

STUDY ON THE EFFECT OF THAI MASSAGE ON PATIENTS WITH KNEE JOINT SYMPTOMS AND KNEE STIFFNESS, AT THE THAI TRADITIONAL MEDICINE CLINIC, SUAN SUNANDHA RAJABHAT UNIVERSITY

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Abstract

This research was a quasi-experimental research with a single group measuring before and after to study the effects of Thai massage on patients with knee pain and stiffness in patients who had been diagnosed by a doctor and had come to receive treatment. Services in Thai traditional medicine clinics Suan Sunandha Rajabhat University between October 2023 and September 2024, 40 people. Select a purposive sample of people with moderate pain. The data collection method was collected using a 3-part questionnaire, consisting of Section 1: general information, Section 2: knee joint pain questionnaire. (Using the Thai version of the Modified WOMAC questionnaire) 3 aspects: 1. knee joint pain level 2. The degree of knee stiffness. 3. The degree of movement of the knee joint. Part 3 Satisfaction level after massage Then the questionnaires were analyzed. Data analysis used inferential statistics. and descriptive, including percentage, mean, standard deviation. It was found that the majority of the sample were female, aged 61-70 years, had a BMI within the obese range, were farmers, gardeners, and had pain in both knees. The average level of knee pain and stiffness decreased and the degree of movement of the knee joint in the sample improved. The overall level of satisfaction of the patients in this group was satisfied with receiving the placenta. The most

Keywords: Thai Massage, Knee Joint, Knee Stiffness

Introduction

Osteoarthritis is one of the most common diseases worldwide, especially in individuals aged 30 years and above. The incidence of osteoarthritis ranges from 15.6 percent (Framingham Study), 27.8 percent in The Third National Health and Nutrition Examination Survey (NHANES II) in China, 21.2 percent in Japan, 37.8 percent in Korea, and 6–35 percent in Korea. According to the Ministry of Public Health's statistics in 2010, more than 6 million patients with osteoarthritis were reported. It was also found that the knee joint was the most affected by degenerative joint disease, with a continuous increase in cases (Royal College of Rehabilitation Medicine of Thailand, 2012).

In addition to age being an important factor, it has also been found that occupation or hard work is also a major cause of knee pain, as well as repeated movements of the joints will result in joint degeneration faster than usual. Orthopedic patients of the Joint Disease Foundation under the patronage of His Majesty the King in 2010 found that the most patients with osteoarthritis were knee joints because the knee joint is the largest joint in the body, which requires a lot of weight and movement, making it easy for joints to deteriorate, resulting in knee pain and knee stiffness, which is a chronic disease that cannot be cured. It will not return to normal and will intensify, causing disorders that may cause disability, but can be controlled to prevent it from spreading. But as it becomes more and more painful, the pain is constant and more severe. Knee pain often occurs without cause. It is called primary osteoarthritis (primar).

Infections in the joints or others, such as hereditary metabolic diseases, neurological disorders. Knee pain from osteoarthritis is the result of age-related changes and repetitive use that causes the cartilage to wear out. It is caused by friction of uneven areas of cartilage, causing swelling of the joints, and inflammation of the lining of the fibrous tissue, resulting in swelling of the joints

On January 12, 2019, the Institute of Traditional Thai Medicine Department of Thai Traditional Medicine and Alternative Medicine, meeting of the Intergovernmental Committee on the Preservation of Intangible Cultural Heritage 14th session in Bogotá Colombia has resolved to register Thai massage. In the list of cultural heritage representatives who must not be under the mass of mankind. Under the 2003 Convention on the Preservation of the Intangible Cultural Heritage, UNESCO is Thailand's second list. Thai massage is certified by UNESCO with the following criteria: developed wisdom. Starting at the family and community level, it has continued to develop until it is a science of health care that uses hands or organs to adjust power and structure without the use of drug therapy, reflecting the creative ability of human beings. Thailand has recognized the legal status of Thai massage wisdom by establishing a system to protect the rights of both national and individual wisdom. However, There are more than 50 organizations that are ready to promote and develop massage, such as the Professional Department, the Council of Thai Traditional Medicine. Teaching and learning institutions, including establishments. Nationwide Health Thai massage is used in household and community health care in all regions of the country. There is a local masseur. There are personnel in private establishments that provide Thai massage services for treatment and health rehabilitation in all provinces. In addition to Thai massage being popular in the country. It is also known to people all over the world. Foreign tourists prefer Thai massage services. In addition, there are also people who apply for Thai massage classes in various institutions, especially at Wat Pho, there are graduates of Thai massage at Wat Pho and it is a profession that can make a lot of money

The number of patients receiving services at the Thai Traditional Medicine Clinics of Suan Sunandha Rajabhat University, particularly those suffering from knee pain and stiffness, has been increasing every year. Some patients required surgery, while others endured pain and discomfort due to knee stiffness, which significantly impacted their daily lives. The Thai Traditional Medicine Clinic at Suan Sunandha Rajabhat University offers an alternative treatment approach focused on prevention, promotion, rehabilitation, and health counseling. The clinic provides holistic care for patients, both before and after illness, during treatment.

Recognizing the importance of addressing knee pain and stiffness in patients, the researcher aimed to study the effects of Thai massage on patients with knee pain and stiffness at the Thai Traditional Medicine Clinic of Suan Sunandha Rajabhat University. The goal is to reduce knee pain and improve the quality of life for these patients.

Research Objectives

1. To study the effect of Thai massage on reducing knee pain and knee stiffness.
2. To assess the level of satisfaction with Thai massage among individuals experiencing knee pain and knee stiffness.

Scope of the Research

Population Scope:

This study uses purposive sampling, targeting patients diagnosed by a doctor with knee pain and knee stiffness, who seek services at the Thai Traditional Medicine Clinic, Suan Sunandha Rajabhat University, between October 2023 and September 2024. Participants are selected based on the inclusion criteria derived from the Modified Knee Joint Assessment

(WOMAC) (Royal College of Medicine of Thailand, 2000). Eligible participants must have a WOMAC score in the range of 4-6 points, indicating moderate pain. A total of 40 participants will be included in the study.

Variable Scope:

1. The first variable is Thai massage applied to the right side of the body, 3 times a week for 2 weeks, totaling 6 sessions, with each session lasting 60 minutes.
2. The second variable is the level of knee pain and knee stiffness, assessed by the degree of movement in the knee joint.

Time Scope:

The data collection period spans from October 2023 to September 2024.

Literature Review

The researcher has reviewed relevant documents and studies to be used in conducting the research and forming the conceptual framework for the study, as outlined below:

1. Thai Massage

Thai traditional massage, or simply traditional massage, is a type of Thai massage, which is a branch of Thai traditional medicine that focuses on pressing, rolling, and massaging. Pinching and bending are also involved. It is commonly referred to as “traditional massage.” Evidence suggests that Thai massage has its origins in India, and it is believed that massage was introduced along with the spread of Buddhism. When it was brought to Thailand, it became standardized and has been passed down to the present day. Thai traditional massage is divided into two types: royal court massage and commoner massage.

Types of Thai Massage

The target group for royal court massage was noble lords and dignitaries in the palace. Therefore, the massage was designed to focus only on the use of fingers and hands, with modest postures used during the massage. There are many study requirements, and those who specialize in this field worked within the palace as royal doctors, with a salary, rank, and position.

Commoner massage, on the other hand, was used at the local level with more general gestures. It did not have as many strict rules or rituals as royal massage. In addition to the hands, other body parts such as knees, elbows, and feet can be used to assist in the massage. This differs from royal massage, which focuses solely on hand techniques. Thai massage is both an ancient science and an art. It originated from the basic human instinct for survival—when there is pain or illness, individuals or those nearby would often rub or massage the affected area, which helps reduce the pain. Initially, this was done unintentionally, but over time, people began to observe the effects of pressing or massaging certain points or using certain techniques. This knowledge was passed down through generations, evolving from simple to complex. Eventually, it developed into a massage theory that became a branch of science, playing a role in treating certain symptoms and diseases.

2. Royal Court Massage: This is a refined form of massage designed for use in the royal court, intended for the monarch and royal servants. The knowledge and techniques are passed down from one royal masseur to the next. The massage must be performed with gentleness, lightness, precision, and focus on specific areas. In royal court massage, only three positions are used:

- 2.1 Supine position
- 2.2 Side-lying position

2.3 Sitting position

3. Captive Massage: This is a traditional folk massage, with knowledge and techniques passed down through generations. The person receiving the massage will be positioned in four different postures:

3.1 Supine position

3.2 Side-lying position

3.3 Prone position

3.4 Sitting position

In conclusion, Thai massage can be classified into two main types: royal massage and captive massage, both of which can be used to treat various symptoms and ailments.

Related research

Duangkamon Simanta, Kukiattudpor & Prasert Prasomruk (2018, p.81) The study Effects of an Exercise with Elastic Chain and Health Promotion Behavior on Delaying Osteoarthritis of Knee among Elderly in Kudhae Subdistrict, Loengnoktha District, Yasothon Province. The results showed that at the baseline, strength of knee muscles, knowledge, awareness and osteoarthritis prevention behaviors of both control and experimental groups were not different. However, after 4th, 8th and 12th week of the experiment, strength of knee muscles, and scores on knowledge, awareness, and osteoarthritis prevention behaviors of the experimental group were higher than those of before the experiment (p -value < 0.001), and they were higher than those of the control group (p -value < 0.001). In summary, the exercise program with the elastic and health promotion with the use of lessons learned from the role model, and home visits. This program can delay the onset of knee osteoarthritis in the elderly.

Saneeya Ma-hgaesatae. (2018). The study comparative study of the Thai treatment court massage with herbal balm and herbal ball of knee osteoarthritis in elderly group at Katong, Yala Province. The study findings revealed the research results that the experimental group (Thai treatment court massage with herbal balm) and the control group (Thai treatment court massage with herbal ball) were significantly different (P -value < 0.05). The results showed that after treatment the knee pain and knee stiffness were decreased and the knee movement angle was increased significantly different (P -value < 0.05). However, when compared results between the experimental group and the control group, there had no significantly different (P -value > 0.05) in the treatment of knee osteoarthritis in elderly group.

Kanita Pheangsalud, Thavatchai Kamoltham. (2022). A Comparative Efficiency, Safety and Satisfaction of Ta-Pha-Sen and Diclofenac Gel for Treatment Osteoarthritis of Knees. The research results were found that by using Ta-Pha-Sen and Diclofenac gel over a period of 4 weeks, both drugs were effective in reducing pain, stiffness, swelling and improved knee operability. When compared between Ta-Pha-Sen and Diclofenac gel, the trend of Ta-Pha-Sen was more effective at reducing pain, stiffness, and knee joint efficacy than Diclofenac gel statistically significant ($p < .001$) But, there was no statistically significant difference in reducing knee swelling ($p < .05$). Moreover, the Ta-Pha-Sen was more satisfied with the use of the drug than the Diclofenac gel. And in this study, No adverse drug reaction were found in Ta-Pha-Sen. Diclofenac gel were found adverse drug reaction. It is a mild symptom that can disappear on its own. Conclusion, Ta-Pha-Sen is another alternative as a guideline for drug selection and is safe for relieving the symptoms of Osteoarthritis of Knees.

Research Methodology

This study was a quantitative research study using a specific sampling method and questionnaire-based data collection.

1. The population in this study consisted of 40 patients with knee pain and stiffness, diagnosed at the Thai Traditional Medicine Clinic, Suan Sunandha Rajabhat University.
2. The tool used in this study was a questionnaire comprising two types of questions: closed-ended questions (selective answers) and open-ended questions for respondent comments.
3. Data Collection: The researcher collected data from October 2023 to September 2024 using purposive sampling and conducted an electronic questionnaire survey.
4. Data Analysis: Data were analyzed using a statistical software program, applying percentage, mean, and standard deviation.

Research Results

Results of Comparative Analysis of Knee Pain and Stiffness Before and After Thai Massage, Administered 3 Times a Week for 2 Weeks:

1. The average level of knee pain in the experimental group before and after Thai massage showed a statistically significant reduction ($p < 0.05$). Before the trial, the knee pain ranged from 4 to 6 points, indicating moderate pain. After the experiment, the pain level decreased to 1 to 3 points, representing mild pain.
2. The average level of knee stiffness in the experimental group also decreased significantly ($p < 0.01$). Before the trial, knee stiffness was rated between 4 and 6 points, indicating moderate stiffness. After the experiment, the stiffness level dropped to 1 or 3 points, showing mild stiffness.
3. The degree of knee joint movement in the experimental group improved significantly ($p < 0.01$). Before the experiment, knee movement was at a moderate level of 4 to 6 points. After the treatment, knee movement improved to a range of 1 to 3 points, reflecting better mobility.
4. The analysis of the satisfaction level of the experimental group after Thai massage indicated an overall satisfaction score of 4.85 (S.D. = 0.31), which is considered the highest level of satisfaction. An average score between 4.51 and 5.00 suggests a very high level of satisfaction with the treatment.

Discussion

Based on the analysis of data studying the effect of Thai massage on patients with knee pain and stiffness, the treatment consisted of 6 sessions of 60 minutes each, performed 3 times a week on alternating days for 2 weeks. The results showed that knee pain in the experimental group was significantly reduced ($p < 0.05$) after Thai massage. Similarly, knee stiffness in the experimental group decreased significantly ($p < 0.05$). Additionally, knee mobility in the experimental group improved significantly ($p < 0.05$) after the massage sessions. A moderate increase in knee movement was observed post-treatment. Furthermore, the satisfaction analysis of the group after Thai massage revealed an overall score of 4.51 - 5.00, indicating the highest level of satisfaction with the treatment. In line with the study by Sanya Mawangatae (2018) on the effects of royal massage combined with herbal knee pads, the research compared this treatment to royal massage with herbal compresses for managing osteoarthritis in the elderly in Katong Subdistrict, Yaha District, Yala Province. The study found that both treatments significantly reduced pain, joint stiffness, and adhesions ($p < 0.05$). Both trials demonstrated a similar reduction in pain and stiffness. Additionally, the study revealed a statistically significant increase in joint usability and the range of motion in the knee ($p < 0.05$).

Recommendations

1. Thai massage is an alternative treatment for patients suffering from knee pain and stiffness.
2. Thai massage can help reduce knee pain, improve knee joint mobility, and enhance patients' well-being in their daily lives.
3. It serves as a reference for future research and development

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References

- Duangkamon, S., Tudpor, K., & Prasomruk, P. (2018). Effects of an exercise with elastic chain and health promotion behavior on delaying osteoarthritis of knee among elderly in Kudhae Subdistrict, Loengnoktha District, Yasothon Province. *Journal of Nursing and Health Care*, 36(2), 41-48.
- Pheangsalud, K., & Kamoltham, T. (2022). A comparative efficiency, safety, and satisfaction of Ta-Pha-Sen and diclofenac gel for treatment osteoarthritis of knees. *Thai Journal of Public Health and Health Sciences*, 5(3), 154–171.
- Royal College of Orthopaedic Surgeons of Thailand. (2011). *Guidelines for the management of knee osteoarthritis*. Bangkok: Ministry of Public Health.
- Ma-hgaesatae, S. (2018). *A comparative study of the Thai treatment court massage with herbal balm and herbal ball of knee osteoarthritis in elderly group at Katong, Yala Province* (Master's thesis, Rangsit University). College of Oriental Medicine, Rangsit University.