

NURSING EXPERIMENTAL RESEARCH: ANALYSIS OF THE EFFECTIVENESS OF SPIRITUAL SUPPORT ON PRE-OPERATIVE PATIENT ANXIETY IN THE CENTRAL SURGICAL INSTALLATION

Janes Jainurakhma^{1CA}

Email: janesjr.nuryadi@gmail.com (*Corresponding Author*)

¹Nursing Study Program-Undergraduate Program, Kepanjen University

Ida Arini²

²RSUD Kanjuruhan, Malang

Hardiyanto³

³ Nursing Study Program-Undergraduate Program, Kepanjen University

ABSTRACT

Pre-operative anxiety is often experienced by patients due to the uncertainty of the procedure, fear of pain, and concern about the outcome of the surgery. Although anxiety management has become a nursing concern, many patients still experience high anxiety, which can affect their physical, psychological and postoperative recovery. The study aimed to analyze the effect of spiritual support (prayer guidance) on anxiety in pre-operative patients at the Central Surgical Installation (IBS) of the Kanjuruhan Regional General Hospital (RSUD), Malang Regency. The research is designed with *pre experimental, one group pre-test and post-test design*. Population All pre-operative patients at IBS Kanjuruhan Hospital. The sample was determined by *purposive sampling technique*, with a sample size of 80 respondents. The instrument used was *the Zung Self-Rating Anxiety Scale (ZSAS)* questionnaire. Data analysis with *the Wilcoxon test*. The results showed that most of the pre-operative patients experienced moderate anxiety (52.5%) with a median score of 64. After the spiritual support intervention (prayer guidance), the majority of respondents experienced a decrease in anxiety to mild (52.5%) with a median score of 47. The results of *the Wilcoxon test* obtained a $p <$ value of 0.001, there was a significant influence of prayer guidance on anxiety where 76 out of 80 respondents experienced a decrease in anxiety levels. Pre-operative patients need spiritual support, one of which is prayer guidance, this helps relaxation, strengthens patient confidence, and courage through spiritual connections so that it can reduce anxiety levels in pre-operative patients.

Keywords: Anxiety, pre-operative patient, prayer guidance, spiritual support

INTRODUCTION

Anxiety is a psychological condition that is often experienced by pre-operative patients. This anxiety can occur due to various factors, such as uncertainty about the surgical procedure, fear of pain, and concerns about the outcome of the surgery. Although the management of anxiety in patients has become a concern in nursing practice, the reality is that there are still many patients who experience high levels of anxiety ahead of surgical procedures. This can affect the patient's physical and psychological condition, and even potentially hinder the postoperative recovery process (Kasana, 2018).

The prevalence of anxiety in pre-operative patients varies widely globally. The meta-analysis showed a global average prevalence of 48% in elective surgery patient anxiety, with the highest levels of anxiety reported in Africa (56%) and Asia (54%), while North America and Latin America had a lower prevalence, around 24% and 25%, respectively (Bedaso *et al.*, 2022). In Indonesia, pre-operative anxiety is still quite high. Research at Dr. Saiful Anwar Hospital Malang showed that 41.18% of pre-operative patients were at a moderate anxiety level, 29.41% were at a low level, and the rest did not experience anxiety (Purwanza *et al.*, 2024). The results of a preliminary study conducted in November 2024 at the Central Surgical Installation (IBS) of Kanjuruhan Hospital, Malang Regency on 10 pre-operative patients showed that most patients experienced anxiety with varying degrees. Based on the results of the initial obervation using *Zung Self-*

Rating Anxiety Scale (Z-SAS), as many as 2 patients (20%) showed mild anxiety with a score between 45-59, 5 patients (50%) experienced moderate anxiety with a score of 60-74, and 3 patients (30%) experienced severe anxiety with a score of ≥ 75 . Common anxiety symptoms include restlessness, muscle tension, increased heart rate, and sleep disturbances. Some patients also report fear of the surgical procedure and concerns about possible complications. These data confirm that pre-operative anxiety is a significant problem that needs special attention to improve patient comfort and readiness before undergoing surgery.

Pre-operative anxiety can be caused by a variety of factors, such as uncertainty regarding the surgical procedure, fear of anesthesia side effects, or previous adverse experiences of the patient (Rissa, 2024). If not managed properly, this anxiety can increase the patient's stress levels, which in turn affects the body's immune response, slows down the recovery process, and even increases the risk of postoperative complications. In the long term, unresolved anxiety can lead to more serious psychological disorders, such as generalized anxiety disorder or PTSD (*Post-Traumatic Stress Disorder*). Other negative impacts include decreased patient satisfaction with health services and adverse effects on the relationship between patients and medical personnel (Wafa *et al.*, 2021).

To address anxiety in pre-operative patients, various approaches have been tested, both pharmacological and non-

pharmacological in nature. One of the most widely studied non-pharmacological interventions is spiritual support, especially prayer guidance. Recent research suggests that spiritual support can help reduce anxiety in patients, especially those who are about to undergo medical procedures. A study of pre-operative patients showed that spiritual support interventions helped reduce anxiety and improve patients' sleep quality (Setiyowati & Zulkarnain, 2024). In addition, studies conducted on patients with heart failure have also shown that spiritual support not only reduces psychological stress, but also improves the patient's quality of life and emotional well-being. Spiritual care is a nursing approach that prioritizes the spiritual and inner needs of patients, the positive influence of this spiritual support is often attributed to its ability to promote inner peace, hope, and a sense of connection with a higher power, which can help patients overcome their health challenges (Zhang *et al.*, 2024).

Prayer guidance can be provided as a form of emotional support for patients undergoing surgical procedures, in the hope of reducing anxiety and improving their psychological well-being. The implementation of this program can optimize the role of nursing in providing holistic care that includes not only the physical aspect, but also the psychological and spiritual aspects of the patient. The study aimed to analyze the effect of spiritual support (prayer guidance) on anxiety in pre-operative patients at the Central Surgical Installation (IBS) of the

Kanjuruhan Regional General Hospital (RSUD), Malang Regency.

METHOD

This study employed a pre-experimental design using a one-group pre-test and post-test approach to assess changes in anxiety levels among pre-operative patients before and after receiving a spiritual support intervention in the form of prayer guidance. Data collection stages, including: before the intervention, anxiety measurements were carried out using the Zung Self-Rating Anxiety Scale (Z-SAS), which allows to identify the patient's anxiety level based on the psychological and somatic symptoms experienced. Then, the spiritual support intervention was carried out with the patient's consent, then the nurse guided the prayer according to the patient's religion and beliefs by providing the form of prayer guidance that the nurse had prepared in five beliefs, including: Islam, Christianity, Catholicism, Buddhism and Hinduism. This intervention was carried out for 15 minutes while waiting for the surgical procedure until the patient was calmer and used more time to pray according to the guidance that had been given before the operation. After the prayer guidance intervention, anxiety measurements were carried out again using the Z-SAS to evaluate changes in the patient's anxiety level. The comparison between the pre-test and post-test scores was used to assess the extent to which spiritual support influenced anxiety reduction.

Data collection was conducted over January, 2025, at the Central Surgical Installation (IBS) of

Kanjuruhan Hospital, Malang Regency. A total of 80 respondents were selected through purposive sampling based on specific inclusion criteria to ensure the suitability of participants for the study. The study included pre-operative patients aged 18 years or older who were fully conscious, capable of effective communication, and willing to participate in the intervention and there are no religious restrictions in patient selection. Patients with severe psychological disorders or those actively taking anti-anxiety medications were excluded. Data collection was conducted using the Zung Self-Rating Anxiety Scale (Z-SAS) questionnaire to assess patients' anxiety levels, is a standardized tool used to measure patients' anxiety levels based on self-reported symptoms. The collected data were then analyzed using the Wilcoxon signed-rank test to evaluate pre- and post-intervention differences, with statistical significance set at $p \leq 0.05$. This research has received ethical approval from the Health Research Ethics Committee of Kanjuruhan Hospital, with document number 072.1/EA. KEPK-092/35.07.302.101/2004. The study upheld research ethics by obtaining informed consent, ensuring data confidentiality, and prioritizing participant welfare.

RESULTS AND DISCUSSION

A. Result

Table 1 Characteristics of Respondents

Category:	n	%
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Age:		
Adult	45	56,3
Pre-Elderly	35	43,8
Total	80	100
Gender:		
Man	38	47,5
Woman	42	52,5
Total	80	100
Education Level:		
Elementary school	9	11,3
Junior high school	29	36,3
Senior high school	35	43,8
Bachelor degree	7	8,8
Total	80	100
Family support:		
Yes	41	51,2
Not	39	48,8
Total	80	100
Have had surgery:		
Ever	24	30
Not	56	70
Total	80	100
Explanation of the operation:		
Yes	24	30
Not	56	70
Total	80	100
Surgery lead time		
< 1 day	5	6,3
1 - 3 days	64	80
> 3 days	11	13,8
Total	80	100

Table 1. explains the majority in this study were in the adult age category (56.3%), while the pre-elderly category had a lower number (43.8%). Women are more than men, with percentages of 52.5% and 47.5%, respectively. From the level of education, the most respondents are high school graduates (43.8%), while the least are undergraduate graduates (8.8%). Most respondents have never had surgery before (70%) and the majority have not received an explanation of the surgical procedure to be undergone (70%). In addition, the majority of patients wait for

surgery in the range of 1–3 days (80%), while those who undergo surgery for less than 1 day are only 6.3%.

Table 2 Anxiety Before and After Prayer Guidance

Category:	n	%
The level of Anxiety before prayer guidance:		
No anxiety	4	5
Light	28	35
Keep	42	52,5
Heavy	6	7,5
Total	80	100
The level of Anxiety after prayer guidance:		
No anxiety	32	40

Light	42	52,5
Keep	6	7,5
Total	80	100

Table 2 explains anxiety before and after prayer guidance. Prior to the prayer guidance intervention, most pre-operative patients experienced moderate anxiety (52.5%), while a level of severe anxiety was found in 7.5% of respondents. After the intervention, anxiety levels changed significantly, with 40% of respondents no longer experiencing anxiety and the category of severe anxiety no longer found. This shows that prayer guidance plays a role in lowering the anxiety level of pre-operative patients.

Table 3 Cross Tabulation

Variable	Post Test Anxiety Level							
	No anxiety		Light		Keep		Total	
	n	%	n	%	n	%	n	%
Level	No anxiety	4	5	0	0	0	4	5
Anxiety	Light	28	35	0	0	0	28	35
Pre test	Keep	0	0	42	52.5	0	42	52.5
	Heavy	0	0	0	0	6	7.5	6
	Total	32	40	42	52.5	6	7.5	80
								100

Table 3 describes the cross-tabulation of anxiety before and after the intervention. The results of cross-tabulation showed that all respondents who initially experienced severe anxiety (7.5%) experienced a decrease in anxiety levels. Meanwhile, respondents who were initially in the moderate anxiety category (52.5%) experienced a decrease in anxiety to the mild category. None of the respondents experienced an increase in anxiety after being given prayer guidance

Table 4. Wilcoxon Test

	Median (Min-Max)	P value
Pre test	64 (29 - 80)	< 0.001
Post test	47 (20 - 72)	

Wilcoxon test, 76 subjects anxiety decreased, 4 fixed and 0 increased

Table 4 describes the results of the Wilcoxon test. The median anxiety score before the intervention was 64 (29–80), which then decreased to 47 (20–72) after the intervention. A total of 76 out of 80 respondents experienced a decrease in anxiety, while 4 respondents remained at the same level of anxiety, and none experienced an increase in anxiety. Statistical tests showed a *p*-value <

0.001, which means that there was a significant influence of prayer guidance on the reduction of anxiety in pre-operative patients.

B. Discussion

1. Anxiety Levels Before Spiritual Support (Prayer Guidance)

The results showed that the level of anxiety of preoperative patients at IBS Kanjuruhan Hospital, before the spiritual support intervention (prayer guidance) was mostly in the moderate anxiety category, which was as many as 42 people (52.5%). Meanwhile, the category with the least number of patients is not anxious, which is only 4 people (5%). These findings reflect that the majority of pre-operative patients experience a significant level of anxiety before the intervention. These results are in line with research Sugiarkha *et al.*, (2021), which found that out of 90 respondents, 22 patients (24.4%) experienced moderate anxiety before surgery. These results are also supported by research Aulia and Murniati, (2022), which revealed that out of 110 respondents, 55 patients (50.0%) experienced moderate anxiety before surgery.

The high proportion of preoperative patients at IBS Kanjuruhan Hospital with moderate anxiety levels can be explained through several factors from the general data of respondents. Most of the respondents were in the adult age group (56.3%) and pre-elderly (43.8%), who had a higher awareness of the risks of surgery. This is supported by research Sugiarkha *et al.*, (2021), at Buleleng Hospital, which found that adult patients were more prone to moderate anxiety. In

line with Erik Erikson's Psychosocial Development Theory, which states that human psychosocial development consists of eight stages, each of which focuses on the main conflicts that individuals must resolve. In adulthood (30–60 years), individuals are in the "*Generativity vs. Stagnation*," where their main concern is responsibility to family, work, and society. Adult individuals have a higher awareness of the risks of surgery due to the responsibility towards the people who depend on them. Similarly, in the pre-elderly group (60 years and older), individuals are in the "*Integrity vs. Despair*," where they are more reflective of risk due to concerns about their health and future.

In addition, the majority of preoperative patients at IBS Kanjuruhan Hospital have secondary education (junior high school 36.3% and high school 43.8%), which has the potential to limit their in-depth understanding of surgical procedures, in line with research. Aulia and Murniati, (2022), at Tgk. Chik Ditiro Sigli Hospital, which found that patients with secondary education levels were more in the moderate anxiety category. This phenomenon can be explained by the Health Literacy Theory (*Health Literacy Theory*) Nutbeam, (2000), which states that education level plays an important role in an individual's ability to understand and use health information. Patients with secondary education (junior high and high school) tend to have limited health literacy at the basic or interactive level, which makes it difficult for them to understand the surgical procedure in depth. This limited

understanding can increase uncertainty and worsen pre-operative anxiety.

The lack of social support, with only 51.2% of pre-operative patients at Kanjuruhan Hospital's IBS feeling supported, and the lack of information about surgical procedures experienced by 70% of respondents, also exacerbated anxiety. This phenomenon is a theoretical implication *The Buffering Hypothesis of Social Support* which Cohen and Wills put forward in Chen *et al.*, (2021). This theory posited that social support played an important role in helping individuals cope with stress. Social support can be emotional, informational, and instrumental support provided by family, friends, or other social groups. Patients who feel undersupported are more prone to stress and anxiety, especially before stressful medical procedures such as surgery. Lack of social support can worsen the perception of stress and increase anxiety because individuals feel more isolated and have fewer resources to deal with it

The phenomenon of high levels of anxiety of preoperative patients at IBS Kanjuruhan Hospital found in this study reflects the urgent need for a more holistic approach in patient care. Most patients, who are in the moderate anxiety category, indicate significant concern ahead of the surgical procedure. Several factors contributing to this anxiety can be explained through demographic analysis of respondents, including the adult and pre-elderly age groups who are more prone to experiencing anxiety. This is in line with the findings of previous studies

that showed that patients with adult age were more likely to feel anxious because they were more aware of the risks associated with surgery. In addition, the majority of patients have a secondary education background, which can limit their understanding of the medical procedures to be undertaken, thus exacerbating their anxiety.

The lack of clear information about surgical procedures, which is felt by more than 70% of respondents, is also a key factor in increasing patient fear and uncertainty. The study also showed that only a small percentage of patients felt socially supported, which is an indicator that psychological and social support during the pre-operative period is essential. This support, both in the form of more transparent information and spiritual support, such as prayer guidance, can play a big role in lowering patients' anxiety levels. Overall, these findings underscore the importance of better medical education and adequate psychological support for patients before undergoing surgery, so that they can feel better mentally and emotionally prepared, as well as reduce the fear they experience.

2. Anxiety Levels After Spiritual Support (Prayer Guidance)

The results of the study showed that after prayer guidance, most of the preoperative patients at IBS Kanjuruhan Hospital showed mild anxiety (52.5%) and no anxiety (40%). Patients with moderate anxiety decreased significantly from 42 people (52.5%) to 6 people (7.5%), and none of the patients remained in the severe anxiety category. Statistically, the average anxiety

score decreased from 61.55 (moderate anxiety) to 45.03 (mild anxiety). Of the total 80 patients, 76 patients experienced a decrease in anxiety levels, while 4 patients remained at the same level of anxiety, and no patients experienced an increase in anxiety. These results are in line with research Suyanto *et al.*, (2023), which revealed that in preoperative patients with spinal anesthesia at Jombang Hospital before prayer guidance, the average anxiety score was in the moderate to high category, which was 60.2, but after the intervention it decreased to 45.1, which was included in the category of mild anxiety.

The results of the study that showed a significant decrease in the level of anxiety of pre-operative patients after receiving prayer guidance can be explained through the Stress Reduction Theory (*Stress Reduction Theory*). According to this theory, stress is reduced when the individual feels comfortable, secure, and has control over the situation at hand. In this case, prayer guidance creates an environment that supports mental relaxation through the strengthening of spiritual beliefs, providing a sense of protection and confidence in a positive outcome. In this context, prayer serves as an emotional control tool that helps reduce physiological stress responses, such as increased heart rate and blood pressure, which are common in patients with high anxiety before surgery (Prasetyo *et al.*, 2023). In addition, Theory *Coping with* proposed by Lazarus and Folkman is also relevant in explaining this phenomenon. They define coping as an ever-changing cognitive and

behavioral effort to manage external and internal demands that are perceived as burdensome or beyond an individual's abilities. Prayer guidance can be thought of as an emotional-focused coping strategy (*Emotion-focused coping*), in which individuals seek to reduce negative emotions arising from stress through a spiritual approach (bin Zuhadi, 2023).

Prayer guidance had a significant impact in reducing anxiety in pre-operative patients, with the majority of patients showing a decrease in anxiety from moderate to mild, with no patients even remaining in the severe anxiety category. This finding is in line with the research of Suyanto *et al.* (2023), which showed a decrease in anxiety in pre-operative patients after the prayer intervention. Based on Stress Reduction Theory, prayer can create a sense of emotional security and control, which reduces physiological stress such as increased heart rate, as well as improves the patient's mental state by providing a sense of protection and confidence in positive outcomes. In addition, *the Coping Theory* of Lazarus and Folkman emphasizes that prayer guidance serves as an emotional-focused coping strategy, which helps patients manage their anxiety through a spiritual approach. This reduction in anxiety suggests that spiritual support such as prayer can be an effective intervention to reduce pre-operative anxiety and improve the psychological well-being of patients.

3. Effect of Spiritual Support (Prayer Guidance) on Anxiety

The results of the study revealed that spiritual support in the form of prayer guidance had a

significant influence on reducing anxiety levels in pre-operative patients at IBS Kanjuruhan Hospital, Malang Regency. The results of the analysis showed a significant change in the anxiety level of pre-operative patients after the intervention. Before the prayer guidance, most of the respondents experienced moderate anxiety (52.5%), with a median score of 64 (moderate anxiety category). After the intervention, the majority of respondents experienced a decrease in anxiety levels to mild (52.5%), with a median score of 47 (mild anxiety category). These results are in line with research Hasniah *et al.*, (2024), which found a significant association between nurse assistance through prayer and tawakkal spiritual services and a decrease in anxiety levels in patients pre-operated with closed fractures. This data is reinforced by the results of the Test *Wilcoxon*, which showed that out of 80 respondents, 76 experienced a decrease in anxiety, while 4 remained unchanged, and none experienced an improvement. A $p <$ value of 0.001 indicates that this result is statistically significant, with the mean patient's anxiety score also decreasing markedly, from 61.55 in the pre-test to 45.03 in the post-test. These results support the research Safitri and Pabontong, (2024), which revealed that the prayer therapy intervention had a positive impact on the decrease in anxiety scores of pre-operative patients, with an average decrease in anxiety scores from 12.94 to 9.87 after the intervention.

The results of this study can be explained through the Relaxation Theory developed by Dr. Herbert Benson in Sihombing and Paulina

(2022). This theory explains that the relaxation response is the opposite of the stress response activated by the sympathetic nervous system. When a person is stressed, the body releases the hormones adrenaline and cortisol which cause an increase in heart rate, blood pressure, and respiration. In contrast, the relaxation response triggered by the parasympathetic nervous system helps to decrease that physiological activity, resulting in a sense of calm and relaxation. In the context of this study, prayer guidance as a form of spiritual support triggers a relaxation response through several mechanisms. Focusing on prayer activities distracts from the negative thoughts that trigger anxiety. Additionally, spiritual beliefs provide a sense of security and self-control, while the structured practice of prayer is often accompanied by calming deep breathing. This activity also stimulates the release of endorphins, hormones that function as the body's natural sedatives. The results of the study showed a significant decrease in anxiety scores from 64 (moderate anxiety category) to 47 (mild anxiety category) after prayer guidance supported this theory. Most respondents, 76 out of 80 people, experienced a decrease in anxiety levels, suggesting that the relaxation mechanisms triggered by prayer were effective for most patients. P value < 0.001 in the test *Wilcoxon* reinforces the evidence that these interventions are statistically significant. Relaxation Theory explains that prayer facilitates the activation of the parasympathetic nervous system, lowers physiological stress, and helps patients better manage anxiety. Thus, prayer guidance can be an effective

nursing intervention to help pre-operative patients reduce their anxiety holistically.

The results of this study provide strong evidence that spiritual support in the form of prayer guidance is an effective intervention in reducing anxiety levels in pre-operative patients. These findings highlight the important role of spirituality in nursing practice, particularly in providing a holistic approach to patients. Cross-tabulation data of pre-test and post-test anxiety levels showed that patients with mild anxiety on the pre-test, experienced significant improvement in becoming less anxious on the post-test and even patients with severe anxiety dropped to moderate anxiety after the post-test. This shows that the interventions carried out are not only effective in patients with mild anxiety, but also have a positive impact on patients with severe anxiety. The decrease in anxiety levels from severe to moderate reflects the influence of the intervention in reducing anxiety intensity in the heavier group of patients, although it does not completely eliminate anxiety.

Prayer guidance interventions not only facilitate relaxation responses but also strengthen the patient's confidence and courage through deep spiritual connection. This practice is a simple, inexpensive, and applicable approach in various health facilities. Therefore, prayer guidance should be considered as an integral part of nursing service standards, especially for pre-operative patients who face high levels of anxiety. Further research can be conducted to explore the effectiveness of this approach in other

patient populations and develop practical guidelines for wider implementation in health care systems. Spiritual support such as prayer guidance can also be combined with other interventions to produce a more optimal effect in reducing the patient's anxiety.

This study has limitations, where the language used when explaining spiritual support management in Indonesian with modifications to Javanese as much as possible is done with the hope that it will be easy to understand for each patient, but the various levels of education and culture possessed by patients will more or less affect the effectiveness of communication between patients and nurses, especially in carrying out prayer guidance interventions.

CONCLUSIONS

Spiritual support in the form of prayer guidance is recommended to be integrated into routine nursing practice to reduce anxiety in pre-operative patients, with specific training for nurses to improve the quality of interventions. Patients are expected to actively participate in prayer guidance and be open to emotional support from health workers and families. Prayer guidance interventions not only facilitate relaxation responses but also strengthen the patient's confidence and courage through deep spiritual connection. This practice is a simple, inexpensive, and applicable approach in various health facilities. Hospitals need to adopt spiritual support programs by providing dedicated spaces and clear SOPs. Further studies with stronger research

methods are recommended to strengthen the evidence for the effectiveness of this intervention and expand its application in different patient populations

REFERENCES

Aulia, S. D., & Murniati, M. (2022). Gambaran Tingkat Kecemasan Pada Pasien Pre Operasi Di Rumah Sakit Umum Daerah Tgk. Chik Ditiro Sigli. *Journal of Nursing and Health*, 7(3, Desember), 252–260.

Bedaso, A., Mekonnen, N., & Duko, B. (2022). Prevalence and factors associated with preoperative anxiety among patients undergoing surgery in low-income and middle-income countries: a systematic review and meta-analysis. *BMJ Open*, 12(3), e058187.

bin Zuhadi, M. I. H. (2023). *Coping Stress Dalam Menangani Kecemasan Ditinjau Dari Perspektif Islam*. UIN Ar-Raniry.

Chen, L., Zilioli, S., Jiang, Y., Wang, X., & Lin, D. (2021). Perceived social support and children's physiological responses to stress: An examination of the stress-buffering hypothesis. *Psychosomatic Medicine*, 83(1), 51–61.

Hasniah, H., Hamidah, S., Munazar, M., & Mutiah, C. (2024). Hubungan Pendampingan Perawat Dengan Layanan Spiritual: Doa Dan Tawakkal Terhadap Tingkat Kecemasan Pasien Pre Operasi Fraktur Tertutup Di Rumah Sakit Meuraxa Kota Banda Aceh 2021. *Barongko: Jurnal Ilmu Kesehatan*, 2, 510–524. <https://doi.org/10.59585/bajik.v2i3.439>

Kasana, N. (2018). Hubungan antara komunikasi terapeutik dengan tingkat kecemasan pada pasien pre operasi sectio caesarea di ruang ponek rsud karanganyar. *Skripsi Kesehatan Komunikasi Terapeutik Dengan Tingkat Kecemasan STIKes Kusuma Husada*, 17.

Nutbeam, D. (2000). Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, 15(3), 259–267.

Prasetyo, R., Sulastri, S., Yuniastini, Y., Amperaningsih, Y., & Purwati, P. (2023). Mengontrol Kecemasan dengan Dukungan Spiritual. *Jurnal Wacana Kesehatan*, 8(2), 57–66.

Purwanza, S. W., Priantoro, C. T., Putra, F. N., & Rofi, M. (2024). *Effectiveness Counseling Technique Applied Thinking , Feeling , and Acting on Anxiety in Appendicitis Pre-Operating Patients*. 7(1).

Rissa, R. W. H. (2024). Determinan Kecemasan Pre Operasi Pada Pasien Sectio Caesarea: Literatur Review Determinant Of Preoperative Anxiety In Caesarea Section Patiens. *Jurnal Kesehatan Madani Medika (JKMM)*, 15(1), 1–13.

Safitri, K. H., & Pabontong, Y. O. (2024). Pengaruh Terapi Doa Kristiani Terhadap Skor Kecemasan Pasien Pre Operasi. *Jurnal Keperawatan Wiyata*,

5(1), 68–72.

Setiyowati, E., & Zulkarnain, E. V. (2024). The Influence of Spiritual Support on Anxiety Levels and Sleep Quality in Pre-Operative Patients: Literature Review. *Journal of Applied Nursing and Health*, 6(1), 81–90.

Sihombing, Y. A., & Paulina, M. M. (2022). Upaya Mengatasi Gangguan Pola Tidur pada Pasien Hipertensi Melalui Terapi Relaksasi Benson. *Care Journal*, 2(1), 57–62.

Sugiarkha, P. A., Juniartha, I. G. N., & Kamayani, M. O. A. (2021). Gambaran kecemasan pada pasien pra-operasi di RSUD Buleleng. *Coping: Community of Publishing in Nursing*, 9(3), 305.

Suyanto, S., Indri, I., & Taufiqurrahman, F. (2023). Pengaruh Terapi Spiritual Bimbingan Do'a Terhadap Tingkat Kecemasan Pasien Pre Operasi Dengan Spinal Anestesi. *Jurnal Ilmu Kesehatan Dan Gizi*, 1(2), 245–256.

Wafa, O., Faradisi, F., & Fajriyah, N. N. (2021). Pengaruh Teknik Relaksasi Genggam Jari Terhadap Penurunan Nyeri Pasien Post Operasi Appendiktomi: Literature Review. *Prosiding Seminar Nasional Kesehatan*, 1, 996–1004.

Zhang, G., Zhang, Q., & Li, F. (2024). The impact of spiritual care on the psychological health and quality of life of adults with heart failure: a systematic review of randomized trials. *Frontiers in Medicine*, 11, 1334920.