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Soaking Feet Therapy with Ginger on Elderly with Arthritis: Case Study

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Abstract: Osteoarthritis, also known as degenerative joint disease, is a condition where the joints feel painful due to mild inflammation caused by friction between the bones that make up the joint. It is a slow-progressing disease with different causes, and it is more common in women aged 60 years and over. There is currently no cure for osteoarthritis, and management is mainly aimed at controlling pain, improving joint movement and function. This case was to analyze nursing care for clients with osteoarthritis with the main intervention applying warm compress therapy boiled with ginger to reduce pain. Using a case study with an osteoarthritis client which was carried out for three consecutive days for 15 minutes per day. The results of the intervention carried out on osteoarthritis clients with chronic pain problems before being given warm compress therapy with boiled ginger, the pain scale was at 5 (moderate pain) from a range of 0-10, after being given warm compress therapy with boiled ginger, the pain scale was reduced to 3. (mild pain). Warm compress therapy boiled with ginger has been shown to have a significant effect on reducing pain in osteoarthritis patients.

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Introduction

Osteoarthritis, also known as degenerative joint disease, is a chronic condition characterized by joint pain, stiffness, limited movement, and varying degrees of local inflammation. According to WHO data, 9.6% of men and 18.0% of women over the age of 60 have osteoarthritis, and the disease increases with age. 80-90% of patients with osteoarthritis are aged 60 years and over, and it is more common in female than male (Loeser & Lotz, 2015; Palo et al., 2015).

A study conducted in the Garut Regency Elderly House found that 20 elderly people had osteoarthritis. Osteoarthritis is the most common joint disease and is age-related, affecting more than 80% of people older than the age of 55. It is a leading cause of elderly visits to outpatient departments and accounts for almost half of all musculoskeletal problems. Knee osteoarthritis is a significant health concern, affecting about 1.5% of adults over the age of 55, and it can cause pain, stiffness, and reduced range of motion in the joints (Loeser & Lotz, 2015; Palo et al., 2015).

Osteoarthritis is a common form of arthritis that affects the knee joint, particularly in women over 60 years of age. It is caused by factors such as age, gender, heredity, obesity, trauma, joint infections, and joint malalignment. Osteoarthritis of the knee happens when the cartilage in the knee joint breaks down, enabling the bones to rub together, causing pain, stiffness, and

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swelling. While there is no cure for osteoarthritis, there are treatments available to relieve symptoms and slow its progress. These treatments include weight loss, exercise, pain relievers, and anti-inflammatory drugs. In severe cases, surgery may be necessary. It is important to seek early treatment to ease the symptoms of osteoarthritis of the knee and slow its progress (Zelman, 2019; Foran & Fischer, 2021; Hsu & Siwiec, 2021).

One of the main complaints of osteoarthritis sufferers is joint pain, which can significantly impact mobility and daily activities. To manage the pain, health workers can use heat therapy, such as warm compresses of boiled ginger, which has been shown to have a physiological effect by increasing muscle relaxation, reducing pain, and improving joint flexibility (Kambach, 2015; Hamdana et al., 2018).

Method

This study is nursing care implementation with a client with osteoarthritis which was carried out for three consecutive days for 15 minutes per day. The client was elderly who experienced osteoarthritis and the results of the assessment showed that the client complained of pain in his right knee and felt stiff in the morning. The tools and materials the author uses are ginger, water, basin, and washcloth.

The interventions carried out are in accordance with the Indonesian National Nursing Planning (PPNI) guidelines with the books used namely SDKI, SLKI, and SIKI to determine nursing diagnoses, nursing goals and objectives, nursing plans and to evaluate actions given to patients (Tim Pokja SDKI DPP PPNI, 2017; Tim Pokja SLKI DPP PPNI, 2022, Tim Pokja SIKI DPP PPNI, 2018). The intervention carried out is pain management. The author provides pain management intervention by providing non-pharmacological techniques by means of warm compress therapy with boiled ginger.

The intervention was carried out from March 6-8, 2023, in the Kenanga Griya Elderly room, Garut Regency. A 67-year-old client who suffers from osteoarthritis has been present for more than 6 months. Client agreed that their health data is published without any identity (anonymous).

Result and Discussion

The intervention provided with warm ginger compress therapy according to Evidence Based Practice obtained positive results. In this case, there was a significant decrease in the pain scale, namely from a moderate pain scale to a mild pain scale with the intervention given for 3 days. The nursing process that has been carried out in providing nursing care to clients in this case has been carried out for 3 days. While in the field the author did not experience difficulties in providing nursing care to clients. After the author carried out the stages of the nursing process and intervention based on Evidence Based Practice (EBP) related to osteoarthritis cases, he got positive results regarding the nursing problems experienced by the client.

This is in accordance with previous research that warm compress therapy with boiled ginger can reduce the pain scale in clients. Based on research conducted by (Alisabella et al., 2023) entitled The Effect of Warm Compress Combination of Ginger on Pain Levels in Osteoathritis Patients in the Polindes Working Area, Lawang Subdistrict who performed warm compresses with a combination of ginger which was carried out for 3 consecutive days for 15-20 minutes. Every day, the results showed that there was a significant change in the level of pain before and after the warm compress intervention combined with ginger in osteoarthritis patients. This study in line with other research that applied warm compresses boiled ginger to all 20 elderly people with knee osteoarthritis who attended the elderly posyandu in Klojen District, Malang, it was found that there were significant results where the highest pain scale level before the procedure was scale 8, after the procedure the highest pain scale was on a scale of 5 (Masyhurrosyid et al., 2014). According to research results by Fitriana & Rizany (2022), after giving warm ginger compresses for 4 consecutive days, it showed that there was a decrease in pain in patients from a pain level of scale 5 to scale 2. Supported by research by Prihandhani (2020). Based on the research results, there is a significant effect of giving warm compresses with boiled grated ginger on reducing pain levels in elderly people with osteoarthritis and in research by Megantari (2020), the results showed that in both patients the patient complained of pain in the joints, felt that joint movement was limited, joint strength decreased, and additional bones appeared. In patient I the pain scale 3 (0-10) decreased to 0 (0-10) and in patient II the pain scale 2 (0-10) decreased to 0 (0-10) (Prihandhani, 2016; Megantari, 2020; Fitriana & Rizany, 2022;

In connection with the acute pain nursing problems that arise, the main implementation given to clients is pain management, one of which is by providing non-pharmacological techniques by means of warm compress therapy with boiled ginger. This compress can have a physiological effect by increasing muscle relaxation in joint movements so that it can also reduce the level of pain felt (Pratintya, 2014). Besides that, hot compresses can dilate blood vessels, which can help reduce the pain sensation experienced by hypertension patients (Puspita et al., 2023). In addition, ginger also contains a natural substance called oleoresin which consists of zingrion, gingerol, and shgool. This natural

ginger substance provides spicy, warm and aromatic properties which, when combined with warm water, will widen blood vessels thereby increasing blood flow to obtain anti-pain effects, muscle relaxation, and increase joint flexibility so that the inflammation process is reduced which can then have the effect of reducing sensation of pain (Srikandi et al., 2020; Rondanelli et al., 2020).

Conclusion

Nurses can provide the semi-Fowler position as an independent intervention to asthma patients, which has been found to be very effective as a non-pharmacological intervention. The role of body positioning in lung function and the clinical implications of this as a treatment priority are described in the literature, and the principles of therapeutic positioning for optimal gas exchange and lung function are investigated.

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Providing warm compress therapy with boiled ginger overcomes the main nursing problem in the form of acute pain by widening the blood vessels thereby increasing blood flow which relaxes the muscles and joint movements so it can also reduce the level of pain felt.

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