

Effectiveness of Spiritual Emotional Freedom Technique (SEFT) in Reducing Anxiety Among Patients with Stable Angina Pectoris Undergoing Cardiac Catheterization

Husin^{1,a*}, Ahmad Nirwan^{2a}

^{1,2}Program Studi Ilmu Keperawatan, STIK Bina Husada Palembang

^a husinkarmin80@gmail.com

*corresponding author

Article history: Received Month april 28, 2026; Revised April 28, 2026; Accepted April 30, 2026

Abstract

Background: Cardiovascular disease remains the leading cause of mortality worldwide. Patients undergoing cardiac catheterization often experience anxiety due to the invasive nature of the procedure, uncertainty regarding outcomes, and potential risks of complications. Unaddressed anxiety can lead to increased blood pressure and heart rate, further exacerbating the patient's condition. Spiritual Emotional Freedom Technique (SEFT) is a non-pharmacological therapy based on spiritual principles and energy psychology, believed to reduce anxiety through tapping techniques and spiritual affirmations. **Objective:** To determine the effect of the Spiritual Emotional Freedom Technique (SEFT) on reducing anxiety levels in patients with stable angina pectoris undergoing cardiac catheterization in the Cath Lab Room of RSUP Dr. Mohammad Hoesin Palembang. **Methods:** This study employed a quantitative design with a pre-experimental one-group pretest-posttest approach. The research was conducted from January 21 to February 6, 2026, in the Cath Lab Room of RSUP Dr. Mohammad Hoesin Palembang. A sample of 55 respondents was selected using the accidental sampling technique. Anxiety levels were measured using the Hamilton Anxiety Rating Scale (HARS) before and after the SEFT intervention. Data were analyzed using the Wilcoxon test with a significance level of $\alpha = 0.05$. **Results:** The findings indicated a decrease in anxiety levels following the administration of SEFT therapy. The Wilcoxon test yielded a $-value = 0.000 (<0.05)$, signifying a significant effect of SEFT on reducing anxiety in stable angina pectoris patients undergoing cardiac catheterization. **Conclusion:** Spiritual Emotional Freedom Technique (SEFT) is effective in reducing anxiety among patients undergoing cardiac catheterization. **Keywords:** Spiritual Emotional Freedom Technique (SEFT), Anxiety, Stable Angina Pectoris, Cardiac Catheterization.

Keywords: Spiritual Emotional Freedom Technique (SEFT), Anxiety, Stable Angina Pectoris, Cardiac Catheterization.

1. Introduction

Cardiovascular diseases (CVDs) remain the leading cause of death worldwide and pose a significant challenge to the global healthcare system. World Health Organization data indicates that in 2022, approximately 19.8 million deaths were attributed to cardiovascular diseases, accounting for 32% of all global deaths. The majority of these fatalities were caused by coronary heart disease and stroke, with more than 75% of cases occurring in developing countries. In Indonesia, the prevalence of heart disease increased from 0.5% in 2013 to 1.5% in 2018, establishing heart disease as one of the primary causes of

national morbidity and mortality. These conditions demonstrate that heart disease remains a serious health issue that requires a comprehensive management approach, encompassing both the physical and psychological aspects of the patient.

One of the clinical manifestations of coronary heart disease is stable angina pectoris, a condition characterized by chest pain resulting from an imbalance between myocardial oxygen supply and demand. Patients with stable angina pectoris generally require cardiac catheterization as both a diagnostic and therapeutic procedure to evaluate the presence of narrowing or blockages in the coronary arteries. Cardiac catheterization is an invasive procedure widely utilized in modern cardiology practice due to its high level of accuracy in evaluating coronary artery conditions. Nevertheless, this procedure frequently triggers psychological responses in the form of anxiety among patients.

Anxiety is an emotional response that arises from the perception of threats toward one's health condition or the medical procedures to be undergone. In patients scheduled for cardiac catheterization, anxiety can be triggered by the fear of pain, potential complications, uncertainty of diagnostic outcomes, and even the fear of death. Previous research indicates that approximately 25–45% of patients undergoing cardiac catheterization experience anxiety both before and after the procedure. Unmanaged anxiety can activate the sympathetic nervous system, leading to increased heart rate, blood pressure, and myocardial oxygen demand. These conditions have the potential to exacerbate the patient's hemodynamic status and negatively affect the success of the cardiac catheterization procedure. Therefore, anxiety management is a crucial component of nursing care for cardiovascular patients.

Nurses play a strategic role in assisting patients to overcome anxiety through both pharmacological and non-pharmacological approaches. Currently, nursing interventions based on holistic care are increasingly evolving, particularly approaches that integrate the biological, psychological, social, and spiritual aspects of the patient. One complementary therapy gaining widespread use is the Spiritual Emotional Freedom Technique (SEFT). SEFT is a therapeutic method that combines spiritual affirmations, prayer, and surrender to God with tapping techniques p-value <0,05 on the body's meridian points to help reduce emotional pressure and enhance relaxation. The spiritual approach in SEFT is believed to provide inner peace and improve the patient's ability to adapt to the stress and anxiety they experience.

According to Muzaki et al. (2024), SEFT therapy works through the stimulation of the body's energy points combined with spiritual affirmations, thereby modifying an individual's regulator and cognator responses to stress. Several previous studies have demonstrated that SEFT is effective in reducing anxiety across various clinical conditions. Research by Agustina (2024) indicated that SEFT therapy has a significant effect on reducing anxiety in cervical cancer patients undergoing chemotherapy, with a p-value <0,05. Other studies have also reported that SEFT is effective in decreasing anxiety among patients with hypertension, chronic kidney failure, heart failure, and preoperative patients. Nevertheless, research regarding the application of SEFT specifically for stable angina pectoris patients undergoing cardiac catheterization remains very limited, particularly within the Cath Lab setting.

RSUP Dr. Mohammad Hoesin Palembang is one of the national referral hospitals in South Sumatra, with the number of cardiac catheterization procedures increasing annually. The results of a preliminary study indicated that the majority of patients scheduled for cardiac catheterization experience moderate to severe anxiety, characterized by restlessness, tension, sleep disturbances, and concerns regarding the upcoming procedure. Furthermore, nursing interventions remain limited to education and deep breathing relaxation techniques, while spiritual-based complementary therapies such as SEFT have not been

optimally implemented and are not yet available in the Standard Operating Procedures (SOP) for nursing services.

Based on the aforementioned description, research is required to examine the effect of the Spiritual Emotional Freedom Technique (SEFT) on reducing anxiety in patients with stable angina pectoris undergoing cardiac catheterization. This study is expected to provide scientific evidence regarding the effectiveness of SEFT as a non-pharmacological nursing intervention and to serve as a foundation for the development of holistic nursing services within cardiovascular units.

2. Research Method

This study employed a quantitative approach with a pre-experimental design, specifically using the one-group pretest-posttest design. This design was utilized to evaluate the effect of the Spiritual Emotional Freedom Technique (SEFT) on the anxiety levels of patients with stable angina pectoris undergoing cardiac catheterization by comparing anxiety scores before and after the intervention. Measurements were conducted twice within the same group without a control group, allowing for the direct observation of changes occurring after the intervention.

The research was conducted in the Cath Lab Room of RSUP Dr. Mohammad Hoesin Palembang from January 21 to February 6, 2026. The study site was selected based on the high volume of patients undergoing cardiac catheterization and the suboptimal implementation of spiritual-based complementary therapies in cardiovascular nursing services.

The research population consisted of all patients diagnosed with stable angina pectoris undergoing cardiac catheterization during the study period. The sampling technique used was accidental sampling, where respondents were selected based on the availability of patients meeting the criteria during the data collection period. The final sample size consisted of 55 respondents.

The inclusion criteria for this study were patients diagnosed with stable angina pectoris scheduled for cardiac catheterization, who were conscious and cooperative, able to communicate effectively, and willing to participate by signing the informed consent form. The exclusion criteria included patients with impaired consciousness, unstable hemodynamic conditions, and those with communication disorders.

The independent variable in this study is the Spiritual Emotional Freedom Technique (SEFT), while the dependent variable is the anxiety level of patients undergoing cardiac catheterization. Anxiety levels were measured using the Hamilton Anxiety Rating Scale (HARS) instrument. The HARS instrument consists of 14 items that measure both psychological and physiological symptoms of anxiety, with a score range of 0–4 for each item. The total scores are classified into five categories: no anxiety, mild anxiety, moderate anxiety, severe anxiety, and very severe anxiety. Measurements were conducted before the intervention (pre-test) and after the intervention (post-test).

The intervention provided was Spiritual Emotional Freedom Technique (SEFT) therapy, administered individually to each respondent prior to the cardiac catheterization procedure. The SEFT procedure consists of three main stages: set-up, tune-in, and tapping. In the set-up stage, patients were guided to recite spiritual affirmations and prayers with full surrender to God while pressing specific points on the body (the sore spot or karate chop point). The tune-in stage was conducted by assisting patients in focusing their attention on the anxiety they experienced regarding the cardiac catheterization procedure. Subsequently, the tapping stage was performed by applying light taps with the fingertips to the body's meridian points systematically to produce a relaxation effect and balance the body's energy.

The SEFT intervention was administered once to each respondent, with a duration of approximately 15–20 minutes before the cardiac catheterization procedure. Upon completion of the intervention, anxiety levels were re-measured using the HARS instrument to determine changes in anxiety scores following the therapy. All intervention procedures were performed using the same technique, sequence, and duration to maintain consistency throughout the research implementation.

Data analysis was performed using univariate and bivariate methods. Univariate analysis was used to describe the distribution of respondent characteristics and anxiety levels before and after the intervention. Bivariate analysis utilized the Wilcoxon Signed-Rank Test to determine the effect of SEFT therapy on reducing patient anxiety. The Wilcoxon test was selected because the data were on an ordinal scale and not normally distributed. The significance level used in this study was $\alpha = 0,05$, where a *p-value* $<0,05$ indicates a significant effect of the SEFT intervention on the patient's anxiety level.

This study adhered to the ethical principles of nursing research, including respect for persons, beneficence, and justice. Ethical clearance for this research was obtained from RSUP Dr. Mohammad Hoesin under Number DP.04.03/D.XVIII.06.08/ETIK/007/2026. All respondents were provided with explanations regarding the objectives, benefits, and procedures of the study before signing the informed consent form. The researcher also guaranteed the confidentiality of the respondents' identities and granted them the freedom to withdraw from the study at any time without affecting the healthcare services they received.

3. Result And Discussion

This study involved 55 respondents diagnosed with stable angina pectoris undergoing cardiac catheterization in the Cath Lab Room of RSUP Dr. Mohammad Hoesin Palembang. The analysis of the research findings encompasses respondent characteristics, the distribution of anxiety levels before and after the Spiritual Emotional Freedom Technique (SEFT) intervention, and the effect of SEFT therapy on the reduction of patients' anxiety levels.

Table 1. respondent Charateristics

Charateristics	f	%
Age (Years)		
36-45	8	14,5
46-55	19	34.5
56-65	21	38.2
>65	7	12.8
Gender		
Male	34	61.8
Female	21	38.2
Education Level		
Primary School	10	18.2
Junior High School	14	25.5
Senior High School	23	41.8
Higher education	8	14.5
History of Cardiac Catheterization		
Yes	17	30.9
No	38	69.1

Table 2. Distribution of Anxiety Scores Before and After SEFT Intervention

Variabel	Mean	SD	Median	Min-Mak
Pre-Test	27.45	4.12	27	21-36
Post-Test	16.22	3.85	16	8-24

Table 3. Results of the Wilcoxon Signed-Rank Test on Anxiety Levels Before and After SEFT Intervention

Variabel	Negative-ranks	Positive ranks	Ties	Z	p. Value
Anxiety Scores: Pre-test and Post-test	49	2	4	-6.457	<0.001

The results of the bivariate analysis using the Wilcoxon Signed-Rank Test, as presented in Table 5, show a Z value of -6.457 with a p-value <0.001. The findings indicate that there is a significant effect of the Spiritual Emotional Freedom Technique (SEFT) on reducing anxiety levels in stable angina pectoris patients undergoing cardiac catheterization at the Cath Lab of RSUP Dr. Mohammad Hoesin Palembang, with a p-value <0.001. These results demonstrate that SEFT therapy is effective as a non-pharmacological nursing intervention in helping to reduce patient anxiety before undergoing invasive cardiovascular procedures.

Prior to the intervention, the majority of respondents were in the moderate and severe anxiety categories. This condition indicates that cardiac catheterization remains a procedure that causes psychological pressure for patients. Invasive procedures are often perceived as frightening because they are associated with pain, potential complications, changes in health status, and even the fear of death. Such conditions can trigger the activation of the sympathetic nervous system, characterized by an increased heart rate, elevated blood pressure, muscle tension, and sleep disturbances. In patients with coronary heart disease, increased sympathetic activity due to anxiety can worsen hemodynamic conditions and increase myocardial oxygen demand, potentially affecting the overall success of the cardiac catheterization procedure.

Berikut adalah terjemahan bagian pembahasan tersebut ke dalam bahasa Inggris akademik yang formal:

After the SEFT intervention, the majority of respondents' anxiety levels decreased to the mild category, and some even experienced no anxiety at all. This reduction is evident from the change in the mean anxiety scores before and after the intervention. These results indicate that SEFT therapy is capable of providing a relaxation effect and emotional tranquility for patients prior to undergoing cardiac catheterization.

The findings of this study are consistent with research by Agustina (2024), which demonstrated that SEFT therapy effectively reduces anxiety in cervical cancer patients undergoing chemotherapy with a *p-value* <0.05. Other studies have also shown that SEFT therapy can lower anxiety in preoperative patients, as well as those with hypertension, chronic kidney disease, and heart failure. The consistency of

these results suggests that SEFT therapy has robust effectiveness in helping to control patients' psychological responses across various clinical conditions.

Theoretically, the effectiveness of SEFT in reducing anxiety can be explained through a combination of physiological and spiritual approaches. The tapping technique on the body's meridian points is believed to stimulate the central nervous system and reduce the activity of stress hormones, such as cortisol, thereby allowing the body to become more relaxed and calm. Furthermore, spiritual affirmations, prayer, and surrender to God within SEFT therapy assist patients in building positive coping mechanisms for the stress and fear they experience. This approach supports the concept of holistic nursing care, which emphasizes the importance of comprehensively meeting the biological, psychological, social, and spiritual needs of patients.

According to Roy's Adaptation Model, individuals will provide adaptive responses to stimuli when the regulator and cognator mechanisms function effectively. In this study, SEFT therapy is presumed to enhance the patients' adaptive capacity toward the stressors of the cardiac catheterization procedure by strengthening their emotional and spiritual responses. Patients who initially felt fearful, tense, and worried appeared more relaxed and capable of controlling negative thoughts after receiving the SEFT intervention.

The research findings also indicate that the majority of respondents had never undergone a cardiac catheterization procedure before. A lack of experience with invasive procedures can heighten a patient's fear and uncertainty, thereby increasing the risk of anxiety. Under these circumstances, SEFT therapy serves as an effective intervention because it is easy to perform, requires no specialized equipment, is safe, and can be implemented as an adjunct therapy in cardiovascular nursing practice.

The implications of this study suggest that SEFT therapy can be utilized as a non-pharmacological nursing intervention to assist in reducing patient anxiety prior to cardiac catheterization. The implementation of this therapy is expected to enhance the quality of holistic nursing care and support a patient-centered care approach within cardiovascular units. Furthermore, the results of this research can serve as a foundation for developing Standard Operating Procedures (SOPs) for spiritual-based complementary therapies in the Cath Lab.

Nevertheless, this study has several limitations. The research employed a pre-experimental design without a control group; therefore, external factors that might influence anxiety levels could not be fully controlled. Additionally, anxiety measurements were conducted only immediately after the intervention, meaning the long-term effectiveness of the therapy cannot yet be determined with certainty. Consequently, future research is encouraged to utilize an experimental design with a control group and a larger sample size to obtain methodologically more robust results and achieve a higher level of generalizability.

4. Conclusion

This study demonstrates that the Spiritual Emotional Freedom Technique (SEFT) has a significant effect on reducing anxiety levels in stable angina pectoris patients undergoing cardiac catheterization in the Cath Lab of RSUP Dr. Mohammad Hoesin Palembang. Prior to the intervention, the majority of respondents experienced moderate to severe anxiety. Following the administration of SEFT therapy, there was a notable decrease in anxiety levels, characterized by an increase in the number of respondents in the mild anxiety or "no anxiety" categories.

Statistical analysis using the Wilcoxon Signed-Rank Test yielded a *p-value* <0.001, indicating that SEFT therapy is effective in reducing patient anxiety before cardiac catheterization. SEFT therapy provides a relaxation effect through a combination of spiritual approaches and the stimulation of the body's

DOI: <https://doi.org/10.52523/nurs.v1i1.6>

Lisensi: Creative Commons Attribution 4.0 International (CC BY 4.0)

meridian points, thereby helping patients control their emotional responses and enhance psychological tranquility.

The findings of this study support the implementation of SEFT therapy as a non-pharmacological nursing intervention based on holistic nursing care within cardiovascular nursing services. This therapy can be considered an integral part of patient-centered care to improve patient comfort and psychological readiness before undergoing invasive procedures. Future research is recommended to utilize an experimental design with a control group and a larger sample size to provide stronger evidence regarding the effectiveness of SEFT therapy on the anxiety of cardiovascular patients

5. Acknowledgments

The researcher wishes to express the deepest gratitude to all parties who have provided support, assistance, and contributions throughout the conduct of this study. Sincere appreciation is extended to the Chairman of STIK Bina Husada Palembang and the Director of RSUP Dr. Mohammad Hoesin Palembang, along with the management and staff of the Cath Lab, for granting permission and facilitating the research process.

Reference List

- ACA. (2025). *ACC, AHA Issue New Acute Coronary Syndromes Guideline*.
https://www.acc.org/Latest-in-Cardiology/Journal-Scans/2025/02/27/17/01/ACC-AHA-Issue-New-Acute-Coronary-Syndromes-Guideline?utm_campaign=twitter_post
- Agustina, A. (2024). *Pengaruh Terapi Spiritual Emotional Freedom Technique (SEFT) Terhadap Tingkat Kecemasan Pasien Kanker Serviks yang menjalani Kemoterapi Di Ruang Rambang 2.2 RSUP Dr. Mohammad Hoesin PA TAHUN 2023*.
<https://doi.org/https://doi.org/10.58231/jkbh.v16i01.208>
- AHA. (2025). *Stable Angina*. <https://www.heart.org/en/health-topics/heart-attack/angina-chest-pain/angina-pectoris-stable-angina>
- Ahmad Muzaki, M., Sucipto, W. B., & Saputro, B. (2024). *Indonesian Journal of Global Health Research*. 6(December), 327–336.
- Alice Petiprin. (2025). *Teori Keperawatan. Nursing Theory*. <https://nursingtheory.org/>
- Ardiani, K., Jumaiyah, W., Purnamawati, D., Sofiani, Y., Erwin, E., Kurniawan, M.
- H., & Yuliarti, Y. (2023). *Pengaruh Terapi Spiritual Emotional Freedom Technique (SEFT) terhadap Kecemasan Pasien Gagal Jantung di Rumah Sakit Hermina Bekasi*. *Dunia keperawatan: Jurnal Keperawatan dan Kesehatan*, 11(3), 338–347.
<https://doi.org/10.20527/jdk.v11i3.558>
- Askarinezhad, F., & Soheila Hasanpournamaghi Seyed mohammad Mirhosseini², O. M. iD M. H. B. and H. E. (2025). *Evaluation of Anxiety Symptoms and Sleep Quality among Patients Undergoing Coronary Angiography*. *Authors Info & Affiliations*.
<https://doi.org/10.2174/0118749445384225250328040226>

- Atheer Abd Ahmed. (2025). *Indonesian Journal on Health Science and Medicine Vol2 No 2 Assessing Anxiety in the Cardiac Catheterization Pathway : Cross- Sectional Evidence from a Tertiary Center*. 2(2), 1–13.
- Ayu Agustini, Muhammad Rizki Ramadhan, & Astri Rahmawati. (2024). Mengatasi Kecemasan melalui Spiritual Emotional Freedom Technique (SEFT). *Proceeding Conference on Psychology and Behavioral Sciences*, 3(1), 90–105. <https://doi.org/10.61994/cpbs.v3i.130>
- Carpenter, et al. (2018). Cognitive behavioral therapy for anxiety and related disorders: A meta-analysis of randomized placebo-controlled trials. *Cognitive behavioral therapy for anxiety and related disorders: A meta-analysis of randomized placebo-controlled trials*. <https://doi.org/10.1002/da.22728>
- Hamilton, M. (1959). The assessment of anxiety states by rating. *The assessment of anxiety states by rating*. <https://doi.org/10.1111/j.2044-8341.1959.tb00467.x>
- Kern, M. J., Sorajja, P., & Lim, M. J. (2021). *Cardiac Catheterization Handbook E- Book (9th ed.)*. Elsevier. <https://books.google.com/books?id=88-wDwAAQBAJ>
- Prabowo, R. K. (2019). Efektivitas Terapi Spiritual Emotional Freedom Technique (Seft) Terhadap Tingkat Kecemasan Pada Pasien Pre Operasi Bedah Jantung. *Indonesian Jurnal of Health Development*, 1(2), 11–18.
- WHO. (2025a). Anxiety disorders. In *Anxiety disorders*. https://www.who.int/news-room/fact-sheets/detail/anxiety-disorders?utm_source=chatgpt.com