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Effectiveness of Spiritual Emotional Freedom Technique in Reducing Pain Among Fracture Patients

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ABSTRACT

The main complaint in fracture patients is pain, this pain needs to get the right intervention both pharmacologically and non-pharmacologically. The purpose of this research is to determine the effectiveness of SEFT Therapy (Spiritual Emotional Freedom Technique) on reducing pain in fracture patients. This research design is Pre-Experimental with a one group pre-post test approach. The population of fracture patients in the emergency room of dr. Soedono Hospital, East Java Province was 30 respondents. The sample technique is probability sampling with purposive sampling method. Taking instruments to measure the pain level of fracture patients, researchers used the NRS (Numeric Rating Scale) pain tool. The data were processed descriptively followed by the Paired t Test. The results showed that the average pain level before SEFT therapy was 5.13 with a minimum-maximum scale of 2-7 and after SEFT therapy was 4.13 with a minimum-maximum scale of 2-6. The results of statistical tests using the Paired t Test test showed a value of p=0.000 (p<0.05). There is a significant difference in pain levels before and after SEFT therapy. SEFT therapy effectively reduces the pain level of fracture patients and becomes an alternative as non-pharmacological management to reduce the pain level of fracture patients.

Keywords: Pain; fracture; SEFT

INTRODUCTION

Increased community activity and mobility has an impact on the increasing use of transportation as a means of fulfilling economic and social needs (1). Transportation is an important factor in supporting community activities, but also contributes to the increasing risk of traffic accidents (2). Traffic accidents are the leading cause of fractures in various countries, including Indonesia (3).

Fractures are a health problem that impacts the physical, psychological, and social conditions of patients(4). National data shows that the incidence of fractures in Indonesia remains relatively high, mostly caused by traffic accidents(5). he most common types of fractures are fractures of the femur, humerus, and tibia and fibula (4).

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Fractures cause pain due to the disruption of bone tissue continuity, which triggers the activation of the nociceptor system (6). Untreated pain can elicit physiological responses such as increased heart rate, respiratory rate, and blood pressure (7). Severe pain can also potentially cause hemodynamic disturbances and slow the patient's healing process(8).

Management of fracture patients requires prompt action within the "golden period" to prevent complications and disability (7). Pain management in fracture patients can be carried out through pharmacological and non-pharmacological approaches (9). Non-pharmacological approaches play an important role as supportive therapy to improve patient comfort (10).

Non-pharmacological therapies frequently used in nursing include distraction techniques, relaxation, and complementary therapies (11). Complementary therapies have been shown to reduce pain perception and patient anxiety (12). One complementary therapy that nurses can use is Spiritual Emotional Freedom Technique (SEFT) (13).

SEFT therapy combines tapping techniques on the body's meridian points with a spiritual approach such as prayer and positive affirmations (13). This therapy is safe, easy to perform, and has no side effects, making it suitable for use in nursing practice (14). Several studies have shown that SEFT therapy is effective in reducing pain intensity based on Numeric Rating Scale (NRS) scores (15).

Other studies have also shown that SEFT therapy can increase comfort and reduce anxiety in patients with acute and chronic pain (16). The effectiveness of SEFT has been demonstrated in post-operative patients and other pain conditions (17). The application of appropriate non-pharmacological therapies can improve the quality of nursing care and patient satisfaction (18).

Based on pre-survey results at Dr. Soedono Regional General Hospital, pain management in fracture patients is still dominated by the administration of analgesics and deep breathing techniques. SEFT therapy has not yet been implemented as a non-pharmacological nursing intervention. Therefore, research on the effectiveness of SEFT therapy in reducing pain in fracture patients needs to be conducted as a basis for implementing holistic and evidence-based nursing interventions.

METHODS

Respondents in this study were fracture patients who came to the emergency room of dr. Soedono Hospital, East Java Province as many as 30 respondents with purposive sampling technique. The research time was carried out in January - March 2024. The place of this research was in the emergency room of dr. Soedono Hospital, East Java Province. Data analysis in this study used univariate and bivariate analysis. This study uses the NRS (Numeric Rating Scale) pain measurement tool.

RESULTS

General Data

Table 1. Frequency Distribution of Fracture Patients Based on Age and Gender in the emergency room of dr. Soedono Hospital, East Java Province in 2024.

Characteristics		Frequency (N=30)	%
Age	15-64 (Productive Age)	22	73,3
	> 65 (Non Productive Age)	8	26,7
Gender	Female	14	46,7
	Male	16	53,3

Based on table 1, it can be interpreted that the distribution of fracture patients based on age shows that the average age is mostly in the productive age range of 15 years - 64 years as many as 73.3% (22 respondents) with gender 53.3% (16 respondents) are male.

Table 2. Distribution of Fracture Patients Based on Type of Fracture, Cause of Fracture and Fracture Location in the Emergency Room of dr. Soedono Hospital, East Java Province in 2024.

Characteristics		Frequency (N=30)	%
Fracture Type	Closed Fracture	28	93,3
	Open Fracture	2	6,7
Causes of Fracture	Traffic Accidents	16	53,3
	Work Accidents	3	10,0
	Household Accidentd	11	36,7
Fracture Location	Lower Extremity	21	70,0
	Upper Extremity	9	30,0

Based on table 2, it can be interpreted that the most common type of fracture experienced by respondents is a closed fracture as many as 93.3% (28 respondents) caused by traffic accidents 53.3% (16 respondents) and domestic accidents 36.7% (11 respondents) where the location of the fracture experienced by the patient occurred mostly in the lower extremities as many as 70% (21 respondents).

Table 3. Distribution of Fracture Patients Based on Pharmacological Administration in the Emergency Room of dr. Soedono Hospital, East Java Province in 2024.

Pharmacological Administration	Pain Changes						Total	
	No Change		Light Enough		Lightweight			
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Not Yet Awarded	2	28,6%	10	55,6%	3	60%	15	50%
Already Provided	5	71,4%	8	44.4%	2	40%	15	50%
Total	**7**	**100%**	**18**	**100%**	**5**	**100%**	**30**	**100%**

Based on table 3, it can be seen that 50% (15 respondents) have not been given pharmacology, there are changes in mild pain as many as 55.6% (10 respondents) and 50% (15 respondents) have been given pharmacology, there are changes in mild pain as many as 44.4% (8 respondents).

Special Data

Table 4. Distribution of Pain Scale of Fracture Patients Before Intervention in the Emergency Room of dr. Soedono Hospital, East Java Province in 2024.

Characteristics	N	Mean	Median	SD	Minimum-Maximum
Pain Scale Before Intervention	30	5,13	5	1,332	2-7

Based on table 4, the results of the analysis obtained the average pain scale before the intervention was 5.13 with a standard deviation of 1.332, a minimum scale of 2 and a maximum pain scale of 7.

Table 5. Distribution of Pain Scale of Fracture Patients After Intervention in the Emergency Room of dr. Soedono Hospital, East Java Province in 2024

Characteristics	N	Mean	Median	SD	Minimal - Maksimal
Pain Scale After Intervention	30	4,13	4	1,252	2-6

Based on table 5, the results of the analysis obtained the average pain scale after the intervention was 4.13 with a standard deviation of 1.252, a minimum pain scale of 2 and a maximum pain scale of 6.

Table 6. The Effect of SEFT on Decreasing Pain Scale in Fracture Patients in the Emergency Room of dr. Soedono Hospital, East Java Province in 2024

Characteristics	N	Mean	SD	Sig, (2-Tailed)
Pain Scale Before Intervention	30	5,13	1,332	0,000
Pain Scale After Intervention	30	4,13	1,252	

Based on table 6, the results of the analysis of the average pain scale before the intervention was 5.13 with a standard deviation of 1.332, while after the intervention was 4.13 with a standard deviation of 1.252, there was a decrease in the average pain scale with a difference of -1.00. Further analysis using the Paired t Test test, the p-value is 0.000 with a value ($p < 0.05$), it can be concluded that there is a significant difference between the pain scale before and after the SEFT intervention.

DISCUSSION

Pain Level of Fracture Patients Before Being Given SEFT Therapy

The results of the study based on pain characteristics before being given SEFT therapy intervention obtained an average pain of 5.13 with a minimum - maximum value of 2-7. The average person who experiences fracture pain is male with an age between 15-64 years. According to (19) pain is an unpleasant sensory and emotional experience, associated with actual or potential tissue damage or

describes the condition of occurrence. Pain in fracture patients can be caused by several factors, namely age, gender, culture, meaning of pain, attention and anxiety (20).

This study shows that men experience higher intensity than women. In accordance with research conducted (21) regarding the effectiveness of Mozart classical music distraction techniques to reduce pain in postoperative fracture patients, the study was conducted with 30 respondents. The results showed that men experienced more pain than women.

Based on the theory and related research, the researcher assumes that fracture pain is caused by a break in tissue continuity that sends impulses to the hypothalamus. Pain can also be influenced by gender, age, culture. The pain felt before being given SEFT (Spiritual Emotional Freedom Technique) therapy which often appears is an average on a moderate scale due to the fracture experienced is quite complex with the characteristics of fracture patients grimacing, grinning, can describe pain and can follow orders well.

Pain Level of Fracture Patients After Being Given SEFT Therapy

The results of the study based on pain characteristics after being given SEFT therapy intervention obtained an average pain of 4.13 with a minimum - maximum value of 2-6. Based on the results of measuring pain intensity, it shows that the pain of fracture patients after being given SEFT therapy is still in the moderate pain category. From the results of this analysis it can be concluded that there is a significant difference in the pain of fracture patients between before and after being given SEFT therapy.

SEFT therapy (Spiritual Emotional Freedom Technique) is a therapy that is very easy to do. The learning process is very fast, without drugs, and without doing complicated diagnostic procedures. Just use a light tap (tapping) on 18 key points throughout the 12 energy bodies, and the healing effect can be felt instantly (one minute wonder). In addition to physical and emotional healing, it can also be used to improve achievement and peace of mind (22).

Based on the theory and related research, researchers assume that the pain felt by fracture patients after being given SEFT (Spiritual Emotional Freedom Technique) therapy is still in the moderate pain category with characteristics that do not cause anxiety and can objectively communicate well. This is due to the provision of SEFT therapy (Spiritual Emotional Freedom Technique) creating comfort, patients feel relaxed with these activities can reduce the pain experienced by fracture patients.

Effectiveness of SEFT Therapy on Pain Reduction in Fracture Patients

From the results of the research that has been carried out, the researchers obtained the results and have conducted a paired t test to determine the average difference in the pain scale of fracture patients before and after being given SEFT therapy (Spiritual Emotional Freedom Technique) at emergency room of dr. Soedono Hospital, East Java Province and obtained a significant figure of 0.000, because the p-value is <0.05, Ho is rejected, meaning that there is a significant difference before and after being given SEFT therapy.

The pain response felt by each patient is different so it is necessary to explore to determine the pain value. According to (6) differences in the level of pain perceived by patients are caused by the ability of individual attitudes to respond and perceive the pain experienced. One of the efforts to reduce pain is to use pharmacological techniques and non-pharmacological techniques. One of the non-pharmacological techniques is to provide SEFT (Spiritual Emotional Freedom Technique) therapy.

Non-pharmacological pain therapy such as SEFT therapy (Spiritual Emotional Freedom Technique) has a very low risk. Pain management by doing SEFT therapy is a nursing action taken to reduce the level of pain felt. Some researchers have shown that SEFT therapy (Spiritual Emotional Freedom Technique) is effective for reducing pain levels. Research conducted by Hamidiyah, and Jannah, on the intensity of primary dysminorhea pain before and after Spiritual emotional Freedom Technique therapy, showed that there was a difference in the intensity of respondents' dysminorhea pain before and after being given Spiritual emotional Freedom Technique therapy with a p-value of 0.000 <0.05. Further tests prove that there is an effect of giving Spiritual emotional Freedom Technique (SEFT) therapy on changes in dysminorhea pain intensity (13).

According to the researcher's assumption that the measurement before and after being given SEFT (Spiritual Emotional Freedom Technique) therapy has decreased, where a moderate level of pain is obtained with the attitude of respondents who grimace, grin can show the location of pain, can describe the pain felt, and can follow orders well, while moderate pain intensity after being given SEFT therapy can objectively communicate well, be active, smile, joke, look more cheerful, comfortable, safe, not stressed and more relaxed than before. This is due to SEFT (Spiritual Emotional Freedom Technique) therapy which has the aim of helping others both individually and in groups in reducing psychological and physical suffering. By being given SEFT therapy (Spiritual Emotional Freedom Technique) the patient will become more comfortable so that it can reduce psychological and physical suffering and can accelerate the healing process. If someone in a sick condition becomes weaker in carrying out activities, no one can raise him from recovery except the creator. Therefore, the spiritual aspect can help lift the patient's spirits in the healing process.

CONCLUSION

Based on the results of the discussion described above, it can be concluded that the average pain scale of fracture patients before being given SEFT therapy is 5.13 with a minimum-maximum scale of 2-7, while after being given SEFT therapy is 4.13 with a minimum-maximum scale of 2-6. Changes in pain are not only obtained in patients who have been given pharmacology, but patients who have not been given pharmacology also experience a decrease in pain scale with a fairly mild category.

The results also showed that there was an effect of SEFT (Spiritual Emotional Freedom Technique) therapy on reducing the pain of fracture patients with a p-value of 0.000 with a value (p

<0.05) it can be concluded that there is a significant difference between the pain scale before and after being given SEFT therapy.

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