Abstract.
Pre-surgical anxiety is an anticipative response to an experience regarded by clients as a threat to their life and bodily integrity. Spiritual therapy is an alternative treatment used by the religious through prayer and dzikir. This study aims to determine the effectiveness of spiritual therapies on the level of patient anxiety in preoperative patients. This research used a pre-experiment with a post-test-only design. Fifty respondents were taken by total sampling and divided into two groups (intervention and control group); each group consisted of 25 patients. The research was conducted from September to October 2020 at the University of Muhammadiyah Malang hospital. The dependent variable was anxiety level, measured by SAS (Zung self-rating anxiety scale) questionnaire. The data were analyzed with Mann Whitney Test using SPSS software version 23. The intervention group had mild anxiety at 52%, while the control group had 80%. The statistical test obtained a p-value of $0.016 < 0.05$ and an effect size of 0.34 (moderate). This means that there is a difference in anxiety levels between the two groups. Spiritual therapies can enhance emotional intelligence, interpret its condition, and be aware of anything in favor of Allah SWT to improve coping and lower the level of anxiety. The nurse may provide spiritual intervention to pre-surgery patients to reduce their level of anxiety.

Keywords: anxiety, spiritual therapy, pre-operation, dzikir

1. Introduction

Surgery is a treatment that causes much anxiety and is an experience that often causes stress and physical and psychological changes for patients (1,2). According to the World Health Organization (WHO), there is an increase in the number of surgical patients yearly. In 2011, there were 140 million patients with surgery in all hospitals worldwide, while in 2012, the data experienced an increase of 148 million patients. Operations in Indonesia...
in 2012 reached 1.2 million people (2). Many patients experience considerable anxiety before surgery, and this is reported to affect 60-80% of surgical patients (3).

Anxiety is a condition of mental anxiety, personality, fear, foreboding, or feelings of hopelessness due to an imminent threat or an unidentifiable threat of anticipation towards oneself. During surgery, the patient experiences anxiety for various reasons, such as fear of pain after surgery, physical changes, abnormal functioning of the organ, fear of an established diagnosis, fear of facing the operating room, surgical equipment, attendants, and fear of failing the operation (4,5).

Preoperative anxiety will have several impacts, such as influencing the severity of postoperative pain. A meta-analysis of 53 studies also revealed a significant relationship between preoperative anxiety and the severity of acute post-operative pain. Preoperative anxiety has been associated with a higher dosage of intravenous anesthetics, at induction and during maintenance. Lastly, preoperative anxiety can lead to psychological distress and a tendency to somatize pain in the postoperative period, increasing post-operative analgesic requirements (5,6). Moreover, other impacts are irritability, insomnia, restlessness, and fatigue. If preoperative anxiety is not treated, it will have an impact on surgery failure or delayed operation, prolonged hospital stay, and patient dissatisfaction (1).

Preoperative anxiety was recognized as a potential and preventable risk factor for postoperative complications (5). Preoperative anxiety can be treated with pharmacological interventions, such as hypnotic medications before surgery, and non-pharmacological interventions, such as spiritual therapy. Spiritual therapy is an alternative treatment employing a diverse approach through prayer and dzikir, which is an element of healing diseases or psychotherapeutics that aims to awaken self-confidence and optimism (2). The results of a previous study by Pujiani conducted at Jombang Regional Hospital, there was a decrease in the anxiety of preoperative patients after being given psycho religious therapy (1).

Preliminary studies conducted by researchers at the University of Muhammadiyah Malang hospital (RS UMM) show that the hospital has a vision and mission of Islamic services and implements a policy that all incoming patients must be subjected to spiritual care. However, this procedure is still carried out on a limited basis in the inpatient room. Meanwhile, the assistance of spiritual services in patients ahead of surgery has not been carried out. Therefore this study aimed to determine the effectiveness of spiritual therapy on the level of anxiety of preoperative patients.
2. Materials and methods

This study used a pre-experimental with a post-test-only design. Researcher used. Two groups were the intervention group and the control group. However, researchers only measured the post-test because the average patient was hospitalized one day before surgery. The independent variable in this study was spiritual therapy, while the dependent variable was the anxiety level of preoperative patients. The study was conducted on inpatients at the University of Muhammadiyah Malang hospital in September – October 2020. Each participant explained the study purpose and intervention in detail before enrollment. Moreover, they were asked to sign the written informed consent for their willingness to participate in this study.

Samples in this study are patients who will be performed preoperatively in the Inpatient Room of Muhammadiyah Malang Hospital. The sampling technique used was a total sampling with a sample of 50 patients divided into two groups (intervention and control), with inclusion criteria: age > 17 years, Muslim religion, cooperative, and non-serious or critical health conditions.

The administration of the intervention is carried out for 20 minutes, carried out one day before the patient’s operation (at night) because the patient usually enters the hospital in the afternoon. The material presented includes: explaining the wisdom of pain, providing motivation/encouragement, and teaching prayer and istighfar. At the end of the intervention, the patient will be given a module as reading material after a time lag of the next 1-2 hours and will be given an anxiety questionnaire. Meanwhile, the control group received regular care from the hospital.

Measurement of anxiety levels using a SAS/SRAS (Zung Self-Rating Anxiety Scale) questionnaire consisting of 20 questions with answers using the Likert scale. The questionnaire scores for positive statements are (almost every time= 4, part of the time= 3, sometimes = 2, never= 1) while for a negative statement, the opposite score. William WK Zung designed the questionnaire. It has been standardized, translated into Indonesian, and tested for validity and reliability. The validity test of the questionnaire has the lowest value of 0.663 and the highest value of 0.918. The reliability test results showed a figure of 0.829, so the questionnaire was said to be reliable. The final score is 20-44 for normal/none, score 45-59 for mild anxiety, score 60-74 for moderate anxiety and score 75-80 for severe anxiety(7).

Descriptive analysis with mean, frequency, and percentage distributions was used to analyze demographic data such as age, gender, education level, and operating history.
Meanwhile, the inferential analysis used the Mann-Whitney test to examine differences in anxiety levels in the intervention group with an α-level of 0.05.

### 3. Results

The total of participants was 25 people for each group. Range age of intervention group was 18 to 60 years (m= 39; SD: 15.05), and control group 17-60 (m=44; SD: 14.39). Most participants have a level of education in senior high school, 14 (56%) and 10 (40%), respectively. Most participants from the intervention group never had surgery, whereas most in the control group had previous surgery experience (table 1).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Intervention Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (m, SD, min, max)</td>
<td>39 (15.05); 18, 60</td>
<td>44 (14.39); 17, 60</td>
</tr>
<tr>
<td>Gender</td>
<td>Male 15 Female 10</td>
<td>Male 14 Female 11</td>
</tr>
<tr>
<td>Education level</td>
<td>Elementary school 2, Junior high school 14, Senior high school 1, College 1</td>
<td>Elementary school 11, Junior high school 14, Senior high school 10, College 0</td>
</tr>
<tr>
<td>History of surgery</td>
<td>Ever 11 Never 14</td>
<td>Ever 14 Never 11</td>
</tr>
</tbody>
</table>

After the spiritual intervention, patients in the intervention group were not anxious 11 (44%) people, while in the control group were not anxious 2 (8%) people and those who had severe anxiety 3 (12%) people. Based on the results of statistical tests, a p-value of 0.016 < α-level 0.05 means that there is a difference in anxiety levels between the two groups and the effect size (0.34) shows that spiritual interventions have a moderate impact on reducing preoperative anxiety levels. (table 2).

<table>
<thead>
<tr>
<th>Anxiety Levels</th>
<th>Intervention Group</th>
<th>Control Group</th>
<th>Significant Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Anxious</td>
<td>11</td>
<td>2</td>
<td>Sig = 0.016 Effect size=0.34</td>
</tr>
<tr>
<td>Mild Anxiety</td>
<td>13</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Moderate Anxiety</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Severe Anxiety</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>25</td>
<td>100%</td>
</tr>
</tbody>
</table>
4. Discussion

The results showed that the majority intervention group experienced mild anxiety levels before pre-operation after being given spiritual therapy. Spiritual therapy can reduce the patient's psychological state, such as fear, shock, despair, anger, anxiety, and depression. The results of this study align with Nurhayati's research that there is a relationship between spiritual support and the level of anxiety of pregnant women in the third trimester in the era of the COVID-19 Pandemic (8). Dzikir spiritual therapy can lower anxiety levels in patients with diabetes mellitus (9). There is an influence of spiritual relaxation guidance techniques on the decrease in anxiety in preoperative patients (10).

Spiritual therapy in Islam is an action that aims to provide the therapeutic effect of Islamic medicine by strengthening the heart, relying on oneself and tawakal to Allah Subhanahu wa Ta'ala, and praying to Him for healing carried out by demonstrating and guiding the patient in the implementation of therapy. Prayer and dzikir will awaken confidence, and a sense of optimism, bring peace and feel the presence of Allah Subhanahu wa Ta'ala so that by remembering Allah, one's faith increases, and there is an intake of energy and tranquillity in the soul. This process will cause stimulation in the hypothalamus to decrease the production of CRF (Corticotropin-Releasing Factor), further stimulating the anterior pituitary gland to reduce the production of ACTH (Adrenocorticotropic hormone). This hormone will stimulate the adrenal cortex to lower the secretion of cortisol which will suppress the immune system, thereby reducing the level of anxiety and depression(11,12)

Spiritual belief in religion is fundamental in human life because it can affect lifestyle, habits, and feelings of pain (13). Islamic spiritual acts such as prayer and dzikir are expressions of the behavioral dimension. Adults who face life problems and experience stressful situations often use prayer and dhikr to overcome their concerns (11). Dzikir is an intervention that nurses can use to meet basic human needs, especially in pre and post-operative patients with anxiety problems, whereby doing dzikir to Allah SWT in a not-too-long period will provide calm to psychiatric (psychic) conditions (14). Dzikir dramatically affects a person's health and psychology because if a person is in a state of illness, then the relationship with God is even closer, considering that a person in a sick state becomes weak in all things no one can raise him from healing except the creator (8).
5. Conclusions

Spiritual therapy effectively reduces preoperative anxiety at UMM Hospital because through this spiritual therapy of thinking and praying, the patients get calm and satisfaction, reducing anxiety. Therefore, it is hoped that this spiritual therapy will become a standard operational procedure for hospitals and be applied to all patients. The limitation of this study is the limited number of samples, and the measurement of anxiety levels is only carried out at the time of post-test because the patient enters the hospital less than one day before surgery, so the research time is limited.

References


