Jurnal Mutiara Ners E.ISSN: 2620-4061
Vol. 6 No. 1 Januari 2023 (P 1-9)

THE EFFECT OF SPIRITUAL EMOTIONAL FREEDOM TECHNIQUE (SEFT) ON ANXIETY AND PAIN IN POST-OPERATIVE FRACTURE PATIENT

Isneini[1], Nurleli[2], Hermansyah[3]
[1,2,3]Dosen Jurusan keperawatan Poltekkes Kemenkes Aceh
isnmanaf@yahoo.co.id, nurleli@poltekkesaceh.ac.id, herman_mph@yahoo.com

ABSTRACT

Postoperative fracture patients can experience anxiety and pain which impact on the healing process because it affects physiological and psychological conditions. Several studies have revealed that this condition can be treated with Spiritual Emotional Freedom Technique (SEFT) therapy because it can eliminate negative emotions. However, the impact on pain and anxiety in postoperative fracture patients who are hospitalized is not yet known. The purpose of this study was to determine the effect of SEFT therapy on reducing anxiety and pain in postoperative fracture patients at dr. Zainoel Abidin (RSUDZA) Banda Aceh. The research method used was quasi-experimental through a post test only control group design by means of randomization of the control and experimental groups, providing educational interventions on SEFT management and post tests on 44 respondents who were divided into the intervention group and the control group. The independent t-test technique obtained p-value of 0.032 (<0.05) and the Man Whitney U test obtained p-value of 0.008 (<0.05 so there is a difference between the control group and the control group intervention after being given SEFT therapy. it turns out that the respondent is able to focus attention so as not to experience anxiety which can increase his perception of pain, so that the pain scale decreases. There is a significant effect of SEFT therapy on anxiety and pain in postoperative limb fracture patients. These results are expected to add to the reference to help meet the psychological needs of postoperative fracture patients with pain and anxiety.

Keywords: *SEFT, anxiety, pain, post surgery, fracture*
Reading List : 20 articles (2011-2020) and 6 books (2006-2013)

1. INTRODUCTION

Fracture is a condition where there is a discontinuity of bone integrity which causes pain problems.The biggest cause is work accidents and traffic accidents.Based on data from the World Health Organization (WHO) in 2011 there were 21 million people experiencing fractures with a prevalence of 4.2%. Based on the results of the 2018 Basic Health Research (Riskesdas), the prevalence of fractures nationally increased by 9.2% in 2013. In Aceh Province, the prevalence of fractures increased by 8.1% in 2018 compared to the previous fracture in 2013, which was 7.4%. (Kemenkes, 2018).

It is estimated that at least 11% of the world's disease burden comes from diseases or conditions that can actually be treated with surgery. One of them is fracture management. WHO states that surgical cases are a public health problem so that the quality of surgical services must be improved to address emergency and essential problems (Kemenkes 2015).

Postoperative pain is the body's reaction to tissue damage due to skin incisions, pulling or stretching of internal organs during surgery. Every postoperative patient must feel pain even though the intensity is different. In a study it was said that in the first two hours after surgery, patients experienced severe pain. At eight hours postoperatively the patient was still in severe pain. Sixteen hours postoperatively the

DOI : https://doi.org/10.51544/jmn.v6i1.3353

patient felt moderate pain. Twenty hours after surgery, the patient felt mild pain (Lubis, K.A., 2021). So it is necessary to carry out effective interventions to help patients with surgical wound pain.

Without effective preparation in the preoperative phase, anxiety in patients and their families will not be resolved and can lead to surgical failure. Some important nursing interventions applied by nurses to reduce pre-surgical anxiety are by implementing independent nursing actions such as fostering effective relationships, listening to patient complaints, providing patient counseling before surgery and providing spiritual therapy which are expected to reduce patient anxiety levels. (Andarmoyo, 2013).

Treatment of pain and anxiety can be done pharmacologically by administering analgesic and sedative drugs. However, to treat mild and moderate pain it is better to use non-pharmacological pain management because it does not cause side effects. Several options can be made such as anticipatory guidance, ice therapy and hot or cold compresses, TENS (Transcutaneous Electrical Nerve Stimulation), distraction, relaxation, guided imagination, hypnosis, acupuncture, massage, music therapy and SEFT (Spiritual Emotional Freedom technique) (Andarmoyo, 2013).

SEFT is one of the non-pharmacological pain treatments that can be relied upon because this technique makes a combination of techniques that use psychological energy and spiritual strength as well as prayer to overcome negative emotions. SEFT works with disturbances of the body's energy system to eliminate negative emotions by realigning the body's energy system (Ulett, 1992 dalam Lane, 2009).

This SEFT action has been tested in several previous studies, including in Ma'rifah's 2015 study on postoperative Sectio Caesarea patients, the results showed that SEFT was effective in reducing postoperative Sectio Caesarea pain. This is in line with Wijayanti's research, (2010) that SEFT can reduce post-Section Caesarea pain and Zakiyyah's research, (2010) that SEFT has an effect on dysmonera pain management. However, there has been no research on SEFT conducted on the anxiety of patients with fractures.

2. METHODS

The research design is a quasi-experimental with post-test only control group design. In this design, data was collected only at the end of the study after treatment was carried out to compare the effectiveness of the Spiritual Emotional Freedom Technique therapy for anxiety and pain in postoperative lower extremity fracture patients. The intervention group will receive spiritual emotional freedom technique (X1) therapy and then do a post-test (P1). Whereas the control group will be given routine post-operative management from the hospital (X2), then a post-test with a similar examination (P2), a different group after simple randomization.

The study was designed with a post test group only experiment with a control group by means of randomization, namely the grouping of members of the control group and the experimental group was carried out on a random basis. Then providing intervention, the intervention group received SEFT management education (X1), while the control group received routine care in the form of deep breathing relaxation techniques (X2). Intervention for 15 minutes in 3 action times with a range of 1-2 hours. The appointment time for intervention is after 24 hours of surgery. Each patient will be taught about the SEFT therapy procedure and what the patient must do.

Then a post test was carried out by measuring the respondents' anxiety and

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index

pain again and compared the effect of SEFT management on reducing anxiety and pain between the control group and the intervention group.

(R) The intervention Group = X_1P_1
(R) The Control Group = X_2P_2

Notice :
X_1 = Intervention of SEFT
X_2 = Manajement of post-operative routine
PO_1, P_2 = The last Observation (*post-test*)

The population in this study were all postoperative fracture patients who treated in the surgical ward of dr. Zainoel Abidin hospital (RSUDZA) Banda Aceh city. Samples were taken using the sample mean formula of two paired populations with a sample size for each group of 22 people.

Research data collection was carried out using a questionnaire that measured the characteristics of respondents and the SEFT protocol, numerical pain intensity and the Zung Self Rating Anxiety Scale (ZSAS). (Andarmoyo, 2013). Data was collected by obtaining permits and ethical clearance procedures, conducting research outreach, selecting respondents and seeking approval to participate in the study, determining prospective respondents in the treatment group and control group with a total of 22 people each. The activity ended by conducting a final assessment of anxiety and pain (post test) in both groups. Data processing was carried out using descriptive statistical techniques to answer research questions by calculating the mean, SD, frequency and percentage of respondents' answers for each selected item and presented textually and in the form of a frequency distribution. The data normality test was performed using the Kolmogorov Smirnov test.

Statistical analysis of differences in anxiety in the intervention group and the control group (data distribution is normal) with the Independent T-test while differences in pain in the intervention group and the control group (data distribution is not normal) with the Mann-Whitney U test.

The study was conducted through research ethics approval from the Health Research Ethics Commission of the University Medical Faculty Syiah Kuala- dr. Zainoel Abidin Hospital. In the implementation process, the researcher applies the principles of Beneficence, Anonymity and Justice.

3. RESULT.

The results of the study explain the characteristics of the respondents, the level of anxiety and pain of the respondents in the control group and the intervention group and the effect of the spiritual emotional freedom technique on anxiety and pain. Univariate analysis results describe the characteristics of the 44 respondents who were divided into the intervention group and the control group in the study. The average age of the respondents was 36 years, with the highest percentage of both groups being in the age range of 30-40 years (61.4%). The majority of respondents are married, have a bachelor's degree, are privately employed, and most have a history of smoking.

Frequency Distribution of Respondents' Anxiety Levels based on the results of the Zung Self Rating Anxiety Scale (ZSAS) which are categorized as: 20-44 (normal), 45-59 (mild), 60-74 (moderate), 75-80 (severe) in 22 respondent groups intervention and 22 control group respondents, which aims to assess the anxiety felt by post-fracture surgery patients treated in the operating room of RSUDZA Banda Aceh, where the results can be seen in table 1.

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index

Table 1. Frequency Distribution of Respondents' Anxiety Levels in the Intervention Group and the Control Group (n1 = 22; n2 = 22)

Group	Anxiety level					
	Normal	%	Low	%	Medium	%
Control	5	22,7	15	68,2	2	9,1
Intervention	8	36,4	13	59,1	1	4,5

Source: primari data (processed 2021)

Based on table 1, it is known that of the 22 respondents who underwent Spiritual Emotional Freedom Technique Therapy in the control group, it was found that 17 respondents (77.3%) had mild to moderate anxiety. Meanwhile, of the 14 respondents who had been given Spiritual Emotional Freedom Technique Therapy, the control group was found to have mild to moderate anxiety. While the results of the anxiety score normality test show that the data is normally distributed.

Frequency Distribution of Respondents' Pain Levels based on the Numeric Rating Scale (NRS) with a pain scale of 0-10 in 22 intervention group respondents and 22 control group respondents, which aims to assess the level of pain felt by post-fracture surgery patients treated in the operating room of dr. Zainoel Abidin hospital, Banda Aceh city, where the results can be seen in table 2.

Table 2. ***Frequency Distribution of Respondents' Pain Levels in the Intervention Group and the Control Group (n1 = 22; n2 = 22)***

Group	Pain level					
	Low	%	Medium	%	High	%
Control	13	59,1	9	40,9	0	0
Intervention	18	81,8	4	18,2	0	0

Source: primari data (processed 2021)

Based on table 2, it is known that of the 22 respondents who underwent Spiritual Emotional Freedom Technique Therapy in the treatment group, 18 respondents (81.8%) had mild pain levels. Meanwhile, 13 respondents in the control group had mild pain levels.

The results of the normality test that the researchers did showed that the spiritual emotional freedom technique was given to the intervention group and to the control group, where the results showed that the significant figure was <0.05 namely for the intervention group the p-value was 0.006, while for the control group the p-value. 0.000. From these results it can be concluded that the effectiveness of Spiritual Emotional Freedom Technique therapy in this group is not normally distributed.

The results of the Bivariate Analysis of the effect of the spiritual emotional freedom technique on anxiety. The results of data processing on the effect of the spiritual emotional freedom technique on anxiety in postoperative lower extremity fracture patients at dr. Zainoel Abidin hospital, Banda Aceh city, can be seen in table 3 below:

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index

Table 3. The Effect of Spiritual Emotional Freedom Technique on Anxiety (n1 = 22; n2 = 22)

Group	*Mean*	*SD*	*Min-Maks*	*t*	*p-value*
Control	51,09	6,568	42-64	2,218	0,032
Intervention	45,18	10,631	25-60		

Based on table 3 above, it shows the results of the Independent Sample Test which shows a p-value of 0.032 (<0.05), then Ho is rejected and Ha is accepted. So it can be concluded that there is an effect of Spiritual Emotional Freedom Technique on reducing anxiety levels in post-fracture surgery patients at dr. Zainoel Abidin hospital.

Analysis of differences in pain in postoperative lower extremity fracture patients after receiving intervention in the form of spiritual emotional freedom technique therapy in the intervention group and in the control group after receiving standard care can be seen in the following table:

Tabel 4. ***The Effect of Spiritual Emotional Freedom Technique on Pain (n1=22; n2=22)***

Group	*Mean Rank*	*Z*	*Asymp. Sig. (2-tailed)*
Control	27,36	-2,644	,008
Intervention	17,64		

Based on table 4, it can be seen that the results of statistical analysis using the Man Whitney U test obtained a Z value of -2.644 and a p-value of 0.008 (<0.05). This shows that there is a significant difference between the control group and the intervention group after being given the spiritual emotional freedom technique therapy for pain in patients. Table 4 depicts the results of the statistical analysis using the Man Whitney U test, which obtained a Z value of -2.644 and a p-value of 0.008 (<0.05). This shows that there is a significant difference between the control group and the intervention group after being given spiritual emotional freedom technique therapy for pain in postoperative lower extremity fracture patients at dr. Zainoel Abidin hospital, Banda Aceh city.

4. DISCUSSION.

Fractures tend to occur at the age of under 45 years because at that age they are often related to sports, work, or which often occur due to injuries caused by motor vehicle accidents (Ningsih, 2012). Fracture sufferers based on gender characteristics, mostly suffered by men. This is related to high mobility and activity such as driving. Men are 2.9 times at risk of experiencing a fracture than women at the age of 15–49 years, while women approaching the age of 60 have a 2.3 times risk of experiencing a fracture than men (Noorisa, 2016).

The results showed that the average respondent's anxiety in facing surgery in the intervention group and the control group was not much different. The results of the analysis showed that there was a significant difference between the control group and the

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index

intervention group after being given spiritual emotional freedom technique therapy for anxiety in postoperative lower extremity fracture patients at dr. Zainoel Abidin hospital, Banda Aceh city.

Surgery can cause physiological and psychological stress and is sometimes considered frightening by some people. This is not due to the surgical procedure but due to the unpleasant experience that accompanies it during the process before and during surgery. (Ljungqvist, 2014). However, in this study, respondents experienced a decrease in anxiety after being given the spiritual emotional freedom technique therapy.

The results of this study are in accordance with research on the effectiveness of the Spiritual Emotional Freedom Technique (SEFT) therapy on anxiety levels in pre-cardiac surgery patients conducted by Prabowo (2019) which showed that there was a decrease in the average anxiety of respondents in the intervention group before and after being given SEFT therapy (p -value = 0.0001). While in the control group did not show any decrease. So that it can be said that the Emotional freedom technique has also been investigated extensively to reduce anxiety and depression (Bach, 2019).

As we know that anxiety or anxiety is a feeling of anxiety, worry, or discomfort as if something is going to happen that is felt as a threat. When experiencing anxiety, individuals use various coping mechanisms or ways of solving problems, and if they cannot deal with anxiety in a healthy manner, it can lead to maladaptive behavior (Keliat et al, 2011). Patients who are about to be operated on usually become a bit nervous and scared. The patient does not want to talk and show his surroundings, but instead the patient diverts his attention or vice versa the patient moves continuously and cannot sleep (Chatwin, 2016).

The intensity of feelings can be mild or severe enough to cause panic, and the intensity can increase or disappear. Anxiety can be expressed directly through physiological and behavioral changes and indirectly through the emergence of symptoms or coping mechanisms in an effort to fight the emergence of anxiety. (Kaplan & Sadocks, 2015).

There are several factors associated with speed in surgery patients. These factors include knowledge, culture and family support. The factor that has the most dominant influence on anxiety is the cultural factor. Sufficient knowledge influences respondents in deciding attitudes towards operative anxiety. Culture that influences enough to influence respondents to set the anxiety scale. Family support and attention calmed the respondent so that anxiety decreased (Setiawan Wahyuningsih et al., 2021).

Based on the results of the research above, the researchers assume that the application of Spiritual Emotional Freedom Technique (SEFT) Therapy in postoperative fracture patients can actually reduce the level of anxiety because it is related to the psychological disorders of patients who will face the fracture surgery process.

The results of the study also showed that after giving spiritual emotional freedom technique therapy for pain in patients with post-fracture surgery at Dr. Zainoel Abidin Banda Aceh there is a significant difference in the length of patient stay. This is consistent with research on hypno-EFT (Emotional Freedom Technique) on pain scales in postoperative orthopedic patients who experienced fractures conducted by Rusdiana (2016) which showed that there were significant differences in respondents' pain scales before and after hypno-eft (emotional freedom) was performed. technique) for 3 days (p=<0.001). The more frequently SEFT therapy is performed, the

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index

more optimal the pain reduction will be (M. Zainal Abidin, Siswanto, Agus Prasetyo, 2020).

Another opinion was expressed by Muttaqin & Sari in 2011 that postoperative pain is caused by invasive surgical procedures performed. Even though the bone fragments have been reduced, manipulations such as inserting screws and plates into the bone will cause severe acute pain for hours to days. This is caused by the ongoing inflammatory phase accompanied by tissue edema.

The decrease in pain in the intervention group compared to the control group proved that treatment with a combination of SEFT therapy made patients more relaxed and pain intensity more stable than using only a hospital procedure in the form of analgesic therapy alone. Changes in the decrease in pain scale after SEFT therapy treatment have been shown to have an effect on reducing pain and anxiety in post-prostate transurethral resection surgery patients (Brahmantya, 2016). SEFT therapy provides stimulation of the body's energy system which is directly related to the source of pain, activation of pain pressure pathways, so that it activates electrical stimulation in the cerebral gray matter so that it blocks the substance as a pain neurotransmitter (Potter & Perry, 2010).

Based on the results of the research above, the researchers assumed that the application of Spiritual Emotional Freedom Technique (SEFT) therapy in postoperative fracture patients was able to reduce the level of pain felt by these patients, although the difference was small. Giving SEFT through neurophysiological mechanisms can reduce pain. Coupled with the spiritual aspects, namely prayer, sincerity and surrender, the SEFT is strengthened so that the effect of SEFT on reducing pain in postoperative femoral fracture patients becomes greater or better. Besides that, SEFT therapy can also be applied as a non-pharmacological therapy because it does not require any costs, the technique is simple, easy to do, safer and without side effects and most importantly the nurse can do it independently.

5. CONCLUTION

The results showed that there was a significant effect of spiritual emotional freedom technique therapy on anxiety and pain in postoperative lower extremity fracture patients at dr. Zainoel Abidin hospital, Banda Aceh city.

In this study the authors recommend that further research be carried out using the action research method on the application of spiritual healing for other types of surgery, such as urological, cardiovascular, digestive surgery, etc. so that it can be useful in the field of perioperative nursing in reducing patient pain and anxiety so that competence nurses will increase which will also have an impact on improving the quality of health services.

6. REFERENSI

Andarmoyo, S. (2013). Aplikasi *Asuhan Keperawatan Berdasarkan Diagnosa Medis* NANDA NIC-NOC

Appley, A. G., & Solomon. (2010). *Orthopedi dan Fraktur Sistem Appley*. Jakarta: Widya Medika

Aspuah, S. (2013). *Kumpulan Kuesioner dan Instrumen Peneliti Kesehatan*. Yogyakarta : Nuha Medika

Bach, D., Groesbeck, G., Stapleton, P., Sims, R., Blickheuser, K., & Church, D. (2019). Clinical EFT (Emotional freedom techniques) improves multiple physiological markers of health. *Journal of Evidence-Based*

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index

Integrative Medicine, (24), 1-12. DOI: 10.1177/2515690X18823691

Chatwin, H., Stapleton, P., Porter, B., & Practitioner, E. F. T. (2016). *The Effectiveness of Cognitive Behavioral Therapy and Emotional Freedom Techniques in Reducing Depression and Anxiety Among Adults: A Pilot Study*, *15*(2), 27–34.

Faiz, A. (2012). *Spiritual Emotional Freedom Technique*

Kaplan, H. I., & Sadock, B. J. (1997). *Sinopsis Psikiatri Ilmu Pengetahuan Perilaku Psikiatri Klinis*. Jakarta Barat: Binarupa Aksara

Keliat, B. A., Wiyono, A. P., & Susanti, H. (2011). *Manajemen Kasus Gangguan Jiwa*. Jakarta: EGC

Kemenkes. (2015). pembedahan tanggulangi 11 % penyakit dunia, www.depkes.go.id.

Lubis, K.A., S. J. . (2021). Incidence Of Pain After Obstetric Surgeryin The Delima General Hospital Medan in 2020. *Jurnal Kedokteran Ibnu Nafis*, *10*(2), 110–115.

M. Zainal Abidin, Siswanto, Agus Prasetyo, H. (2020). The Influence Spiritual Emotional Freedom Technique (SEFT) Therapy To Decrease The Intensity Of Post Operative Pain In Major Surgery Patients In Hospital Dr. R. Soeprapto Cepu. *Jurnal Studi Keperawatan*, *1*(2), 1–5. http://ejournal.poltekkes-smg.ac.id/ojs/index.php/J-SiKep

Kozier, B., Erb, Berman, & Snyder. (2010). *Buku Ajar Fundamental Keperawatan Konsep, Proses, & Praktik Volume 2*. (D. Widiarti, Ed.) (7th ed.). Jakarta: EGC

Lee Mone, et al. (2015). Buku Ajar Keperawatan Medikal Bedah. Edisi 5. Jakarta : EGC

Ma'rifah, dkk. (2015). Pengaruh Pemberian Terapi SEFT Terhadap Penurunan Nyeri Post Operasi Sectio Caesarea di RSUD Margono Soekardjo Purwokerto. *Jurnal STIkes Harapan Bangsa Purwokerto*

Mc Caffery, M., & Beebe, A. (2012). *Pain Clinical manual for Nursing Practice*. Mosby, London

Muttaqin, A., & Sari, K. (2009). *Asuhan Keperawatan Perioperatif; Konsep, Proses dan Aplikasi*. Jakarta: Salemba Medika

Ningsih, L. N. (2012). Asuhan Keperawatan Pada Klien Dengan Gangguan Sistem Muskoloskeletal. Jakarta: Salemba Medika

Noorisa, R., Apriliwati, D., Aziz, A., & Bayusentono, S. (2017). *The characteristic of patients with femoral fracture in department of orthopedic and traumatology* RSUD Dr. Soetomo Surabaya 2013 – 2016. *Unair*, *6*(1). ISSN 2460-8742.

Riskesdas. (2018). Riset Kesehatan Dasar Indonesia. Jakarta: Badan Penelitian dan Pengembangan Kesehatan Kementrian Kesehatan RI

Saputra, A. (2012). Buku Terapi Emotional Freedom Tehnique, Yogyakarta: NQ Publishing

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index

Setiawan Wahyuningsih, A., Saputro, H., & Kurniawan, P. (2021). Analisis Faktor Kecemasan Terhadap Tingkat Kecemasan Pasien Pre Operasi Hernia. *Jurnal Keperawatan Jiwa*, *9*(3), 613–620.

Smeltzer, S. C., & Bare, B. G. (2008). *Brunner & Suddarth's textbook of medical-surgical nursing*. Philadelpia : Lippincott

Sjamsuhidajat, dkk. (2005). *Buku Ajar Ilmu Bedah*. Jakarta : EGC

Twycross, A. B. (2009). *Managing Pain in Children a Clinical guide*. USA: Blackwell

Yasmara, dkk. (2016) *Rencana Asuhan Keperawatan Medikal Bedah.* Jakarta: EGC

Zakiyyah, M. (2010). *Pengaruh Terapi Spiritual Emotional Freedom Tehnique (SEFT) Terhadap penanganan Nyeri Dismonera*. Jurnal Sekolah Akbid Hafshawaty Zainul Hasan Genggong, Probolinggo

Zainuddin, A, F. (2009). *Spiritual Emotional Freedom Technique*. Jakarta: Afzan Publishing.

DOI : https://doi.org/10.51544/jmn.v6i1.3353

Website : http://e-journal.sari-mutiara.ac.id/index.php/NERS/index