



Nursing Care of Acute Pain in Multiple Fractures with Spiritual Therapy Quantum Touch and Finger Holding: A Case Study

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ABSTRACT

Background: Multiple Fractures or broken bones are a condition where the continuity of the bones is broken in a complex manner, this is caused by trauma caused by frequent traffic accidents. **Objective:** To analyze the effect of a combination of non-pharmacological therapies "Quantum Spiritual Touch Therapy" (QST) and Finger Holding in multiple fracture patients with acute pain at RSD dr. Soebandi Jember. **Method:** This research is an observational study with a case study design. Primary data obtained through anamnesis and physical assessment. Assessment of the effect of QST therapy and finger holding was carried out a total period of 35 minutes, 20 minutes for QST therapy and 15 minutes for finger holding therapy, based on initial, process, and final data. **Results:** The results showed a reduction in pain levels with a Numerical Rating Scale (NRS) was carried out for 6 meetings with the implementation of therapy once a day. Pain levels decreased in the pre-implantation measurements with an average of 5,4 to 4,7 at the time of post-implantation. **Discussion:** The combination of pharmacological therapy from QST therapy and finger holding aims to help the effectiveness of analgesic drugs by improving the psychological structure with implementations that contain spiritual elements.

Keywords: Multiple Fractures, Acute Pain, Quantum Touch Spiritual Therapy, Finger Holding Therapy

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I. INTRODUCTION

Indonesia is one of the developing countries where community mobilization has certainly increased, Irregular traffic

flow can increase the likelihood of accidents occurring in motorized drivers (Angreyni, 2022). Traffic accidents can result in injuries which are the main cause

of disability and mortality in developing countries. Diseases of the musculoskeletal system are one of the most common problems resulting from traffic accidents (Sembiring & Rahmadhany, 2022). One of the physical damage that occurs is fracture, which is a break in bone continuity either due to trauma, pressure or pathological abnormalities (Awan Pelawi et al., 2019). Fracture conditions in fractures usually occur with more than one crack or severity and can result in displacement of bone fragments. If the fracture does not penetrate the skin, it is called a closed fracture, but if there is a fracture that penetrates the skin, it is called an open fracture (Awan Pelawi & Juni Sinarinta Purba, 2019). Fracture events also have complications in the process of differentiating the main one being the pain felt by the patient. The degree of post-surgical pain shows that more than 70% of post-surgical patients experience pain (Sudrajat et al., 2019). Patients with fractures have pain categories from moderate to severe pain. Pain will increase if there is mobilization in the fracture area and can cause a decrease in joint range of motion and conditions of muscle tension (Awan Pelawi & Juni Sinarinta Purba, 2019).

The annual increase in the incidence of fractures in the world is proven

according to the World Safety Organization (WHO) in 2020 it was noted that there is a prevalence of people having accidents, namely 2.7% or as many as 13 million people. Global response on road status states that every year worldwide there are more than 1.35 million victims who die as a result of traffic accidents and 50 million people suffer serious safety injuries (WHO, 2018). In Indonesia, based on police data for 2019, on average every hour 3 people die in traffic accident cases (Ministry of Health of the Republic of Indonesia [KEMENKES RI], 2021). The condition of Indonesia, which is the largest country in Southeast Asia in terms of fracture incidence, also accounts for 1.3 million of the 238 million population in the country every year. The state of Indonesia in cases of fracture has the greatest prevalence of 5.5% (Ministry of Health of the Republic of Indonesia [KEMENKES RI], 2021). The province in Indonesia that has the highest fracture incidence rate is Bangka Belitung Province with 9.1%, meanwhile, the prevalence of injuries has the highest prevalence of 67.9% by body part, injuries to the lower extremities (Ministry of Health, 2013).. In the event based on the classification of fracture types, namely femur fractures 39% followed by humerus fractures (15%), tibia and fibula fractures (11%), where the

biggest cause of femur fractures is traffic accidents and the majority are men (63.8%) (Ministry of Health of the Republic of Indonesia [KEMENKES RI], 2021).

As many as 1.3 million people suffer from fatal disabilities and deaths each year due to traffic accidents (Platini et al., 2020). Hip fractures have a substantial impact on ability, function, quality of life (Dyer, 2018). The type of accident and the type of fracture have a relationship due to the influence of the mechanism of injury, energy strength, type of object, and the chronology of the accident (Ramadhani et al., 2019). Fractures can cause damage to the musculoskeletal system and damage to bone fragments, this can have an impact on the patient's quality of life so that it greatly affects daily activities in the future (Platini et al., 2020). are two ways of managing pain based on its management, namely pharmacological and non-pharmacological. In pharmacological techniques, one of the pain management in its management requires the use of medical drugs which are carried out in collaboration between nurses and doctors according to the level of pain felt by the patient (Apriliani, 2022). In non-pharmacological techniques, one of them is by means of combination therapy which combines spiritual quantum touch therapy (SQT) and finger holding therapy. Combination therapy is carried out with

the assistance of nurses with the aim of being able to independently both the patient and the patient's family to apply therapy in managing pain in a non-pharmacological manner and can be carried out easily and repeatedly if the pain recurs.

2. METHODS

This research method was carried out from the results of an analysis of nursing care in patients with the initials Mr..S aged 67 years who had a medical diagnosis of multiple fractures with complaints of acute pain. Nursing interventions with combination therapy, namely quantum spiritual touch therapy and finger holding, were carried out for 7 days on January 10-16 2023. Examination of the pain scale using the Numerical Rating Scale (NRS) is an effective scale for assessing pain intensity before and after intervention. The NRS pain scale consists of four different categories. A scale of 0, meaning "no pain," indicates that the patient does not feel any pain. A scale of 1-3, which indicates "mild pain," indicates that the pain is tolerable and does not interfere with physical activity. A scale of 4-6, which indicates "moderate pain," describes pain that may interfere with the patient's activities. A scale of 7-10, indicating "severe pain".

3. RESULTS

Quantum Spiritual Touch Therapy (SQT) and Finger Holding Therapy, both of these therapies can be done at least once a day when meeting with patients, or can be done by the family independently with a maximum time of 35 minutes each time they are given therapy, namely 20 minutes for SQT therapy and 15 minutes for finger holding therapy. The therapy process is carried out within 6 meetings with patients and families, so the observations are carried out once a day for a total of 6 times. Assessment of pain in patients using

the Numerical Rating Scale (NRS) rating scale is more used as a substitute for word description tools. This observation was carried out by assessing the pain scale before therapy was carried out, whether it had received the influence of pharmacological therapy or had not received it. In the first therapy, direct researchers conduct and provide examples to families with the aim of being able to do it independently. The first therapy is SQT therapy and continued with finger grip therapy.

Table 1. Table 1. Observation of Patient Pain Intensity Pre Therapy and Post Therapy

Intervention	Pain Intensity*	
	Pre-Therapy	Post-Therapy
10 January 2023	6	6
11 January 2023	6	5
12 January 2023	5	4
13 January 2023	5	4
14 January 2023	5	5
15 January 2023	6	5
16 January 2023	5	4
Average	5,4	4,7

*) Numerical Rating Scale (NRS) with scale 1-10

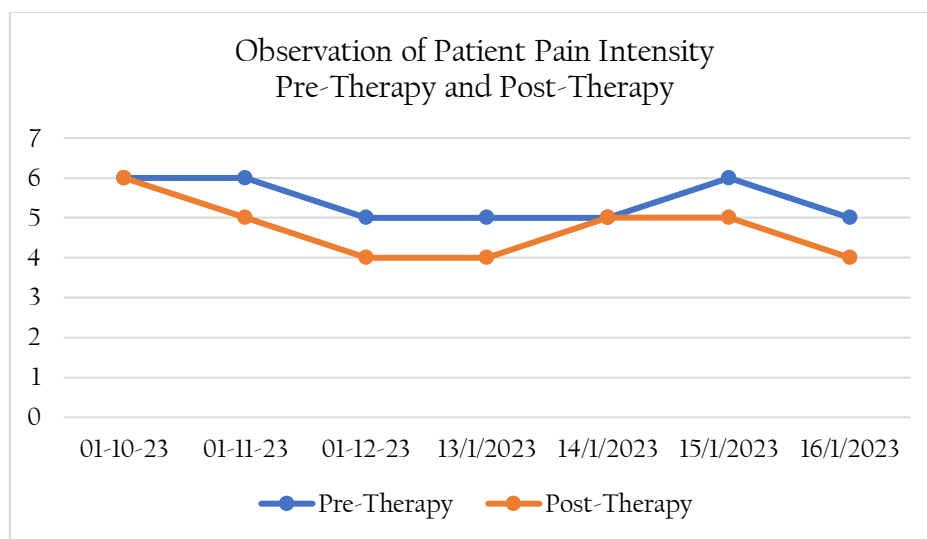


Figure 1. Chart Observation of Patient Pain Intensity Pre-Therapy and Post-Therapy

The results obtained when implementing Quantum Spiritual Touch (SQT) therapy and Finger Holding Therapy on Mr. S pain levels based on the Numerical Rating Scale (NRS), namely there was a decrease in pain levels in Mr. S. on days 2 to 4, but increased again on the fifth day. During 5 meetings the patient's family implemented this therapy when the patient after carrying out wound care and when the patient was anxious about the pain. From the results of these observations the average pre-therapy pain level was 5.4 while in post-therapy it was 4.7. So that there is a decrease of 0.7.

4. DISCUSSIONS

Examination of the pain scale using the Numerical Rating Scale (NRS) is an effective scale for assessing pain intensity before and after intervention. The use of the NRS pain scale is particularly useful in the postoperative period, and its use is recommended to evaluate pain levels in patients aged 9 years and over after surgery. The NRS pain scale consists of four different categories. A scale of 0, which means "no pain," indicates that the patient has no pain. A scale of 1-3, which indicates "mild pain," indicates that the pain is bearable and does not interfere with physical activity. A scale of 4-6, which indicates "moderate pain," describes pain

that could interfere with the patient's activities. A scale of 7-10, which indicates "severe pain," indicates that pain affects the patient's activities so that he cannot carry out independent activities (Larasati & Hidayati, 2022)

On examination when assessing the condition of Mr. S with a composmentis level of awareness communication could be carried out but it was very limited unable to speak in sentences that were too long accompanied by facial expressions showing discomfort and grimacing in unbearable pain. When the pain intensity was examined, Mr. S answered by describing clear words and assisted by his family to make it easier to understand what the patient said. The management of the patient's examination was carried out on Mr. S using a line drawing media showing a scale of 0-10 to assess the level of pain he felt. The scale is effectively used to measure pain intensity before and after performing therapeutic interventions. The process of measuring the pain scale carried out by the researcher "Sir, please look at this picture for a moment, sir, now you feel very painful in the pelvis and lower legs, right? Answer by nodding yes sir" the patient answered "yes" by nodding. The researcher said "Sir, please choose from this picture, there are 3 choices sir a/b/c you feel pain, yes (a) numbers 1-3 mild pain, (b) 4-6 moderate

pain, and (c) 7-10 severe pain or very disturbing pain" the patient said if you feel by choosing option c which indicates pain in the 7-10 range. The researcher obtained other subjective data from families who were waiting for clients in the near future, patients often moaned, groaned, shouted, could not communicate anything when spoken to by the family if the pain was very severe for the client. Objective data that can be assessed by researchers at the time of assessment of the patient is moaning and showing a grimace on the face, unable to make any movements to reduce pain, and at the time of assessment the patient, Mr. S, has not received analgesics. So, from the results of the pain scale assessment during the study the researcher concluded that the patient's pain scale was a scale of 9 with an interpretation according to the subjective and objective data obtained.

Quantum Spiritual Touch Therapy (SQT) is a concept that describes a healing method that involves hand touching done with sincere love and affection. This therapy is done with a sincere heart and accompanied by prayer, with the hope that the healing process will occur through this approach. (Suhendro et al., 2020). The purpose of this therapy is as a therapy to reduce/overcome acute pain and provide a relaxing effect on patients who experience postoperative conditions. Indications for

SQT therapy are patients with postoperative pain and patients with anxiety (Sriati et al., 2016). The way this therapy works is by providing a comfortable position and suggesting that you regulate your breath by taking deep breaths, exhaling slowly. When exhaling the patient says a prayer according to their respective religions and beliefs. Do this action by involving family members by touching the area to be treated. For example, if there is an area that feels painful, touch it gently with your right hand, while your left hand provides support from behind or the side. In your heart or in a low voice, say the sentence "Bismillahirrahmanirrahim, with Allah's permission, I intend Al-Fatihah, Al-Ikhlâs, Al-Falaq, An-Nas, Sholawat, and my love. With Allah's permission, may Allah's love enter Fulan's body as a remedy for pain and other disturbing complaints." Always pay attention to the client's response during the action.

Finger hold therapy is a simple relaxation method that anyone can do. This technique involves the use of the fingers and is related to the flow of energy in the body (Indrawati & Arham, 2020). The aim of this therapy is to support pharmacological therapy by increasing the analgesic effect as a method of reducing postoperative pain. This therapy also aims

to shorten the duration of episodes of pain that occur within minutes or seconds, and as an effective way to reduce pain overall. Indications for the use of this therapy include patients who experience postoperative pain and patients with high levels of anxiety (Wati & Ernawati, 2020). The way this therapy works is by providing a comfortable position by sitting or lying down, the researcher or with the family can sit next to the client next to the finger of the hand that you want to treat, previously providing comfort and warmth to the patient's palms by rubbing the researcher's hands, the patient is asked to regulate his breath with a regular count, namely breathing 16-20 times in a matter of minutes. Relaxation begins by holding the thumb of the respondent's left hand (*digitus primus manus sinistra*) with gentle pressure, held until the patient's pulse feels throbbing. for about 3-5 minutes with regular breathing, the same thing is done on all fingers, the family is given the opportunity to try (Rosiska, 2021).

The things that need to be considered are the SQT therapy procedure and finger grip which must pay attention to the period of administration of analgesics to patients, because they can affect the scale of pain felt by patients when analgesics have been given. In the management of this therapy is carried out after 3 hours after

administration of analgesics or before administration of analgesics (Uzuner et al., 2020). This is in accordance with the results of previous studies that pain intensity returned to normal 3 hours after the last administration of analgesics. This time is the time that has passed the peak effect period of the given non-opioid analgesic, which gives a peak effect 1-2 hours after administration (Sriati et al., 2016).

In the results of the implementation of the 7x24 hour dive, there are other factors that affect the intensity of the patient's pain so that it has an impact on the results of the therapy given. Pain that reacts is related to a person's age. The level of pain can be related to a person's age. Age has an influence on pain perception, especially in children and the elderly. In the elderly, they may have difficulty remembering pain they have felt before (Potter, 2005). Coping styles also develop in response to the physical and psychological effects of pain, and often emerge during the pain process. Communication with family or engaging in exercise are examples of coping strategies that can help reduce pain levels. However, there are situations in which pain can hinder a person's ability to manage pain well (Ulfiani & Sahadewa, 2021). Support from family and social environment can

have a relationship with pain. Getting support, protection, and assistance from the closest people can help reduce the fear that arises due to the pain experienced (Putri, 2018). In Mr..S patients who undergo surgery, generally experience pain. Postoperative pain can have physiological and psychological impacts. Previous experience in undergoing surgery does not automatically make it easier for someone to reduce their perception of pain from the procedure compared to those who have never had surgery before. People who have never had surgery tend to look for ways to deal with the pain they will experience after surgery. Therefore, they have the potential to manage pain better than those who have had previous surgery. People who have never had surgery have coping mechanisms that are adaptive to the pain that occurs after surgery (Indrawati & Arham, 2020).

The results of the research findings in the role of nursing are knowing the process of monitoring the pain scale of patients with multiple fractures during the therapy process SSQ therapy and. finger grip therapy. In the evaluation results, the nursing diagnosis of acute pain related to a physical injury agent was characterized by the client complaining of pain, the client being protective, the client saying he had difficulty sleeping. From this diagnosis, the

researchers focused on evaluating the level of pain carried out before undergoing therapy and after undergoing therapy for 6x24 hours with an interpretation of the evaluation results after undergoing therapy for 35 minutes, 20 minutes for SSQ therapy and 15 minutes for finger grip therapy. While undergoing therapy, the patient is accompanied by the family, therapy can also be carried out independently with the family if pain appears, especially when the patient is undergoing wound care and has not received pharmacological therapy. During the procedure there are no side effects for the patient and it can be applied. An obstacle during the therapy process is when the patient cannot control his emotions when enduring pain, so it takes time to make the patient feel comfortable and focus on undergoing therapy.

5. CONCLUSION

From the results of the innovation analysis in this case using two combinations of therapy for patients with acute pain is one form of effectiveness in reducing pain, and it contains religious elements which simultaneously provide a relaxing effect and approach to God. The decrease in pain level with the numerical rating scale shows that during the 7 times the implementation of the therapy has decreased, namely 0.7 where this can be

influenced by various other factors, so that there is no significant decrease during the implementation of the therapy.

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AUTHOR CONTRIBUTIONS

Substantial contributions to conception, data collection, and analysis: Risma Eka Putri Arlyani Kusuma Dewi, Mulia Hakam, Jon Hafan Sutawardana, and Mohammad Shodikin. Irmarawati Dia Primirti. Writing manuscript and revisions: Risma Eka Putri Arlyani Kusuma Dewi and Mulia Hakam.

CONFLICT OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

DATA AVAILABILITY STATEMENT

The data are not publicly available due to privacy or ethical restrictions.

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