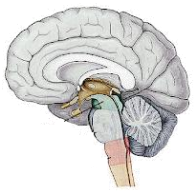
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# NURSING CARE FOR GOUT ARTHRITIS PATIENTS WITH ACUTE PAIN NURSING PROBLEMS WITH ADMINISTRATION WARM COMPRESS INTERVENTION USING LEMONGRASS LEAVES

**Arsindy Fitrotul Muslim [1 *], Wiwit Dwi Nurbadriyah [2]**
[1.2] Nursing Study Program, Faculty of Health Sciences, Kepanjen University
Email : arsindyfm@gmail.com

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**Correspondence :**
E-mail:
arsindyfm @gmail.com

**ABSTRACT**

Gouty arthritis is a health problem that has signs and symptoms of inflammation in the joints and surrounding tissues which can cause severe pain or intermittent pain. To overcome this, non-pharmacological therapy can be done, namely warm compress therapy using lemongrass leaves to treat acute pain in sufferers of Gouty Arthritis. This research uses a case study which includes assessment, diagnosis, intervention, implementation and evaluation. Data collection takes the form of interviews, direct observation and documentation. The subjects of this research were 3 clients with Gouty Arthritis in Sambigede village who met the research criteria. The research was conducted in June 2024. Each client had 3 meetings over 7 days. Based on the results of the assessment, a nursing diagnosis was made, namely acute pain, with the intervention of warm compress therapy using lemongrass leaves, then the results showed that there was a decrease in the pain scale in the three clients from moderate pain to mild pain. Pain in clients with Gout Arthritis is caused by the accumulation of Gout crystals, causing an inflammatory response. Lemongrass warm compress therapy is a compress that provides a warm feeling to the area experiencing pain using warm lemongrass decoction. From this research, the results showed that there was a decrease in the pain scale due to the fact that when therapy was given, the body felt a relaxing effect so that the body secreted endorphin and serotonin hormones and reduced the hormone cortisol, which was marked by a change in the client's perception of pain.

## INTRODUCTION

Elderly people often face health problems due to physical decline and organ weakness, leading to various diseases such as increased uric acid levels that lead to kidney stones, gout, and rheumatism (Rina Julianti, 2011). Gouty arthritis generally presents with signs and symptoms of inflammation in the joints and surrounding tissues, which can cause severe or intermittent pain. If gouty arthritis is not properly treated, it can lead to disability, limiting the client's ability to perform certain activities. Therefore, elderly people should adopt a healthy lifestyle by exercising and maintaining a healthy diet to maintain normal uric acid levels. However, many elderly people still consume foods high in purines, such as meat, offal, crab, shellfish, cheese, peanuts, spinach, and green beans (Darul Azhar, 2017). According to the World Health Organization (2018), the number of people suffering from gouty arthritis and rheumatism is around 355 million. Of these, 5-10% are aged 5-20 years and 20% are aged 55 years (Wiyono, 2018). In Indonesia, gout arthritis ranks second after Osteoporosis (Alifiasari, 2019). The prevalence of gout arthritis in Indonesia occurs in people under 34 years of age by 32% and over 34 years by 68% (Suhadi, 2018). Factors that influence the occurrence of gout arthritis are divided into two categories, namely internal and external.

Internal factors include age , blood vessel disease, obesity, and a history of diabetes mellitus. External factors include nutrition derived from foods with high purine levels (Ahmad, 2019). Factors that cause gout arthritis due to lack of physical activity such as lack of exercise, laziness to move, lack of activity, this can inhibit the destruction of urate deposits or crystals in the tissue, resulting in increased uric acid levels in the blood.

Efforts to address joint pain in gouty arthritis can involve pharmacological and nonpharmacological therapies. Common pharmacological therapies include pain relievers/analgesics from the NSAID (non-steroidal anti-inflammatory drug) group, such as ibuprofen and diclofenac sodium. Nonpharmacological therapies to reduce gouty arthritis pain include a special diet for gout sufferers, physical exercise such as aerobics and light physical activity, and warm compresses. Warm lemongrass compresses can be an alternative nonpharmacological therapy to reduce pain in gouty arthritis sufferers. Warm lemongrass compresses are readily available and easy to use on a daily basis (Budiarti, 2020).

## METHOD

This type of research is descriptive research with a case study method approach. The case study in this study aims to analyze the application of warm lemongrass compress therapy to overcome acute pain in *Gout Arthritis* patients . The subjects in this study were 3 clients with a medical diagnosis of gout arthritis in the Sambigede Village area who would be given warm lemongrass compress therapy intervention . Data collection methods in this study were interviews, direct observation, and documentation. Data validity testing was carried out by extending the observation time, as well as using additional sources of information from the client, the client's family, and medical personnel closest to the client. Data analysis was carried out by case study analysis. This research integrated using nursing care methods from assessment, nursing diagnosis, nursing intervention , implementation, and evaluation. Then described in table and narrative form.

## RESULTS AND DISCUSSION

From the results of the assessment conducted on June 10-16, 2024 on clients 1, 2, and 3 through observation, interviews, direct observation, physical examination, and documentation, it was found that Client 1 (K1) namely Mrs. B is 58 years old, Muslim, works as a trader, has a history of regular treatment to the paramedic and elderly health post, has suffered from gout arthritis for ± 2 years, currently complaining of pain in the right and left knees, pain like being stabbed and aching, pain scale for each knee is 5, continuous pain. Client 2 (K2) namely Mrs. S is 56 years old, Muslim, as a housewife, has a history of treatment to the village paramedic and elderly health post, has suffered from gout arthritis for ± 8 months, currently complaining of pain in the ankles, pain like being stabbed, pain scale is 5, pain comes and goes. Client 3 namely Mrs. P is 52 years old, Muslim, a housewife, with a history of treatment at the community health center and regular visits to the elderly health post, has been suffering for ± 5 months, currently complaining of pain in the left knee, stabbing pain, pain scale 4, pain that comes and goes.

Based on the results of 3 meetings with each client, the following results were obtained :

Table 1 Summary of Client Pain Scale

| Client | Evaluation of the 1st Meeting | | Evaluation of the 2nd Meeting | | Evaluation of the 3rd Meeting | |
|---|---|---|---|---|---|---|
| | Pre | Post | Pre | Post | Pre | Post |
| 1 | 5 | 4 | 5 | 3 | 3 | 2 |
| 2 | 5 | 3 | 4 | 3 | 4 | 2 |
| 3 | 4 | 3 | 4 | 3 | 3 | 2 |

Based on the results of the study, all clients were female in the age range of 49-59 years, which is classified as pre-elderly. Researchers assume that women with pre-elderly age and above will increase the risk of experiencing gout arthritis. This is supported by research by Sriwijaya & Novianti (2018) in Cahyani, Surachmi, & Setyowati (2019) which states that the risk of gout arthritis in women over 45 years old increases due to the phase before menopause, due to a decrease in estrogen levels, where estrogen itself has a diuretic/uricosuric function that causes disruption of uric acid excretion through urine, resulting in the accumulation of uric acid levels in the body.

Based on the assessment results, all patients experienced stabbing pain due to gouty arthritis. Researchers assumed that the stabbing pain was caused by the accumulation of uric acid crystals in the joints. This is supported by research by Widiastuti & Aderita (2022), which stated that clinical symptoms of gouty arthritis include tingling, aching, stabbing sensations in the tissue, severe pain, heat, or even burning. The pain is caused by uric acid in the body depositing into urate crystals and entering the body's tissues.

Based on the results of the assessment, it was found that K1 ( Mrs. B) had complaints of worsening pain since 2 months ago caused by gout arthritis inflammation, the client's blood pressure was 130/80 mmHg, and said she had difficulty sleeping. K2 ( Mrs. S) had complaints of worsening pain since 1 month ago caused by gout arthritis inflammation, and blood pressure was 150/110 mmHg. K3 ( Mrs. P) complained of worsening pain since 2 months ago due to gout arthritis inflammation, blood pressure was 140.90 mmHg, and complained of difficulty sleeping. So it was concluded that the nursing diagnosis that emerged based on the Indonesian Nursing Diagnosis Standards (SDKI) was acute pain (D.0077). This is in line with the definition of pain from PPNI (207) that acute pain is a sensory or emotional experience related to actual or functional tissue damage, with sudden or slow onset and mild to severe intensity lasting less than 3 months.

Some signs and symptoms of acute pain are divided into two categories: major and minor. Major symptoms and signs include complaints of pain, grimacing, protective behavior, restlessness, increased heart rate, and difficulty sleeping. Minor symptoms and signs include increased blood pressure, altered breathing patterns, altered appetite, impaired thinking, withdrawal, self-focus, and diaphoresis (PPNI, 2017).

Based on the results of the nursing diagnosis, the intervention that will be given is Pain Management (1.08238), with the expected outcome after the action is carried out for 3 meetings in 7 days, acute pain is expected to decrease with the outcome criteria of decreased pain complaints, decreased grimacing, and decreased difficulty sleeping.

In pain management, one therapeutic measure is a non-pharmacological technique. In this study, researchers provided non-pharmacological therapy in the form of warm lemongrass compresses to reduce pain levels. This was administered independently by the client for 7 days, and evaluated over three sessions. The warm lemongrass compresses were administered for 15-20 minutes in the afternoon after activities.

Based on the nursing interventions that have been developed, the implementation of warm lemongrass compress therapy is expected to reduce the respondent's pain level. Implementation is the execution of the intervention plan to achieve specific goals . The implementation phase begins after the intervention plan is developed to help the client achieve the desired goals. The goal of implementation is to assist the client in achieving the established goals, which include improving health, preventing disease, restoring health, and facilitating coping (Nursalam, 2014).

The nursing implementation in this study used warm lemongrass compress therapy, which was carried out for 7 days, with three visits per week. During the first visit, the researcher conducted observation, therapeutic intervention, and education on the warm lemongrass compress therapy technique. At the next visit, the researcher conducted re-observation and evaluated the complaints and feelings experienced by the respondents after practicing the warm lemongrass compress therapy. During the final or termination visit with the respondents, the researcher encouraged the respondents to continue practicing the warm lemongrass compress therapy regularly to reduce pain and increase comfort.

From the nursing implementation that has been carried out, an evaluation can be carried out on the three respondents, namely respondents who experienced a decrease in pain. This is because the three respondents regularly performed warm lemongrass compress therapy, which affected the pain they felt and experienced a decrease in the pain scale. Warm lemongrass compress therapy is a non-pharmacological therapy that can be used as an alternative to relieve pain in *gout arthritis sufferers* . Warm lemongrass compresses are compresses that provide a warm sensation to the painful area by using a warm lemongrass decoction. This warm lemongrass compress can be given to patients experiencing joint inflammation, muscle stiffness, headaches, and so on. Warm lemongrass compress therapy aims to improve blood flow, reduce pain, facilitate exudate removal, lower body temperature, stimulate intestinal peristalsis and provide a feeling of comfort and warmth to the client (Adelia Saputri, 2019).

Based on these facts and theories, the nursing evaluation of the 3 respondents who had undergone warm lemongrass compress therapy was seen from the subjective data that the respondents felt reduced pain, felt comfortable and calm after the therapy, from the objective data the pain scale began to decrease in clients 1, 2 and 3. This shows that warm lemongrass compress therapy is very effective in overcoming acute pain experienced by patients with *gout arthritis* . With the warm lemongrass compress therapy that has been carried out, the problem of acute pain felt by the three respondents was partially resolved, so this technique must be practiced routinely at home by respondents.

## CONCLUSIONS AND SUGGESTIONS

Based on the results of the discussion based on the stages of nursing care, the conclusion was obtained that from the assessment, all clients complained of pain (moderate pain category), stabbing and aching pain, pain scale 5 in clients 1 and 2, pain scale 4 in client 3, continuous pain in client 1 and intermittent pain in clients 2 and 3. The Nursing Diagnosis that emerged based on the Indonesian Nursing Diagnosis Standards (SDKI) was acute pain (D.0077). In this study, researchers provided non-

pharmacological therapy in the form of warm lemongrass compress therapy to reduce the pain scale which would be carried out for 7 days independently by the client, and an evaluation was carried out for 3 meetings. Warm lemongrass compress therapy was carried out for 15-20 minutes in the afternoon after activities. The implementation of nursing on the three clients with acute pain problems was carried out for 3 visits for each client in accordance with pain management interventions and non-pharmacological techniques of warm lemongrass compress therapy. The evaluation in this study was that there was a decrease in the pain scale from moderate pain to mild pain after warm lemongrass compress therapy was given to the three clients.

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