source: Primary Data, 2023

Table 3, characteristics of respondents based on education shows that of the 18 respondents, all 18 respondents had higher education (PT) (100.0%).

Table 4. Characteristics of Respondents Based on Occupation

Work	Frequency (n)	Percentage (%)
Doesn't work	12	66.7
Work	6	33.3
Total	18	100.0

Source: Primary Data, 2023

Table 4, characteristics of respondents based on work shows that of the 18 respondents, 12 respondents (66.7%) were unemployed and 6 respondents (33.3%) were employed.

Table 5. Anxiety Level Before Dzikir

Anxiety Level	Frequency (n)	Percentage (%)
Mild Anxiety	6	33.3
Moderate Anxiety	11	61.1
Severe Anxiety	1	5.6
Total	18	100.0

Source: Primary Data, 2023

Table 5 of respondents' anxiety levels before Dzikir therapy was carried out shows that of the 18 respondents there were 6 respondents with mild anxiety (33.3%), 11 respondents with moderate anxiety (61.1%) and 1 respondent with severe anxiety (5.6%).

Table 6. Anxiety Level After Dzikir

Anxiety Level	Frequency (n)	Percentage (%)
No Anxiety	14	77.8
Mild Anxiety	3	16.7
Moderate Anxiety	1	5.6
Total	18	100.0

Source: Primary Data, 2023

Table 6 of respondents' anxiety levels after Dzikir therapy shows that of the 18 respondents, 14 respondents did not experience anxiety (77.8%), 3 respondents with mild anxiety (16.7%) and 1 respondent with moderate anxiety. respondents (5.6%).

Bivariate Analysis

Table 7. The Effect of Dzikir on Reducing Anxiety Levels

		Ranks		
		N	Mean Rank	P-value
Anxiety Level (posttest-pretest)	Negative Ranks	0a	.00	0,000
	Positive Ranks	18b	9.50	
	Ties	0c		
	Total	18		

- a. After < Before
- b. After > Before
- c. After = Before

Source: Primary Data, 2023

Table 7 shows that the Wilcoxon Signed Ranks test results show changes in values before and after Dzikir. Positive ranks with an N value of 18 means that the entire sample experienced an increase in the pretest to posttest scores. The mean ranks or average increase is 9.50 and the Ties value is 0, meaning there are no similar values between the pretest and posttest. The results of this test also obtained a significance value of 0.000 ($p < 0.05$), which means that H_0 is rejected and H_a is accepted. This means there is the effect of Dzikir on reducing anxiety levels in pre-cataract surgery patients at Puri Cinere Hospital Eye Clinic.

Discussion

The majority of respondents in this study were over 60 years old, with 12 individuals (66.7%). This result differs from the study by Sari and Nopriyani[23], which showed that the minimum age of respondents was 45 years and the maximum was 59 years. According to Bahsoan[26], old age begins at 61 years and continues until death, with various physical changes that can trigger anxiety. The analysis indicates that many respondents were over 60 years old because visual function tends to decline at this age. In terms of gender, the majority of respondents were female, totaling 10 individuals (55.6%). This finding is consistent with the study by Sapitri et al. (2015), which also found that the majority of respondents were female. Biological differences and gender roles make women more susceptible to anxiety compared to men[27][28].

All respondents in this study had higher education, with 18 individuals (100%). This aligns with the research by Harahap et al [29], which showed that most respondents had middle and higher education. Higher education enables individuals to more easily accept information and knowledge, which can influence their response to anxiety[30][31]. The majority of respondents were not working, totaling 12 individuals (66.7%), which differs from the study by Setiawati [32], which found that the majority of respondents were farmers. According to Wiltshire[33], work has various definitions and roles in an individual's life,

including providing experience and knowledge. The majority of respondents not working can be linked to their advanced age, with most being retired.

Anxiety levels before dzikir showed that the majority of respondents experienced moderate anxiety, with 11 individuals (61.1%). This is consistent with the study by Fajrin[34], which showed that the majority of respondents had moderate anxiety before dzikir therapy. The anxiety experienced by patients can affect physiological responses and needs to be managed to not hinder surgical procedures[35][17]. After dzikir therapy, the majority of respondents did not experience anxiety, with 14 individuals (77.8%). This is in line with Fajrin's[34] findings, which showed a decrease in anxiety after dzikir therapy. Dzikir, as a spiritual therapy, can provide comfort and reduce anxiety through the production of calming endorphins[36][37].

Bivariate analysis with the Wilcoxon test showed a significance value of 0.000 ($p < 0.05$), indicating that dzikir has an effect on reducing anxiety levels in pre-operative cataract patients at the Eye Clinic of RS Puri Cinere. This is consistent with the studies by Sari & Nopriani[23] and Mastuty et al [22], which showed that dzikir can reduce pre-operative anxiety. Thus, dzikir can divert patients' attention from anxiety and provide calmness. Obstacles in this study included the advanced age of respondents, which made it difficult for them to understand the explanations, and limited space for the research, which reduced respondent privacy.

CONCLUSION

Based on the research findings, it can be concluded that the majority of pre-operative cataract patients at the Eye Clinic of RS Puri Cinere are over 60 years old (66.7%), female (55.6%), have a higher education background (100%), and are not working (66.7%). Before engaging in dzikir, the majority of respondents experienced moderate anxiety (61.1%). However, after performing dzikir, the majority of respondents did not experience anxiety (77.8%). Statistical tests showed a significant effect of dzikir on reducing anxiety levels in pre-operative cataract patients, with a p -value of 0.000. This study is expected to serve as an additional reference in nursing services, particularly as a non-pharmacological alternative intervention to reduce anxiety in pre-operative patients. The implementation of dzikir therapy can help patients be more prepared for surgery. Furthermore, the findings of this study can be used as a basis for developing Standard Operating Procedures (SOP) at RS Puri Cinere, ensuring that dzikir therapy is integrated into daily nursing practice.

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