

Emotional Freedom Techniques for Anxiety Patient before Cardiac Catheterization

Nurul Dani¹, Rizki Sari Utami², Yulianti Wulandari³
nuruldani35@gmail.com, sariutami0784@gmail.com,
wwoelan@gmail.com
STIKes Awal Bros Batam^{1,2,3}

Abstract. Coronary Heart Disease is a disruption of heart function due to lack of blood due to a narrowing of the coronary arteries. Invasive action taken to treat CHD is cardiac catheterization. The problem that often arises in pre-cardiac patients is anxiety. This anxiety must be handled because it can interfere with the patient's hemodynamic condition to become unstable. One way to deal with anxiety is the Emotional Freedom Technique (EFT). This study aims to determine the effect of EFT on patient anxiety who will undergo cardiac catheterization at Awal Bros Hospital in Batam. The design of this study used a quasi-experiment with a one-group pre-post test with a control group approach. This study aimed to determine the effect of emotional freedom techniques on anxiety levels in patients before cardiac catheterization in Angio Rs Awal Bros Batam in 2021. The population used in the study There were 30 nurses in the Angio Rs Awal Bros Batam room. Data processing and analysis were done manually and computerized using statistical programs. The results of this study are there is the effect of emotional freedom techniques with anxiety levels in patients before cardiac catheterization in the Angiography Room of Rs Awal Bros Batam in 2021 indicated by the chi-square results which show the value of value = 0.003 ($> \alpha 0.05$). used as information for future researchers who will examine the Emotional Freedom Technique (EFT) by observing the presence of confounding factors such as age and environment.

Keywords: Emotional Freedom Techniques, Anxiety, Heart Characterization

1 Introduction

Coronary heart disease (CHD) is the main cause of mortality in Indonesia, which is 26.4%. This is also in the opinion of Trotter, Gallagher and Donoghue that CHD is the main cause of mortality and morbidity and affects the quality of life of patients. Various techniques have been developed to open blood vessels and return blood through the coronary arteries, one of which is cardiac catheterization is an invasive procedure where one or more catheters are inserted into the heart and certain blood vessels, the catheter is inserted through a peripheral vessel, usually the femoral, then into heart chamber. Currently, cardiac catheterization is recommended because it is a non-operative invasive procedure so that complications can be minimized as low as possible. Patients with stable angina pectoris (APS) who face diagnosis of coronary angiography and the possibility of further intervention with cardiac catheterization are often anxious and feel uncomfortable because stress. Anxiety and discomfort as a physiological and psychological response to the body, as seen by changes in blood pressure, pulse, respiration, and temperature. Rosfiati, et al., The Effect of Back Massage on Anxiety Levels 103 Patient

responses took the form of various psychological responses including the emergence of anxiety, fear, tension and even depression. Patients who undergo cardiac catheterization with coronary angiography and cardiac catheterization still experience anxiety even though they have been well prepared including providing an explanation of the procedure and all the risks that can occur and informed consent signed by the patient (Azizah, 2017).

In Indonesia, heart and blood vessel disease continues to increase and will give a burden of illness, disability and socio-economic burdens to the sufferer's family, community, and country. The prevalence of coronary heart disease in Indonesia in 2013 based on a doctor's diagnosis was 0.5%. Meanwhile, based on the doctor's diagnosis, the symptoms were 1.5%. Meanwhile, the prevalence of heart failure in Indonesia in 2013 based on a doctor's diagnosis was 0.13%. Cardiovascular disease is a disease caused by impaired heart and blood vessel function. There are many kinds of cardiovascular disease, but the most common is Coronary Heart Disease. (Oktiawati et al., 2020)

Currently there is an epidemiological transition, namely a shift in disease patterns, from initially being dominated by infectious diseases, to shifting to non-infectious disease patterns (chronic, degenerative and accidental diseases). The existence of this epidemiological transition is evidenced by the increasing number of deaths due to non-infectious diseases. One of the non-infectious diseases that currently tends to show a fairly high increase in mortality is cardiovascular disease (Oktiawati et al., 2020)

The application of PCI tools can improve a person's quality of life and reduce the risk of recurrence (Jamal, Shrive, Ghali, Knudtson, & Eisenberg, 2003) and can reduce the incidence of infarction, improve vascularity, and reduce bleeding complications. However, some patients expressed anxiety about this procedure. About 24% –72% of patients undergoing PCI experience anxiety. (Oktiawati et al., 2020)

One of the management of CHD is Percutaneous Coronary Intervention (PCI). The PCI tool functions to repair narrowing and blockages in the coronary arteries in the heart, which is done by ballooning and / or stenting (UPF TEAM DI-INB PJNHK, 2010). In Canada, the implementation of PCI increased by 36% from 1994 to 2001 In Indonesia, the implementation of PCI has also increased, in 2013 there were 469 people who underwent PCI at Hospital X. (Widya Shari et al., 2014)

Interventions to overcome patient anxiety must be carried out in an integrated manner, which includes pharmacology and non-pharmacology. Integrated therapeutic management can be more effective in overcoming anxiety (Widya Shari et al., 2014) states that non-integrated therapeutic management can lead to repeated attacks, longer treatment, increased anxiety, fear to major depression. Nurses as health workers play a role in overcoming anxiety in PCI patients, one way is through non-pharmacological interventions.

Based on the data contained in the medical record room at the Batam Bros. Hospital, the number of patients who underwent the PCI procedure found 66 the number of patients in the last 6 months that were performed by PCI, almost all patients before cardiac catheterization experienced anxiety, Therefore this is a problem in constraints In further action and prolonging the PCI action, it is hoped that this EFT will be effective in handling patient anxiety before taking cardiac catheterization.

Results of interviews with 10 patients who were subjected to cardiac catheterization 3 Patients said their heart was racing, restless, confused and worried about their condition after cardiac catheterization, 6 of them said the nurse did not explain in detail what the cardiac catheterization was like, the patient was getting worse. Anxious Due to Lack of Knowledge, Lack of Nurse Education Who Can Calm Patients So They Are Not Anxious, 1 Patient Among them Said Lack of Motivation from family, Emotional freedom techniques (EFT) therapy can

overcome a person's anxiety problem based on the root of the main problem through the set-up process that will be carried out and can affect the human subconscious by means of self-suggestion. The amount of anxiety that will be used as an affirmation sentence when tapping. In EFT there is also an element of eye movement desensitization repatterning (EMDR) technique through nine gamut procedures (eye movements) to control emotional feelings. This technique is to stimulate the balance of the left brain and right brain. Based on the above background, the researchers are interested in researching the effect of EFT intervention on the level of anxiety of patients who will undergo cardiac catheterization in the Angiography Room of Rs Awal Bros Batam Year 2020

2 Methods

This study was an analytical study design *Cross Sectional Study* is a study design that is studying the dynamics of the correlation and association between variables independent EFT with anxiety and the dependent variable using T test.

3 Results and Discussion

3.1 Characteristics of Respondents

Table 1. Characteristics of Respondents by Age

No.	Age	f	Percentage
1	20-30	3	10%
2	31-40	10	33%
3	41-50	17	57%
	Total	30	100%

Based on table 1, it is known that more than half of those who suffer from coronary heart disease who undergo cardiac catheterization aged 41-50 years are 17 people. Or 57%.

Table 2. Characteristics of Respondents Based on Gender

No.	Gender	f	Percentage
1	Man	17	57%
2	Women	13	43%
	Total	30	100%

Based on table 2, it is known that more than half of the sexes are male, namely 57% or as many as 17 people.

3.2 Univariate Analysis

Table 3. Frequency Distribution of Anxiety Levels Before Emotional Freedom Techniques in Angiography Room Rs Awal Bros Batam Year 2021

Worry	f	Percentage
Mild anxiety	10	33%
Anxious	20	67%
Total	30	100%

Based on table 3 above, it is known that the results of the analysis show that most of the anxiety in patients who will be cardiac catheterized **before** doing **emotional freedom techniques** with an average level of severe anxiety is 20 people or 67%.

Table 4. Frequency Distribution of Anxiety Levels After Emotional Freedom Techniques in The Angiography Room of Rs Awal Bros Batam Year 2021

Worry	f	Percentage
Moderate Anxious	10	33%
Mild anxiety	20	67%
Total	30	100%

Based on table 4 above, it is known that the results of the analysis show that most of the anxiety in patients who will be cardiac catheterized **after** doing **emotional freedom techniques** with an average level of mild anxiety is 20 people or 67%.

3.3 Bivariate Analysis

Table 5. Frequency Distribution Differences in the Frequency Distribution of Anxiety Levels before and After Emotional Freedom Techniques in the Angiography Room Rs Awal Bros Batam Year 2021

Variable	n	Median	Std. Dev	value
Before intervention	30	20	897	0.003
After the intervention	30	10	716	0.003

Based on the table 5 above, the results of the analysis of 30 respondents are as follows: (1) The minimum value of the 30 respondents above shows the value before the intervention / provision of Emotional Freedom Techniques is 20 and after intervention / therapy is 10. After testing the normality of 30 respondents, the Sig. <0.005, so it can be concluded that the data distribution is not normal. Furthermore, the researcher used an alternative test to see the average frequency distribution of anxiety levels before and after **Emotional Freedom Techniques**, namely inferential statistical analysis of *Non-Parametric - Bivariate* hypothesis testing by testing different mean ratings (ordinal data) of 2 measurement results in the same group (for example difference in mean pre-test and post-test ranks t). (Dharma, Nursing Research Methodology, 2015) Based on the output "Test Statistics" in table 4.4 above, it is known that the *p-value* is 0.003. Because the value of 0.003 is less than <0.05, it can be concluded that "H0 is rejected", or in other words, there is "The Effect of Emotional Freedom Techniques on the Anxiety Levels That Do Cardiac Catatization in the Angio Rs Awal Bros Batam Room 2020

4 Conclusion

Based on the results of the research conducted concluded as follows:

- Most of the known analysis results show that most of the anxiety in patients who will be cardiac catheterized before doing Emotional Freedom Techniques with an average level of severe anxiety as many as 20 people or 67%
- Sebagian Great Unknown analysis results indicate that the majority of Anxiety in Patients Who Will Perform cardiac catheterisation At Once Do Emotional Freedom Techniques With the average level of mild anxiety as many as 20 people or 67%
- dist ribusi frequency of average levels of anxiety before and after Do Emotional Freedom Techniques are inferential statistical analysis of hypothesis testing Non Parametric-Bivariate by testing different mean ratings (ordinal data) from the second measurement results to the same group (eg depending mean rank pre-test and post test). (Dharma, 2015) Based on the "Test Statistics" output in table 4.4 above, it is known that the *p-value* is 0.003. Because the value of 0.003 is less than <0.05, it can be concluded that "H0 is rejected", or in other words there is "The Influence of Emotional Freedom Techniques on the Anxiety Level of Heart Catatization in the Angiography Room of Rs Awal Bros Batam Year 2021

References

- [1] Azizah, A. (2017). Literature study of the theoretical basis and practice of narrative counseling. *Journal of BK UNESA*, 7 (2), 1–7.
- [2] Harselia, S. (2018). Percutaneous Coronary Intervention Measures In Right Coronary Artery Stenosis Patients. *ARKAVI (Indonesian Cardiovascular Archives)*, 3 (1), 186–191. <https://doi.org/10.22236/arkavi.v3i1.3687>
- [3] Isnadiya, A., Ryandini, FR, & Utomo, TP (2019). Effect of Emotional Freedom Technique (EFT) on Anxiety Levels of Patients with Pre Percutaneous Coronary Intervention (PCI) at SMC Telogorejo Hospital. *Journal of Medical Surgical Nursing*, 1 (2), 12. <https://doi.org/10.32584/jikmb.v1i2.187>
- [4] Nursalam. (2020). *Nursing Research Methodology*. Salemba Medika.
- [5] Oktiawati, A., Itsna, IN, & Ni'mah, J. (2020). Emotional Freedom Tec hnique (EFT) Reduces Anxiety for Mothers Who Have Low Birth Weight Babies (LBW). *PERINTIS HEALTH JOURNAL (Perintis's Health Journal)*, 7 (1), 8–15. <https://doi.org/10.33653/jkp.v7i1.421>
- [6] Sartika, M., & Pujiastuti, RA (2020). Analysis of the Anxiety Level of Patients who will undergo Cardiac Catheterization at Omni Pulomas Hospital, East Jakarta. *Indonesian Journal of Health Sciences (JIKSI)*, 1 (1), 1–9. [http://www.jurnal.umitra.ac.id/index.php/JIKSI/article / view / 377/266](http://www.jurnal.umitra.ac.id/index.php/JIKSI/article/view/377/266)
- [7] Widya Shari, W., S, S., & Emaliyawati, E. (2014). Emotional Freedom Techniques and Anxiety Levels of Patients Undergoing Percutaneous Coronary Intervention. *Padjajaran Nursing Journal*, v2 (n3), 133–145. <https://doi.org/10.24198/ jkp.v2n3.1>