

Review

The Influence of Spiritual Support on Anxiety Levels and Sleep Quality in Pre-Operative Patients : Literature Review

Eppy Setiyowati ¹, Eva Vera Zulkarnain ²

¹ Faculty of Nursing and Midwifery, Nahdlatul Ulama University Surabaya, East Java, Indonesia

² Gotong Royong Hospital of Surabaya, East Java, Indonesia

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ABSTRACT

Background: Many types of stress psychology at hand on the patient before the operation Because every operation has different stressors, such as: Anxiety, fear or worries about the perception of the patient's operation. One of the intervention For lower anxiety and increased quality Sleep preoperative patients is with give spiritual support (audio visual) in the form of murotal Qur'an for religious patients Islam and singing spiritual for religious patients Christian . Objective from this literature review is For know exists the influence of spiritual support on level anxiety and quality Sleep preoperative patients .

Methods: Method used in article This that is PRISMA Approach-literature review with using a journal database from science direct , pubmed , and google scholar in range time 2019-2023 with the keywords spiritual support , anxiety and quality Sleep .

Results: From the identification results based on inclusion criteria and eligibility review, ten articles were obtained for review. Studies literature review obtained results that There is influence significant anxiety and quality sleep in patients who get spiritual support with those who don't get spiritual support.

Conclusion: Spiritual Support may be recommended in the preoperative process in the hospital to reduce anxiety

Corresponding Author : Eppy Setiyowati

Affiliation : Faculty of Nursing and Midwifery, Nahdlatul Ulama University Surabaya

Email : eppy@unusa.ac.id

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Introduction

Surgery is an intervention that aims to cure a disease that cannot be overcome solely with the use of drugs. Surgery is performed on a variety of grounds of opinion (diagnostic, ablative, palliative, reconstructive, transplant and reconstructive), divided by severity (minor and major surgery) and urgency (elective, emergency and emergency). The number of surgical clients is increasing significantly

every year, with approximately 165 million surgeries per year worldwide. It was found that in 2020, there were 234 million clients in all hospital institutions in the world. By 2020, up to 1.2 million people will be operated in Indonesia (Hanandayu Kawanda & Revisit, 2023)

Preoperative is the period before surgery, which begins with the determination of surgical preparation and ends when the patient is on the surgical



table. This situation, for individuals, is different, some consider it to be normal and some make the situation a problem (Kurul et al., 2023). The influence of surgery carried out is a potential and actual threat to a person's integrity that can evoke physiological and psychological stress reactions (Palamba et al., 2020). Anxiety will appear in patients who need treatment and who will undergo surgery in the hospital, it will cause hypertension until the cancellation of surgery (Prawiro et al., 2023)

Spiritual support in preoperative patients if not done, then patients will not get spiritual needs to overcome their anxiety (Katsohiraki, 2020). The impact of unfulfilled spiritual support causes spiritual distress, difficulty sleeping, high blood pressure, loss of motivation, and even loss of confidence in His God (Witarsana, 2016). Fulfillment of spiritual needs requires interpersonal relationships, therefore nurses as the only health workers who interact with patients for 24 hours, nurses are the right people to provide motivation and guide / help patients' spiritual needs reduce patient anxiety (Prawiro et al., 2023)

There needs to be spiritual support either in the form of prayer assistance or through audio visual to increase the patient's confidence in himself so that patients can control anxiety and improve the quality of sleep.

Methods

The study aims to explore the impact of various anxiety measurement tools on

the anxiety and sleep quality of patients before surgery using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach. The population under investigation includes patients who experience anxiety and decreased sleep quality prior to undergoing surgery and receive spiritual support as part of their preoperative care. The intervention involves using the State-Trait Anxiety Inventory Form (STAI-S) and the Amsterdam Preoperative Anxiety and Information Scale (APAIS) to assess anxiety levels. The results are compared with those obtained using the Beck Anxiety Inventory (BAI) and the Visual Analog Score (VAS). The primary goal is to determine the effectiveness of these assessment tools in improving anxiety and sleep quality among preoperative patients.

The study adopts a systematic review approach, adhering to PRISMA guidelines, and includes research published between 2019 and 2023. Only articles written in English and Indonesian are considered, excluding those in other languages and studies published before 2019. By following the PRISMA approach, the study ensures a transparent and replicable methodology, enhancing the credibility of the findings. The research aims to provide a comprehensive understanding of how different anxiety assessment tools affect the psychological and sleep health of patients awaiting surgery. By focusing on the latest research and utilizing a robust methodological framework, the study intends to offer relevant and up-to-date insights into preoperative care practices that can potentially enhance patient outcomes.

Results

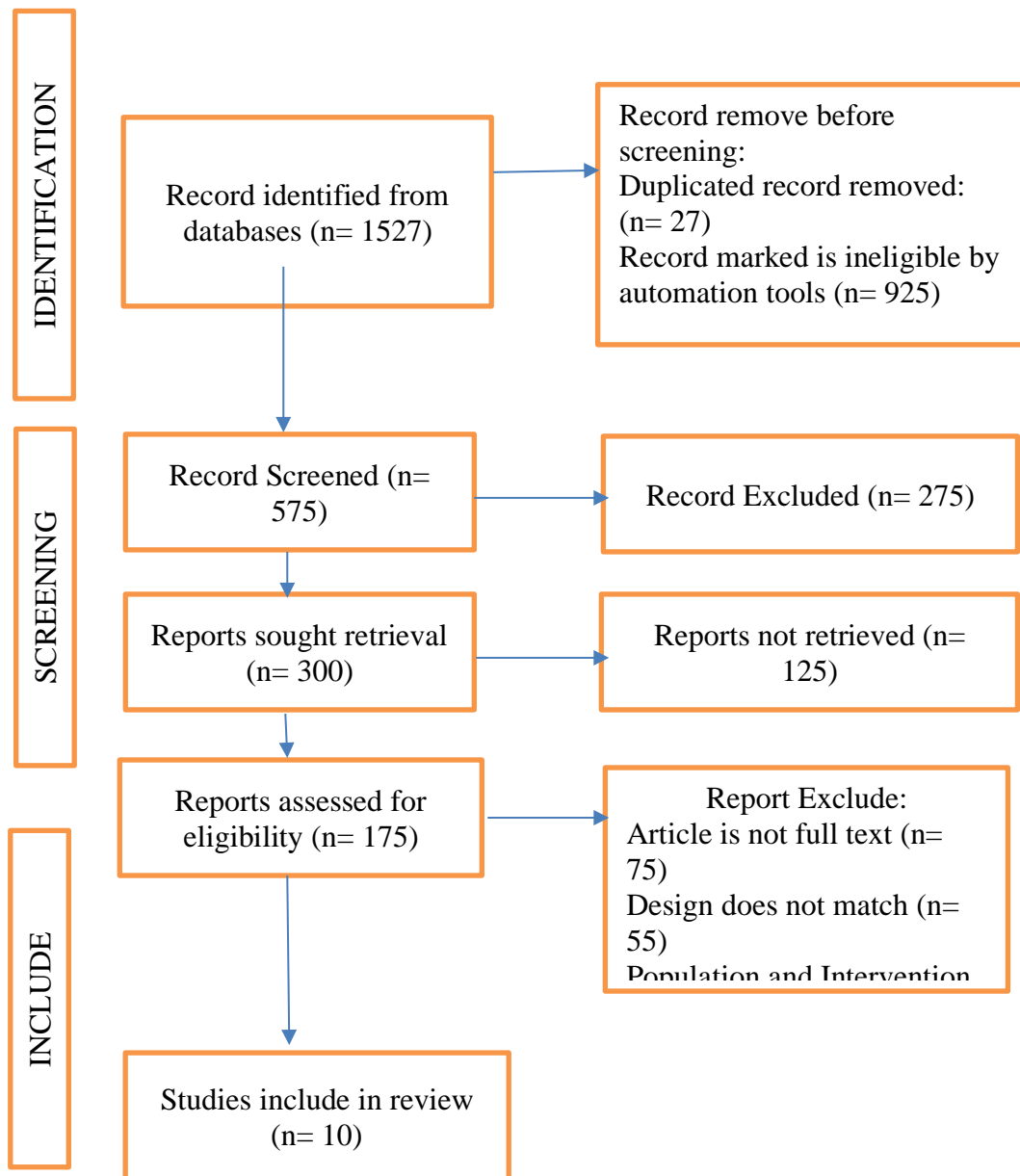


Figure 1. Study Search and Selection Results

Analysis to assess the methodological quality of each study using the JBI Critical Appraisal Checklist was obtained in the validity of the results and review recommendations. In the final screening, 35 studies achieved a score of 50% and were ready to synthesize the data, but due to therapeutic bias assessments and articles used in the literature review there were 10 articles.

Table 2 Study Search Results Based on Research Database

Source Language	Year	Database	N	Types of Research Study Articles			
				Randomized control test	Cross Sectional	Case Studies	Prospective Observation
English	2019-2023	Pubmed	75	3	2	0	1
		Google Scholar	50	1	0	1	0
		Science Direct	25	0	0	2	0
		Result	10	4	2	3	1

Table 3 Literature Search Results

No	Title and Author	Method	Result	Conclusion
1	Impact of a spiritual care program on the sleep quality and spiritual health of Muslim stroke patients (Yousofvand et al., 2023)	D: Randomized control test S: 117 stroke patients V: Independent "Impact of spiritual care programs." Dependent "Sleep Quality and Spiritual Health of Muslim Stroke Patients" I: demographic information form, Pittsburgh Sleep Quality Index, Paloutzian and Ellison Spiritual Well-being Scale, and Modified Rankin Scale A: chi-square, Fisher's exact test, independent t-test, and paired t-test	Socio-demographic characteristics were similar between groups (p > 0.05). At first, there was. There were no significant differences in sleep quality and spiritual health between the experimental and control groups (P >0.05). However, after the intervention, sleep quality and spiritual health of patients in the experimental group improved significantly compared to the control group (p < 0.05).	Spiritual care programs improve sleep quality and spiritual health of stroke patients; Therefore nurses should consider these aspects to provide holistic care
2	Preoperative Anxiety in Patients with Pancreatic Cancer: What Contributes to Anxiety Levels in Patients Waiting for Surgical Intervention (Marinelli et al., 2023)	D: Descriptive sectional S: 104 selected cancer patients who underwent major pancreatic surgery V: Independent "Anxiety trigger factors in patients Ca. Pancreas before surgery I: STAI-S (State-Trait Anxiety Inventory Form) dan APAIS (Amsterdam Preoperative Anxiety and Information Scale)	Our data suggest that patients with high STAI-S show higher levels of APAIS and that the main concerns are related to surgical aspects. Among the psychological characteristics, depressive symptoms and trait anxiety appear as risk factors for the development of preoperative anxiety. The findings support the usefulness of certain psychological screening plans to identify patients who need more help, with the aim of offering support and preventing the	Anxiety in the perioperative period has a significant impact on the flow of surgery and the postoperative recovery process. Our data suggest that patients with high state anxiety (STAI-S) show higher levels of perioperative anxiety (APAIS) and that the main concerns are related to surgical aspects. Among psychological characteristics, depressive symptoms (PHQ-9) and trait anxiety (STAI-T) appear both as risk factors for the development of



No	Title and Author	Method	Result	Conclusion
		A: ANOVA	development of state anxiety and surgery worries in the preoperative phase. It also highlights the importance of good communication by surgeons on specific aspects related to surgery.	preoperative anxiety, and are also highly correlated during hospital screening days.
3	Spiritual peace and life meaning may buffer the effect of anxiety on physical well-being in newly diagnosed cancer survivors (Sleight et al., 2021)	D: Study Cohort S: Total sampling V: Spiritual peace and meaning of life may buffer the effects of anxiety on physical well-being in newly diagnosed cancer survivors I: FACIT-Sp-12 and QOL A: Linear regression	Life meaning and peace were negatively associated with anxiety, $b = -0.56$ ($p < 0.001$) and positively associated with physical well-being, $b = 0.43$ ($p < 0.001$) after adjusting for race, education, income, and age. A significant interaction between the meaning of life and anxiety emerged ($p < 0.001$) suggesting that spiritual well-being moderates the relationship between anxiety and physical well-being. Specifically, for people with cancer with high anxiety, physical well-being depended on the level of meaning of life/peace, $b = 0.19$, $p < 0.001$. For those with low anxiety, physical well-being was not associated with levels of meaning/peace, $b = 0.01$, $p = 0.541$.	More research is needed to assess how spiritual well-being can buffer the negative effects of anxiety on physical well-being. A clinical focus on spiritual well-being topics such as peace and the meaning of life, can help people with cancer of all types as they transition to follow-up care.
4	Evaluating Preoperative Anxiety Levels in Patients Undergoing Breast Cancer Surgery (Katsohiraki et al., 2020)	D: cross sectional S: 169 female patients undergoing breast cancer surgery V: Independent "Evaluation of preoperative anxiety levels of patients undergoing breast cancer surgery" I: State-Trait Anxiety Inventory (STAI) Scale A: Mann-Whitney test, and Spearman rho	In this study, 165 women were enrolled who underwent breast cancer surgery. The average age of the participants was 55.86 years, while the average body mass index was 26.85. 60.6% of patients underwent lumpectomy and 28.5% underwent mastectomy. 35.8% experienced moderate levels of anxiety, and 17.6% experienced high levels. The two scales were positively correlated ($\rho = 0.643$, $P < 0.001$), at the significance level $P = 0.01$. Furthermore, the Stai-X-2 scale was negatively correlated with height ($\rho = -0.1188$, $P = 0.016$)	The study showed that patients' personalities influenced their anxiety levels. Thus, the role of nurses is a cornerstone in their psychological support before surgery, to reduce anxiety and stress levels
5	Religiosity and spirituality in patients with epilepsy (Rigon et al., 2019)	D: case study - observational control S: 100 patients V: Religiosity and spirituality in patients with epilepsy I: Hospital Anxiety and Depression Scale (HADS) A: Chi Square Test	The mean age of PWE and controls was 35.9 ± 12.4 vs. 36.3 ± 18.1 year, the school average is 8.9 ± 3.7 vs. 7.101 ± 4.2 years. The average age of epilepsy onset was 14.5 ± 12.1 and the frequency of monthly seizures is 5.9 ± 12.6 . INSPIRIT-R scores did not differ statistically between patients and controls (3.0 ± 0.8 vs. 3.0 ± 0.8); however, INSPIRIT-R scores were significantly higher in TLE patients when compared with other epileptic syndromes (3.2 ± 0.7 vs 2.8 ± 0.9 ; $p = 0.04$).	Temporal lobe epilepsy patients have higher R/S levels
6	Efficacy of Guided Imagery for Postoperative Symptoms, Sleep Quality, Anxiety, and Satisfaction Regarding Nursing Care (Pickle & Aygin, 2019)	D: Randomized control test S: 60 patients V: Efficacy of guided imagery for postoperative symptoms, sleep quality, anxiety, and satisfaction regarding nursing care	Anxiety and pain intensity were significantly higher in the control group than in the intervention group, and satisfaction levels and sleep quality were lower in the control group than in the intervention group.	Results support that guided imagery can be useful in improving perianesthetic symptoms and can be part of nursing care



No	Title and Author	Method	Result	Conclusion
		I: Visual Analog Score (VAS), Anxiety Specific to Surgery Questionnaire (ASSQ), Richards-Campbell Sleep Questionnaire (RCSQ) A: IBM statistical test		
7	The Impact of Spiritual Care Education on Anxiety in Family Caregivers of Patients with Heart Failure (Borji et al., 2019)	D: Semi experiment S: 71 family caregivers of HF patients V: Independent "Educational impact of spiritual care" Dependent "HF family caregiver anxiety" I: Beck Anxiety Inventory A: Descriptive and inferential tests	There was a difference between anxiety levels in the two groups after the intervention ($P = 0.001$). Anxiety levels in the experimental group three weeks after the intervention (27.88 ± 7.10) were significant compared with before the intervention (45.06 ± 5.79) ($P = 0.001$).	Spiritual interventions reduce anxiety levels in caregivers of patients with HF. Nurses are encouraged to provide necessary training to caregivers to provide reasons to reduce their anxiety.
8	The Effect Of Health Literacy on Preoperative Anxiety Levels in Patients Undergoing Elective Surgery (Demirel et al., 2023)	D: prospective observational S: 466 patients V: Independent "Health literacy influence" Dependent "preoperative anxiety levels in patients undergoing elective surgery." I: Beck Anxiety Inventory (BAI) A: ANOVA	The average BAI score of participants was low to moderate (9.28 ± 10.85). The total HLS score is 105.89 ± 24.42 . For BAI, a negative correlation was found between access to the HLS and BAI information sub-dimensions ($p = 0.043$, $r = -0.094$). In addition, a negative correlation was detected between the patient's age and HLS and its sub-dimensions ($p < 0.001$, [$r = -0.188$, $r = -0.193$, $r = -0.205$, $r = -0.161$]), and positive correlations were observed among the HLS sub-dimensions ($p < 0.001$, respectively [$r = 0.873$, $r = 0.057$, $r = 0.966$, $r = 0.915$]). Average HLS and higher sub-dimensions were observed in single participants, high schools, universities, and civil servants. In addition, higher mean BAI was detected in women, housewives, urban residents, participants living only with their children, and those with additional disease ($p < 0.001$, $p < 0.001$, $p = 0.007$, $p = 0.0034$, $p < 0.01$, respectively)	As health literacy levels increase, preoperative anxiety levels decrease. Preoperative assessment and education are essential for perioperative patient care, especially in surgical settings
9	The effect of spiritual care on anxiety about death in patients with gastrointestinal cancer undergoing chemotherapy (Amiri et al., 2020)	D: Randomized control test S: 145 patients Ca. Gastrointestinal V: Independent "influence of religious-spiritual care." Dependent "anxiety about death" I: Templer's Death Anxiety Scale (T-DAS) before and after the intervention. A: Chi-Square	Prior to the intervention, anxiety scores about mortality in the intervention and control groups were moderate and did not differ significantly between the two groups (8.14 ± 1.54 vs 8.03 ± 0.85 ; $P = 0.429$). After the intervention, the mean scores were 7.86 ± 1.22 vs. 8.18 ± 0.79 ($P = 0.029$), respectively. According to the analysis of covariance, the null hypothesis is rejected at the level of $\alpha = 0.05$. However, Cohen's effect size(d) revealed that the effect obtained was not clinically significant ($d = 0.31$).	The results showed that the spiritual treatment program delivered over a 3-day period had no effect on moderate mortality anxiety among cancer patients in Iran. Future studies should assess whether spiritual care is effective when given to cancer patients over a longer period of time, the type of treatment given and whether there is variation depending on patients with different religious beliefs



No	Title and Author	Method	Result	Conclusion
10	Mindfulness-Based Cognitive Therapy for Psychological, Distress, Fear of Cancer Recurrence, Fatigue, Spiritual Well-Being, and Quality of Life in Patients With Breast Cancer (Park et al., 2020)	D: random control test S: 74 patients V: Independent "Mindfulness-Based Cognitive Therapy" Dependent "Psychological Distress, Fear of Cancer Recurrence, Fatigue, Spiritual Well-being, and Quality of Life in Patients With Breast Cancer" I: Hospital Anxiety and Depression Scale (HADS) A: Chi-Square	The participants in the MBCT group experienced significantly better results in their psychological distress (Cohen's d 1/4 1.17; $P < 0.001$), FCR (d 1/4 0.43; $P < 0.05$), fatigue (d 1/4 0.66; $P < 0.01$), spiritual well-being (d 1/4 0.98; $P < 0.001$), and QOL (d 1/4 0.79; $P < 0.001$) compared with the control group. The difference remained significant at T2 (four weeks after completion of the intervention).	MBCT was shown to improve well-being spanning psychological, physical, and spiritual domains in Japanese patients with nonmetastatic breast cancer. The beneficial effect is maintained for up to four weeks after the completion of the intervention

Discussion

Based on the results of a review of 10 journals, it was stated that spiritual support affects the level of preoperative anxiety and the quality of sleep of patients. According to (Yousofvand et al., 2023), the use of a random control test, the results of socio-demographic characteristics were similar between groups ($p > 0.05$). At first, there was. There were no significant differences in sleep quality and spiritual health between the experimental and control groups ($P > 0.05$). However, after the intervention, the sleep quality and spiritual health of patients in the experimental group improved significantly compared to the control group ($p < 0.05$).

According to (Marinelli et al., 2023), the, in sectional descriptive test, our data show that patients with high STAI-S show higher levels of APAIS and that the main concerns are related to surgical aspects. Among the psychological characteristics, depressive symptoms and trait anxiety appear as risk factors for the development of preoperative stress. The findings support the usefulness of specific psychological screening plans to identify patients who need more help, with the aim of offering support and preventing the

development of state anxiety and surgery worries in the preoperative phase. It also highlights the theimportance ood comcommunication incific aspects related to surgery.

The (Sleight et al., 2021) meaning of life and peacepeaks wereatively associated with anxiety, $b = -0.56$ ($p < 0.001$) and pospositivesical well-being, $b = 0.43$ ($p = < 0.001$) after adjusting for race, education, income, and age. A significant interaction between the meaning of life and anxiety emerged ($p < 0.001$), suggesting that spiritual well-being moderates the relationship between anxiety and physical well-being. Specifically, for cancer survivors with high anxiety, physical well-being depended on the level of meaning of life/peace, $b = 0.19, p < 0.001$. For those with low anxiety, physical well-being was not associated with levels of meaning/peace, $b = 0.01, p = 0.541$.

According to the cross-sectional test (Katsohiraki et al., 2020) , 165 registered women underwent breast cancer surgery. The average age of the participants was 55.86 years, while the average body mass index was 26.85. 60.6% of patpatients entered, and 28.5% undunderwenttectomy. 35.8% experienced moderate levels of anxiety, and 17.6% experienced high levels. The two scales were positively correlated

($\rho = 0.643$, $P < 0.001$) at the significance level $P = 0.01$. Furthermore, the Stai-X-2 scale was negatively correlated with height ($\rho = -0.1188$, $P = 0.016$).

According to (Rigon et al., 2019), in the, in observational control case study, the mean age of PWE and control was 35.9 ± 12.4 vs. 36.3 ± 18.1 years. The average age of onset of epilepsy was 14.5 ± 12.1 and the frequency of monthly seizures was 5.9 ± 12.6 . INSPIRIT-R scores did not differ statistically between patients and controls (3.0 ± 0.8 vs. 3.0 ± 0.8); however, INSPIRIT-R scores were significantly higher in TLE patients when compared with other epileptic syndromes (3.2 ± 0.7 vs 2.8 ± 0.9 ; $p = 0.04$).

(Pickle & Aygin, 2019) Anxiety and pain intensity were significantly higher in the control group than in the intervention group, and satisfaction levels and sleep quality were lower in the control group than in the intervention group.

According to the semi-experimental test, there was a (Borji et al., 2019) difference between the level of anxiety in the two groups after the intervention ($P = 0.001$). Anxiety levels in the experimental group three weeks after the intervention (27.88 ± 7.10) were significant compared with before the intervention (45.06 ± 5.79) ($P = 0.001$).

According to (Demirel et al., 2023) prospective observational tests, the average BAI score of participants was low to moderate (9.28 ± 10.85). The total HLS score is 105.89 ± 24.42 . For BAI, a negative correlation was found between access to the HLS and BAI information sub-dimensions ($p = 0.043$, $r = -0.094$). In addition, a negative correlation was detected between the patient's age and HLS and its sub-dimensions ($p < 0.001$, respectively [$r = -0.188$, $r = -0.193$, $r = -0.205$, $r = -0.161$]), and

a positive correlation was observed among the HLS sub-dimensions ($p < 0.001$, respectively [$r = 0.873$, $r = 0.057$, $r = 0.966$, $r = 0.915$]). Average HLS and higher sub-dimensions were observed in single participants, high schools, universities, and civil servants. In addition, higher mean BAI was detected in women, housewives, urban residents, participants who lived only with their children, and those with additional disease ($p < 0.001$, $p < 0.001$, $p = 0.007$, $p = 0.0034$, $p < 0.01$, respectively).

Before (Amini et al., 2020) the intervention, anxiety scores about mortality in the intervention and control groups were moderate and did not differ significantly between the two groups (8.14 ± 1.54 vs 8.03 ± 0.85 ; $P = 0.429$). After the intervention, the mean scores were 7.86 ± 1.22 vs. 8.18 ± 0.79 ($P = 0.029$), respectively. According to the analysis of covariance, the null hypothesis is rejected at the level of $\alpha = 0.05$. However, Cohen's effect size (d) revealed that the effect obtained was not clinically significant ($d = 0.31$).

Participants (Park et al., 2020) in the MBCT group performed significantly better in their psychological distress (Cohen's d $1/4$, 1.17 ; $P < 0.001$), FCR (d $1/4$ 0.43 ; $P < 0.05$), fatigue (d $1/4$ 0.66 ; $P < 0.01$), spiritual well-being (d $1/4$ 0.98 ; $P < 0.001$), and QOL (d $1/4$ 0.79 ; $P < 0.001$) compared with the control group. The difference remained significant at T2 (four weeks after completion of the intervention).

Conclusion

From the results of a review of 10 articles related to spiritual support on anxiety levels have a significant effect, both using the Beck Anxiety Inventory (BAI) instrument and the State Anxiety Inventory (STAI) scale. And spiritual support for sleep

quality also had a significant effect. Thus, researchers concluded that there is an influence of spiritual support on anxiety and sleep quality of preoperative patients. It is expected that further research will be added preoperative educational interventions to increase patient knowledge regarding the actions to be taken.

Authors Contributions

Throughout the process of conducting this literature review, each author made significant contributions: one author conceptualized the study scope, developed search strategies, and conducted systematic literature searches across multiple databases; another author critically appraised the selected literature, synthesized key findings, and identified thematic patterns and research gaps; while a third author meticulously drafted and revised the manuscript, ensuring alignment with research objectives, and incorporating feedback from co-authors.

Conflicts of Interest

We certify that this research was conducted free from any conflicts of interest, with no external influence from funding bodies, personal relationships, or organizational affiliations that could have compromised the validity of our results.

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