

Rheumatic Exercise for Menopausal Women in the Perumnas II Pontianak Health Center Area

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Abstract

Purpose: Menopause is a phase experienced by women due to the declining function of the ovaries, resulting in the cessation of the menstrual cycle. Various complaints arise in women entering menopause, especially joint and muscle pain, as well as psychological complaints. This condition can affect the quality of life of menopausal women. Therefore, it is necessary to educate women on how to reduce these complaints. This educational activity aims to increase women's knowledge about menopause and the appropriate self-management of menopausal complaints.

Method: This activity is conducted in the community served by the Perumnas II Pontianak Health Center. Participants are members of the Pre-Elderly Prolanis Kejora Manis group. The activity methods include explanations, observational techniques, demonstrations, and practical exercises.

Practical Applications: The outreach activity is divided into two sessions. The first session focuses on educating about menopausal symptoms and how to address them, followed by the second session, which involves demonstrations and joint exercises for rheumatism.

Conclusion: Rheumatism exercises should be taught to pre-menopausal women for daily practice to improve comfort and adaptation to the menopausal condition.



Introduction

Menopause is a natural biological phenomenon that occurs at the end of the reproductive phase in every woman's life. Menopause occurs as a result of the declining function of the ovaries with increasing age (Erika & Fridayana Fitri, 2023; Juliana et al., 2023). The average age at which women experience menopause is 51 years, but it can occur between the ages of 40-45 and is still considered normal. With increasing life expectancy, women now spend almost one-third of their lives in the menopausal stage (Armini et al., 2018). Various menopausal complaints include physical and psychological symptoms, such as vasomotor symptoms, genitourinary syndrome, musculoskeletal disorders, sleep disturbances, as well as psychological issues like depression, anxiety, and mood swings (Hofnie-Hoëbes et al., 2018). According to research conducted by Ganapathy, 97.14% of menopausal women experience menopausal complaints that negatively impact their quality of life (Ganapathy & Furaikh, 2018). Currently, menopause affects the quality of life of millions of women worldwide, including in Indonesia, and can become an increasingly concerning issue.

One of the complaints of menopausal women is joint and muscle pain, which is caused by the reduction of estrogen. When estrogen levels decrease, it can lead to damage to the collagen matrix and cartilage (Fede et al., 2022). Joint pain is a standard physical change experienced during menopause, leading to conditions like osteoarthritis and osteoarthrosis (Yi & Hwang, 2018). Pain management can be achieved through both pharmacological and non-pharmacological methods (Idris & Astarani, 2017). Pharmacological pain relief includes the use of pain relievers. Pain relief does not always have to involve medication; non-pharmacological methods like cupping therapy and warm compresses can also be effective. Progressive muscle therapy is particularly effective in relieving joint pain (Richard & Sari, 2020).

Rheumatic exercise focuses on maintaining maximal joint range of motion. It is an alternative treatment that can have a positive impact on the health of menopausal women by enhancing joint and muscle flexibility to reduce joint pain (Sitinjak et al., 2016). This exercise also induces a sense of happiness, especially when done collectively. During exercise, the body releases endorphins. Higher levels of endorphins reduce or alleviate pain experienced by an individual, making them feel more comfortable and happier and promoting oxygen delivery to the muscles (Bagar & Wilson, 2017; Conde Moreno & Ramalheira, 2022). Dysmenorrhea exercise can increase the production of endorphins (natural painkillers in the body) and can increase serotonin levels. This exercise does not require expensive equipment, is easy to perform, and, of course, has no side effects when done regularly (Yufdel et al., 2022).

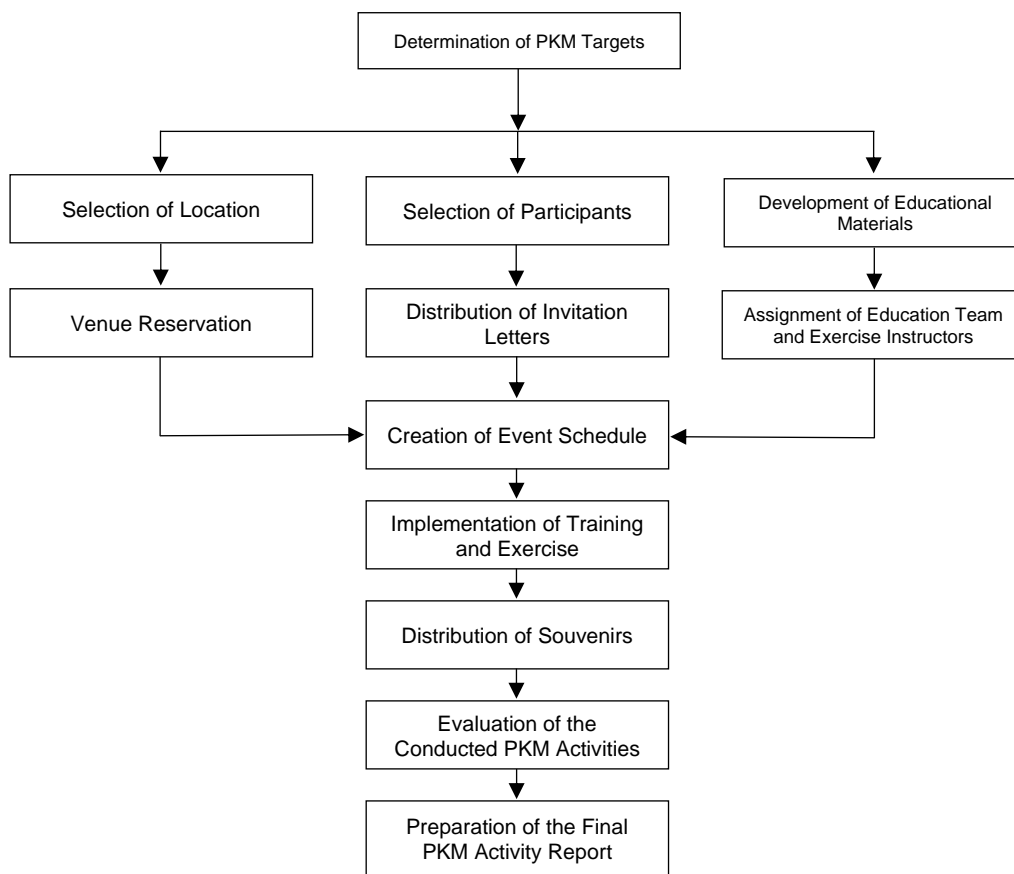
If rheumatic exercise helps with physical adaptation to menopausal changes, it can protect and improve the body's energy reserves for increased needs, such as dealing with illness. Additionally, rheumatic exercise is highly beneficial for menopausal women suffering from obesity, as gradual movement can lead to weight loss (Sukarni et al., 2022). Weight loss can reduce the workload on the joints, especially the knees. For maximum effectiveness, rheumatic exercises should be performed regularly and consistently (Rismawati & Hermalia Putri, 2022; Rusli, 2021). Based on a study conducted in 2020 on menopausal women in the working area of UPK Perumnas II Pontianak Health Center, it was found that there were two main complaints among participants: discomfort in joints, muscles, and bones (joint pain, rheumatic complaints, osteoporosis), and psychological complaints, such as feeling depressed (Juliana et al., 2021). Based on interviews with five menopausal women visiting Perumnas II Health Center, they frequently experienced physical and psychological complaints such as joint pain, irritability, anxiety, and depression. According to interviews with the health Center staff, there is currently no specific program in place to address these menopausal complaints. Based on the information provided above, education and rheumatic exercise for menopausal women in the working area of Perumnas II Pontianak Health Center are highly appropriate. It is hoped that these activities can help participants address the

challenges of menopause.

Method

This Community Service Activity (PKM) was carried out at the Perumnas II Pontianak Health Center, Idham Khalik Street, West Pontianak, Pontianak City, West Kalimantan Province. The education and rheumatic exercise activities took place on Friday, October 15, 2021, in the courtyard of the Perumnas II Health Center from 06:30 to 08:00 AM. The flow of the implementation of PKM education and rheumatic exercise activities to address menopausal complaints can be seen in Figure 1.

Figure 1. The flow of PKM Activity Implementation



The first step taken is to determine the activity's target. Following up on previous research, the PKM team selected the Perumnas II Health Center as a partner and the location for the PKM activity. Perumnas II Health Center has a group called "Prolaris Kejora Manis", which consists of more than 100 elderly and pre-elderly members. The majority (70%) of Prolanis members are women who have already experienced menopause. Every week, specifically on Friday mornings, Prolanis holds regular activities, often including health education sessions and aerobic exercises.

The following preparation stage involves coordinating with Perumnas II Health Center and the management of Prolanis Kejora Manis. On September 01, 2021, a partnership agreement was signed with the Perumnas Health Center. Subsequently, the PKM team, along with the elderly program coordinator, planned the activities, including participants, timing, and the location of the activities. The team also prepared educational materials on how to address menopausal complaints and rheumatic exercise. The PKM activity was planned to take place during the regular Prolanis activities.

The target participants were 40 menopausal members of Prolanis. The following preparation stage involved sending invitations to the participants through the elderly program coordinator at the health centre. The PKM activity used an educational and practical demonstration method conducted directly in the field while adhering to health protocols throughout the event. The rheumatic exercise activity was divided into four stages: warm-up, low-impact aerobic exercise, strengthening and balance exercises, and cooling down. The exercise was led by instructors provided by the PKM team, with some instructors positioned in front and among the participants to guide the exercise. The observation team was located at the rear. Evaluation of the activity was conducted using observation techniques. Subsequently, the team prepared the final report on accountability for the implementation of the community service activity.

The activity methods included demonstrations of rheumatic exercises, presentations, discussions, and practical exercises. The community service activity was divided into two sessions, with the first session focusing on educating about the benefits of rheumatic exercise, followed by a demonstration and collective rheumatic exercise. Participants were given the opportunity to ask questions about anything they found unclear. The evaluation was conducted using observation techniques.

Result

The education and rheumatic exercise activity for menopausal women in the Perumnas II Pontianak Health Center area was attended by more participants than the target. Participants were enthusiastic about participating in the rheumatic exercise activity. This was evident as the targeted number of participants was set at 40, but the actual attendance exceeded the expected target. The activity began with greetings, an opening, a welcome address by the PKM team leader, and an educational presentation addressing menopausal complaints. After the presentation, it was followed by a demonstration of rheumatic exercise and then a collective exercise session. The outcome of the rheumatic exercise activity was that participants were able to follow the exercise until completion, and they could feel the benefits of rheumatic exercise.

Discussion

Preparations before the activity included sending invitations to participants through Prolaris Kejora Manis, creating banners, procuring souvenirs, preparing educational materials related to addressing anxiety during menopause, and gathering equipment for the exercise. Additionally, the team prepared instructors to lead the rheumatic exercise activity.

During the implementation, many participants had already gathered at the Health Center's courtyard before the scheduled time. Participants appeared highly enthusiastic about participating in the rheumatic exercise activity. This was evident as the targeted number of participants was set at only 40, but the actual attendance exceeded the expected target. The activity began with greetings, an opening, a welcome address by the PKM team leader, and educational presentations regarding how to address complaints during menopause. After the presentation, it was followed by a demonstration of rheumatic exercise, and then the collective exercise session. The outcome of the rheumatic exercise activity was that participants who attended could follow the exercise until completion, and they could feel the benefits of rheumatic exercise. The benefits of rheumatic exercise include training joint and muscle flexibility to reduce joint pain.

Figure 2. Opening and Welcome of the PKM Activity



The rheumatic exercise session was led by an instructor positioned at the front and in the midst of the participants. The exercise conducted during this activity consisted of four stages. Firstly, the instructor, together with the participants, conducted a warm-up session. According to (Putra & Suhajana, 2018), the purpose of warming up is to loosen or stretch the muscles, prepare the respiratory and circulatory systems, and adjust the body temperature to be ready for the subsequent exercise movements. Warm-up is also performed to prevent or minimize injuries during exercise activities. Secondly, the instructor and all participants engaged in the core aerobic low-impact movements. Low-impact aerobic exercises are suitable for seniors. These movements are performed with light and slow intensity, such as walking in place, stepping, swinging the arms, and combining various body movements. The core movements aim to strengthen the muscles in the body and train the coordination of movements between body parts. Thirdly, strengthening and balancing exercises were performed. These exercises were conducted to enhance flexibility, strength, and balance in the body. Fourthly, cooling-down exercises were carried out to restore body flexibility after performing various exercise movements, ensuring that the muscles do not become tense and stiff. The atmosphere during the rheumatic exercise session can be seen in Figure 3.

Figure 3. Implementation of the Rheumatic Exercise Activity



The activity concluded with participants signing the attendance sheet for the rheumatic exercise session and distributing souvenirs to all rheumatic exercise participants. Following the exercise, an evaluation of the exercise activity was conducted through observation. Based on the observation results, participants expressed their intention to continue rheumatic exercise regularly after this community service activity.

Figure 4. Participants signing the attendance sheet



Conclusion

Based on the series of activities carried out in this community service program, it can be concluded that education on managing menopausal complaints can increase knowledge among pre-elderly women. As a solution to menopausal complaints, especially in cases of joint pain, these can be addressed through rheumatic exercises. Rheumatic exercises can stretch the body's muscles and reduce joint pain. Participants showed a high level of enthusiasm and participated in the activities until the end. Based on the observations conducted, participants expressed their intention to engage in rheumatic exercises regularly. Regular rheumatic exercises can have a more significant positive impact in addressing joint pain complaints in the elderly.

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