**Original Article** 

### Spiritual Emotional Freedom Technique Intervention on Anxiety Level of Hypertensive Heart Disease Patients

#### Wa Ode Nova Noviyanti Rachman<sup>1\*</sup>, Wa Ode Rahmadhania<sup>1</sup>, Cece Indriani<sup>1</sup>, Ahmad Yani<sup>2</sup>, Lukman Ima<sup>1</sup>

 <sup>1</sup> Faculty of Health Sciences, Universitas Mandala Waluya, Kendari, Southeast Sulawesi, Indonesia
<sup>2</sup> Faculty of Public Health, Universitas Muhammadiyah Palu, Palu, Central Sulawesi,

Indonesia

(Correspondence author email, waodenova.rachman@gmail.com)

#### ABSTRACT

Hypertension is one of the leading causes of various heart diseases. In patients with Hypertensive Heart Disease (HHD), anxiety symptoms can continue to increase, which can affect the treatment and healing process and can cause various complications. This study aims to determine the effect of Spiritual Emotional Freedom Technique (SEFT) therapy on anxiety levels in HHD patients in the ICCU room of Kendari City Hospital. This type of research is a pre-experiment with a one-group pretest-posttest design. The population in this study were all HHD patients treated in the ICCU room of Kendari City Hospital. The sampling technique used was purposive sampling, with a total sample size of 22 respondents. This research instrument uses the Anxiety Visual Analog Scale (VAS-A) questionnaire sheet to measure anxiety levels. The analysis method uses a paired-sample t-test. The results showed that the level of anxiety before and after SEFT therapy decreased. This can be seen from the statistical test p-value =  $0.000 < \alpha = 0.05$ , which shows a significant difference. It can be concluded that SEFT therapy influences reducing anxiety levels in HHD patients. It is expected for service institutions and other institutions to provide training for health workers to perform SEFT therapy to help reduce patient anxiety levels.

*Keywords:* Anxiety, SEFT Therapy, Hypertensive Heart Disease (HHD)

https://doi.org/10.33860/jik.v17i3.3327

© 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (https://creativecommons.org/licenses/by-sa/4.0/).

#### **INTRODUCTION**

Health development is an effort carried out by all components of the Indonesian nation that aims to increase awareness, willingness, and ability to live healthily for everyone to achieve the highest level of public health. Currently, Indonesia is experiencing a change in disease patterns, which is often called an epidemiological transition, which is characterized by increasing deaths and morbidity due to non-communicable diseases (NCDs). One of these non-communicable diseases (NCDs) is hypertension<sup>1</sup>.

Hypertension is when the blood vessels have persistent high blood pressure (systolic blood pressure  $\geq$ 140 mmHg or diastolic blood pressure  $\geq$ 90 mmHg). Blood pressure is the force of blood against the pressure of the artery walls when the blood is pumped by the heart throughout the body. The higher the blood pressure, the more complex the heart works<sup>1</sup>.

2015 WHO data shows that around 1.13 billion people in the world suffer from

hypertension. This means that 1 in 3 people in the world are diagnosed with hypertension, and only 36.8% of them take medication. The number of hypertension sufferers in the world continues to increase every year. It is estimated that by 2025, there will be 1.5 billion people affected by hypertension. It is also estimated that every year, 9.4 million people die from hypertension and complications<sup>2</sup>.

In Indonesia, hypertension is still a disease that is a big challenge. This is because hypertension is often found in primary health care. According to basic health research data (RISKESDAS), in 2018, hypertension is a health problem with a moderately increasing prevalence. Namely, in the 2013 Riskesdas, it was 25.8%, rising to 34.1% in the 2018 Riskesdas. Southeast Sulawesi Province is one of the regions with the prevalence of hypertension also increasing quite significantly. In the 2013 Riskesda results, the majority of hypertension in Southeast Sulawesi was 22.5%, and in the 2018 Riskesda, it rose to 30.2%.

Cardiovascular disease, or heart and blood vessel disease, is one of the leading health problems in developed and developing countries. This disease is the number one cause of death in the world every year. Since 2008, it is estimated that 17.3 million deaths have been caused by cardiovascular disease, which is predicted to continue to increase to reach 23.3 million deaths in 2030. In Indonesia, heart and blood vessel disease continues to grow and will cause a burden of pain, disability, and socioeconomic disadvantage. For the sufferer's family, society, and the country<sup>3</sup>.

Several factors that influence the development of hypertension and cardiovascular disease from a psychosocial aspect include anxiety, anger, social isolation, depression, and stress. Heart disease patients often experience anxiety factors and can have severe consequences if not treated, but this is rarely studied and given attention. Assessment and treatment of anxiety should be part of care in cardiac patients aimed at recovery and reducing the risk of subsequent attacks. Heart patients who experience stress have a greater chance of complications. Further complications that may occur include recurrent infarction, prolonged ischemia, ventricular fibrillation, and ventricular tachycardia <sup>4</sup>. Heart patients with anxiety have a longer length of stay compared to heart patients without anxiety<sup>5</sup>.

One intervention that can be done to

deal with anxiety is the Spiritual Emotional Freedom Technique (SEFT). The spiritual Emotional Freedom Technique (SEFT) is a non-pharmacological therapy that develops the emotional freedom technique (EFT). Emotional freedom technique (EFT) intervention is a technique for dealing with emotions that is done by lightly tapping the fingertips to stimulate specific meridian points on the individual's body while feeling the problem being faced. Seft therapy can be done alone and without the use of special equipment, so that this therapy can be done at any time.

SEFT intervention research to reduce the anxiety of families of patients treated in the ICU room at Bau-Bau City Regional Hospital. The results of the study show that, clinically, SEFT therapy affects reducing anxiety levels in the families of patients treated in the ICU room at Bau-Bau City Regional Hospital <sup>6</sup>.

The results of a preliminary survey conducted on April 18, 2019, showed that the number of patients being treated in the ICCU room at the Kendari City Regional Hospital was five people, and four of them suffered from Hypertensive Heart Disease (HHD). When assessing anxiety in patients with HHD using VAS-A, three of them experienced severe anxiety, and one experienced moderate pressure. The stress experienced is related to the patient's illness and fear of death. Anxiety can stimulate the release of epinephrine and norepinephrine, which affects the work of the sympathetic and parasympathetic nerves. An increase in blood pressure and pulse rate is an impact that can cause further complications. This will also make the length of treatment longer. Based on this description, this study aims to assess the effect of the Spiritual Emotional Freedom Technique (SEFT) therapy intervention on anxiety levels in Hypertensive Heart Disease (HHD) patients in the ICCU room at Kendari City Regional Hospital.

#### METHOD

This quantitative research uses a preexperimental design using a one-group pretestposttest design approach. In this design, an examination of the disease or condition under study is carried out on a group of research subjects, and then the SEFT intervention is carried out. After a period deemed sufficient, a re-examination of the disease or condition is carried out. This research used a one-group pretest-posttest design approach due to limited research time, so it was feared that the number of samples obtained needed to be more significant to be divided into intervention and control groups.

This research was carried out in the ICCU room at the Kendari City Regional General Hospital. This research was carried out from May 2 to June 22, 2019.

The population in this study were all Hypertensive Heart Disease (HHD) patients treated in the ICCU room at the Kendari City Regional Hospital. The sample in this study was HHD patients who were treated in the ICCU room at Kendari City Regional Hospital and met the inclusion and exclusion criteria, totaling 22 people. The sampling technique used in this research was purposive, quantitative analysis with a pre-experimental design using a onegroup pretest-posttest design approach. In this design, an examination of the disease or condition under study is carried out on a group of research subjects, and then the SEFT intervention is carried out. After a period deemed sufficient, a re-examination of the disease or condition is carried out. This research used a one-group pretest-posttest design approach due to limited research time, so it was feared that the number of samples obtained was too small to be divided into intervention groups and control groups.

This research was carried out in the ICCU room at the Kendari City Regional General Hospital. This research was carried out from May 2 to June 22, 2019.

The population in this study were all Hypertensive Heart Disease (HHD) patients treated in the ICCU room at the Kendari City Regional Hospital. The sample in this study was HHD patients who were treated in the ICCU room at Kendari City Regional Hospital and met the inclusion and exclusion criteria, totaling 22 people. The sampling technique used in this research was purposive sampling.

#### RESULTS

Changes in the anxiety scale between respondents who know about SEFT therapy and those who do not know about SEFT therapy can be seen in the table below:

Table 1. Changes in Respondents' AnxietyScale

Scule				
Category	Changes in Anxiety Scale		Total (n)	%
	Yes	No		
Know about SEFT	2	1	3	13,64
Don't know about SEFT	19	0	19	86,36
Total	21	1	22	100

Table 1 above shows that of the 22 respondents, 3 (13.64%) knew about SEFT therapy. Of these respondents, 2 of them experienced a change in the anxiety scale value, and one respondent did not experience a difference in the anxiety scale. In contrast, 19 (86.36%) respondents had never known about SEFT therapy, and all of them experienced changes in anxiety scale scores.

The research results showed that anxiety levels before and after SEFT therapy decreased. This can be seen from the statistical test p-value =  $0.000 < \alpha = 0.05$ , which offers a significant difference. It can be concluded that SEFT therapy reduces anxiety levels in HHD patients.

The research results show that the largest age group of respondents was between 54 and 65. Namely, from 22 respondents, there were 12 (54.5%) respondents. This shows that age is a risk factor for HHD. Apart from the age factor, there is also a gender factor where men are more at risk than women. The number of male respondents was 13 (59.1%) and 9 (40.9%) female. Men aged 35-50 years and menopausal women are at high risk of developing hypertension. As age increases, blood pressure rises, this factor cannot be controlled, and men's gender is more elevated than women's<sup>7</sup>.

The research results show that of the 22 respondents before SEFT therapy was given categorically, there were 14 (63.6%) respondents with moderate levels of anxiety and 8 (36.4%) respondents who experienced severe levels of stress. This anxiety is caused by the presence of a disease that is considered a health threat. This is based on the statements of the majority of respondents, who revealed that they felt anxious because of their illness. Apart from that, the fear of recurrence and loss of livelihood due to not being able to work also adds to the feelings of anxiety experienced. Anxiety in the patient and his family while the patient is in hospital, one of which is due to worry that the patient's condition will get worse and even threaten the patient's life  $^{8}$ .

Judging from the average blood pressure in the intervention group after being given treatment, hypertensive respondents in the intervention group who were given spiritual, emotional freedom technique (SEFT) treatment experienced changes in blood pressure reduction, while those in the control group or groups that were not given spiritual, emotional freedom technique therapy treatment technique (SEFT) experienced an insignificant decrease in blood pressure<sup>9</sup>. One of the reasons for this is that giving spiritual, emotional freedom technique (SEFT) therapy for 15 minutes a day can help lower blood pressure because it is relaxing and suppresses the production of stress hormones such as epinephrine and cortisol, which will reduce heart function and output heart <sup>10</sup>.

The goal of treating hypertension is not only to reduce blood pressure but also to reduce and prevent complications due to hypertension. Non-pharmacological management is treatment without drugs applied to hypertension<sup>11</sup>. The first step in non-pharmacological treatment of hypertension is to live a healthy lifestyle, including controlling body weight, controlling diet, physical activity (exercise), stopping smoking and alcohol, and managing stress <sup>12</sup>. Anxiety, fear, pain, and emotional stress can result in sympathetic stimulation, which increases heart rate, cardiac output, and vascular resistance. This sympathetic effect increases blood pressure. Anxiety increases blood pressure by 30 mmHg<sup>13</sup>.

Anxiety can affect the respondent's health condition by stimulating the sympathetic and parasympathetic nervous system, which can be seen by increasing the respondent's pulse frequency and patient breathing. The mean value of the respondents' pulse frequency before SEFT was 102.91, and the mean value of respiratory frequency before SEFT was 25.55.

Based on the results of research from 22 respondents, 21 (95.45%) respondents experienced a decrease in the anxiety scale score (decrease in the VAS-A scale >8) after SEFT therapy; namely, the average anxiety score before SEFT therapy was 67.95 (SD = 19.091) fell to 48.86 (SD=17.45) after SEFT therapy so that the mean decrease was 19.091 (SD=7.964) while 1 (4.55%) other respondent did not experience a decrease at all in the anxiety scale value.

There was no change in the value on the respondent's anxiety scale because the respondent did not follow SEFT therapy properly, namely at the setup and tune-in stages, where the respondent was not devoted and did not believe in SEFT therapy.

The respondent's disbelief was because the respondent had seen SEFT therapy before via social media and tried it, but there was no change in his complaints at that time. Patients who have reasonable beliefs about vulnerability are 6 (six) times more likely to comply than patients who have poor beliefs <sup>14</sup>. Compliance is an essential factor that influences therapy results. Compliance can be interpreted as a patient cognitively/intellectually complying with all advice and instructions recommended by medical personnel Compliance is an important factor that influences therapy results. Compliance can be interpreted as a patient cognitively/intellectually complying with all advice and instructions recommended by medical personnel <sup>15</sup>.

# DISCUSSION

SEFT reduces adrenaline and cortisol so that heart rate, high blood pressure, and muscle tension decrease <sup>16</sup>. This is confirmed by Faridah's research, which stated that there was a decrease in systolic and diastolic blood pressure in hypertensive sufferers aged 45-59 years at RSUD dr. Soegiri Lamongan <sup>17</sup>.

SEFT can improve the state of mind, emotions, and human behavior by tapping techniques at 18 critical points along the body's 12 energy meridians. As explained, if the body's energy flow is disturbed because it is triggered by memories, trauma, or wrong learning processes stored in the subconscious, then emotions become chaotic, ranging from mild ones such as bad mood, laziness, and unmotivated to do something, to the severe conditions such as acute depression, phobias, excessive anxiety, and prolonged stress <sup>18</sup>. All of this is caused by disrupting the body's energy system. Therefore, to overcome this by neutralizing the energy disturbance again SEFT through therapy. SEFT balances psychological resistance in the form of negative thoughts in the patient. These negative thoughts are changed into positive reviews by being neutralized with a prayer of surrender. The power of prayer accompanied by sincerity and

sacrifice can strengthen the effects of SEFT therapy.

The benefits of SEFT therapy include overcoming emotional and physical problems that can trigger the release of stress hormones such as cortisol and epinephrine, which can trigger heart function and increase cardiac output <sup>19</sup>. The heart is a pump system that pumps blood throughout the body. Because it is a pump system that requires pressure, the amount of pressure depends on two main factors: cardiac output (cardiac output) and peripheral resistance or tone of the arteries (peripheral resistance). Increased CO causes hypertension through increased fluid volume (preload) and contractility. Both of these result from overactivity of the sympathetic nerves, which causes an increase in heart rate and blood volume redistribution due to vasoconstriction. Under normal circumstances, an increase in CO will be required to meet the increasing metabolic needs of body tissues. Peripheral pressure will decrease. This situation is always in balance so that it does not cause hypertension 20

In the concept of psychoneuroimmunology, anxiety or stress as a stressor will influence stress perception and stress responses that occur in the human body. Stress response occurs through the regulation of the nervous and endocrine systems in producing neurotransmitters and hormones that will modulate the body's immune system, one of which is through the HPA axis. Controlled emotions from the amygdala influence hypothalamus activity in reducing CRH secretion, then the decrease in CRH will be responded to by the adrenal glands to reduce ACTH secretion so that the ACTH hormone will reduce cortisol secretion by the adrenal cortex, which causes a person's emotional state (anxiety) which can be observed from fluctuations in adrenal hormones<sup>21</sup>.

Spiritual in SEFT is a prayer that is affirmed by the patient from the therapy session until the end of the therapy session, namely in the set-up, tune-in, and tapping Zainuddin AF phases. 2009, and Sumiati 2010 states in her book that prayer is part of worship. It is a recognition that a person depends on the only God who created humans and the universe. With this recognition, a feeling of security arises in the human soul that there is a close life supporter who will not make him sad. The value of worship is significant in reducing emotional stress so that it influences the process of hypertension and its prognosis. By increasing the motivation to worship and the attitude of prayer, a person's mental and psychological strength will be strengthened, and they will gain peace. By remembering Allah, your day will be calm and peaceful <sup>18,22</sup>.

Research conducted by 6 outlined the results of his study that there was a significant difference in measuring the anxiety levels of families of critical patients before and after being given SEFT. Changes in anxiety levels are characterized by a decrease in anxiety levels from severe to moderate levels, so it can be seen that SEFT given to families of critical patients is effective in reducing anxiety.

SEFT intervention can help patients to accept and surrender the condition or illness they are experiencing by using a spiritual approach and providing calm to the patient, which will cause a relaxation response. Halm (2009) in Rahmadania WO 2021 stated that the relaxation response can be characterized by a decrease in respiration (breathing becomes slower in rhythm), heart rate (slow pulse), a drop in blood pressure, and a reduction in oxygen demand in the heart muscle. This also happened in this study. The results of measuring pulse frequency and respiratory frequency decreased after SEFT therapy <sup>23</sup>.

## CONCLUSION

This study concluded that there was an influence before and after receiving the Spiritual Emotional Freedom Technique (SEFT) therapy intervention on anxiety levels in Hypertensive Heart Disease (HHD) patients. In addition, this study recommends that service institutions and other institutions provide training for health workers to carry out SEFT therapy to help reduce patient anxiety levels.

#### REFERENCES

- 1. Kementerian Kesehatan Republik Indonesia. TOSS TB: Temukan TB Obati Sampai Sembuh. Jakarta: Kementerian Kesehatan Republik Indonesia.. 2016.
- 2. Kementerian Kesehatan Republik Indonesia. Hasil riset kesehatan dasar tahun 2018. Jakarta: Kementerian Kesehatan Republik Indonesia. 2018.
- 3. Kementerian Kesehatan Republik

Indonesia. Riset Kesehatan Dasar. Jakarta: Kementerian Kesehatan Republik Indonesia. 2013.

- 4. Moser DK. "The rust of life": impact of anxiety on cardiac patients. American journal of critical care. 2007 Jul 1;16(4):361-9.
- Nurlindayanti E, Susetyowati S, Probosuseno P, Pangastuti R. Kecemasan dan status gizi berhubungan dengan lama rawat inap pada pasien jantung di RSUD Jenderal Ahmad Yani, Metro, Lampung. J Gizi dan Diet Indones (Indonesian J Nutr Diet. 2016;3(2):98–104.
- 6. Rahmadania WO. Pengaruh Terapi Spiritual Emotional Freedom Technique (SEFT) Terhadap Tingkat Kecemasan pada Keluarga Pasien yang Kritis di RSUD Kota Baubau. Tesis. Universitas Gadjah Mada; 2017.
- 7. Udjianti WJ. Keperawatan kardiovaskular. Jakarta Salemba Med. 2010;2.
- Pochard F, Darmon M, Fassier T, Bollaert P-E, Cheval C, Coloigner M, et al. Symptoms of anxiety and depression in family members of intensive care unit patients before discharge or death. A prospective multicenter study. J Crit Care. 2005;20(1):90–6.
- Ningsih N, Ardianty C. Application of Spiritual Emotional Freedom Technique on Anxiety of Hypertension Patients in the Work Area of the Simpang Periuk Public Health Center Lubuklinggau City. East Asian J Multidiscip Res. 2022;1(9):1903–12.
- 10. Cici R, Özkan M. Effects on Anxiety and Vital Signs of the Emotional Freedom Technique and Music Before Surgery for Lumbar Disc Hernia. Altern Ther Heal Med. 2022;28(5).
- 11. Erkinovna TD. Modern understanding of the occurrence of cognitive impairments in arterial hypertension and their correction. Asian J Pharm Biol Res. 2021;10(3).
- 12. Suratun S, Pujiana D, Sari M. Pencegahan Diabetes Melitus Di Palembang. Masker Med. 2023;11(1):9– 18.
- 13. RENI IISK. Pengaruh Terapi Musik Klasik Mozart Terhadap Penurunan Tekanan Darah Dan Frekuensi Denyut

Jantung Pasien Pre Operasi Dengan Literature Review. 2020;

- Wuryanto MA. Beberapa Faktor Risiko Kepatuhan Berobat Penderita Malaria Vivax (Studi Kasus di Kab. Banjarnegara). Program Pascasarjana Universitas Diponegoro; 2005.
- 15. HD SR, Indriati G. Faktor-faktor yang mempengaruhi keberhasilan pengobatan tuberkulosis paru. Riau University; 2015.
- 16. Aulianita Y, Sudarmiati S. Pengaruh spiritual emotional freedom technique terhadap kecemasan wanita klimakterium di rw 6 kelurahan pedalangan kecamatan banyumanik kota semarang jawa tengah. 2015;
- Faridah VN. Pengaruh Keperawatan Spriritual Emotional Freedom Technique (Seft) Islami Terhadap Tekanan Darah Penderita Hipertensi Usia 45-65 tahun Di Rsud Dr. Soegiri Lamongan Surya. 2012;2.
- Zainuddin AF. SEFT (Spiritual Emotional Freedom Technique). Jakarta: PT. Arga Publishing; 2010.
- 19. Tarigan FGN, Barus Y, Limbong TS. Pengaruh Terapi Seft (Spiritual Emitional Freedom Technique) Terhadap Penurunan Tekanan Darah Penderita Hipertensi Di Upt Puskesmas Medan Tuntungan. J PIONIR. 2022;8(1).
- Isworo A. Anti-inflammatory activity of date palm seed by downregulating interleukin-1β, TGF-β, cyclooxygenase-1 and-2: A study among middle age women. Saudi Pharm J. 2020;28(8):1014–8.
- Fajriah SN, Putra ST, Rahayu YP, Subarniati T R. Stress Perception and Stress Response against Internet Psychological Addiction (IPA) on Adolescents (Psychoneuroimmunology Approach). Med Leg Updat. 2020;20(1):494–9.
- 22. Sumiati D. Penanganan Stres pada Penyakit Jantung Koroner. Jakarta: CV. Trans Info Media. 2010;
- Rahmadania WO, Zoahira WOA. Terapi Spritual Emotional Freedom Technique (SEFT) terhadap Tingkat Kecemasan pada Keluarga Pasien yang Kritis. J Keperawatan Silampari. 2021;5(1):610– 8.