HEALTH PROMOTION GUIDELINES FOR ELDERLY PATIENTS WITH KNEE OSTEOARTHRITIS USING THAI TRADITIONAL MEDICINE AT PRAPOKKLAO HOSPITAL, CHANTHABURI PROVINCE

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ABSTRACT

Knee osteoarthritis is a chronic, incurable disease that results in difficulties for patients and a decrease in their quality of life. There are currently two treatment approaches for knee osteoarthritis: symptomatic medication and knee arthroplasty. Therefore, the researchers are interested in studying Thai traditional treatment as another alternative for patients with knee osteoarthritis. The objectives of this study were 1) to study the background of treatment of patients with knee osteoarthritis using Thai traditional medicine; 2) to study the current condition and health problems of patients with knee osteoarthritis treated with Thai traditional medicine; 3) to study the health promotion guidelines for patients with knee osteoarthritis treated with Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province. In this study, the data collection was performed through interviews, observations, focus group discussions with Thai traditional medicine doctors and folk healers in Chanthaburi Province as the key informants. For the background of treatment of knee osteoarthritis using Thai traditional medicine, it was found that in Thai traditional medicine, osteoarthritis is called “lom-jab-phong”. The treatment is done using massage to relax muscles and relieve pain and herbal compress is also used to relieve inflammation and pain in muscles and joints. For the current condition and health problems of patients with knee osteoarthritis treated with Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province, it was found that patients are treated with manual therapies, herbal compresses, and herbal medicines such as Derris scandens capsule and Plai cream to relieve symptoms. For the knowledge of folk healers in Chanthaburi Province, it was found that at present, rituals of reciting and praying spells are used by folk healers during the treatment. The treatment is done by using manual therapies in combination with various types of oils such as coconut oil and sesame oil until the patient's condition improves. For the health promotion guidelines for patients with knee osteoarthritis treated with Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province, it was found that the health promotion guidelines can be divided into 3 areas: physical, mental, and social health. For physical health, treatment is done by using massage, herbal compress, and herbal medicines. For mental health, counseling is given to patients and meditation therapy is used for relaxation and better sleep. In the social aspect, patients are encouraged to be self-reliant in their daily activities. In conclusion, the health promotion guidelines for patients with knee osteoarthritis treated with Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province, knowledge of knee osteoarthritis, use of herbal medicines and manual therapies are considered the important wisdom for today’s patients' holistic health care.
In this study, a qualitative research methodology was used to collect data which was performed through interviews, observation forms, and focus group discussions. The objectives of this study were to study the background of treatment of patients with knee osteoarthritis using Thai traditional medicine, the current condition and health problems of patients with knee osteoarthritis treated with Thai traditional medicine, and the health promotion guidelines for patients with knee osteoarthritis treated with Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province.

II. METHODOLOGY

In this study, a qualitative research methodology was used to collect data which was performed through interviews, observation forms, and focus group discussions. The population and samples consisted of 3 groups: key informants, practitioners and general people in a total of 30 people. The key informants consisted of 3 modern medicine physicians who are interested in and recognized the importance of Thai traditional medicine and alternative medicine at Prapokklao Hospital, Chanthaburi Province. The practitioner group consists of 9 personnel in charge of the service of the Thai traditional medicine clinic. For general people, the samples were selected from 30 osteoarthritis patients aged 60 years and over, both male and female, who are treated with Thai traditional medicine and applied for Thai traditional medicine and showing symptoms suggestive of knee osteoarthritis. The inclusion criteria based on the work group’s CPG were dull pain in the knee joint with no apparent localization, rustling in the knee joint during movement, stiffness, and limited knee mobility at the discretion of the physician. This study was approved by the Human Research Ethics Committee.

Keywords: health promotion guidelines, patients with knee osteoarthritis, elderly, Thai traditional medicine
Committee of Chanthaburi Province prior to data collection and data analysis was done along with the collection throughout the study period and upon completion of field data collection. Data obtained from recording, interview transcripts, and photographs were categorized as determined by the researchers. The data were then examined for completeness and credibility by using triangulation. Three aspects of data were examined. Place: Are the information obtained from different locations be the same? Person: Are the data obtained from different people be the same? Time: Are the data obtained at different times be the same? The data were presented using descriptive analysis.

III. RESULTS

The field data were analyzed according to the objectives and the research findings were presented into the following issues:

Background of treatment of knee osteoarthritis using Thai traditional medicine

According to traditional Thai medicine in Thai society, it is traditionally believed that knee osteoarthritis is a disease of bones, joints, muscles, and tendons. The causes of this disease are behaviors in daily life, including working posture, overwork, improper diet, resulting in pain. In Thai traditional medicine, knee osteoarthritis is classified into wet knee osteoarthritis and dry knee osteoarthritis. Symptoms of wet knee osteoarthritis include severe inflammation around the knee joint, pain, swelling, redness, and heat while the symptoms of dry knee osteoarthritis include chronic inflammation of the knee joint and pain (Amornrat Ruangsakul, Tipparada Pananporn, Saowani Saesim, Thabthim Yoysanit, Vadhana Jayathavaj, 2020: 21-34). Knee osteoarthritis is mentioned in the scriptures of Thai traditional medicine. For example, Vetchasuksa Scripture mentions the names of diseases related to bones, joints, muscles, and tendons. The most common treatment for knee osteoarthritis-related to joints, joints, muscles, and tendons according to the scriptures are massage to relax muscles and relieve pain; herbal steam to improve blood circulation and relieve muscle aches; herbal compress to relieve inflammation, muscle pain, bruise, joint pain, joint swelling, joint inflammation; and knee joint exercise (Kitisak Rujigjananarat, 2018: 339-345). From the data review, it was found that physical examination and diagnosis cannot determine whether it is osteoarthritis, so the symptoms of diseases in the scriptures are compared to the symptoms of knee osteoarthritis (Vanuchawan Wisuitiprot, Wasin Bumrungchaichana, Nipon Kaewtai, Arinchara Rawangking, Suphawat Saiphanit, Kanoknan Lasongmuang, Nitirat Meekai, Wudthichai Wisutiprot, 2019: 207-215).

Current condition and health problems of patients with knee osteoarthritis treated with Thai traditional medicine

From the study, it was found that there were 349 knee osteoarthritis patients treated with Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province in a period of 1 year (Statistics of Prapokklao Hospital, for the year 2018, Chanthaburi Province) both from patients of Thai medicine clinic and Thai traditional medicine clinic (Sujitra Boonmag, 2020: 518-532). Patients often have severe knee pain that they cannot work. Severe knee pain which makes it impossible for patients to sleep at night results in a decrease in their quality of life. Sometimes taking painkillers can't reduce pain, so patients come for treatment at Thai traditional medical clinic and Thai massage clinic. The treatment is done by using manual therapies, herbal compresses, and herbal medicines. Herbal medicines used are produced from medicinal herbs with muscle and joint pain relief effects. For example, Derris scandens capsule to relieve muscle pain and reduce muscle inflammation; Plai cream to relieve swelling, bruise, sprain; Naharupikarn formula to relieve muscle pain and reduce knee pain; and Lasikapikarn formula to relieve joint and knee pain. The problem is “when patients have knee pain, they tend to relieve their symptoms by using balm or Plai cream because they do not want to take the drug because of fear of the liver and kidney effects. In addition, Thai massage only relieves knee pain for a while, but when returning to work, the pain often relapses” (Anusorn Sornkaew, Krid Thongbunjob, Dusida Tooprakai, 2020: 41-54).

From the study of the knowledge of folk healers in Chanthaburi province, it was found that the current folk healers inherited the knowledge of treatment from their ancestors from generation to generation. At present, folk healers are over 60 years old and most of them started their treatment service since they were 20 years old until now. The diseases treated by these folk healers are paresis, paralysis, abdominal abscess, intestinal abscess, leg pain, knee osteoarthritis, Mo-Krueng, Kam-Suk. Before the treatment, a spell is recited in order to heal the sickness. In addition, the folk healers do not charge medical expenses, it depends on the patient’s willingness. They use similar treatment methods. The folk healers often use their fingers to massage around the knee and coconut oil is applied for about 15-30 minutes depending on the patient’s symptoms and the treatment will be done for at least 3 consecutive days. The problems encountered from the current condition of treatment outcomes with folk healers are such as there is no medical record, so it is not possible to for accurate evaluation of treatment outcomes and follow-up. For the mental state of the patients, it was found that faith plays a role as the...
spiritual anchor as it makes patients feel safe, at ease, and believe in the healing of folk healers. Most of the patients who were treated by the folk healers had been treated using modern medicine such as taking medicines, splinting, or surgery, which helps improve patients’ symptoms. With the use of modern medicine in combination with the treatment by folk healers, these treatment methods give patients more faith and confidence, thereby reducing the symptoms of the diseases.

Figure 1: Equipment used in treatment includes coconut oil (simmered), tiger’s fangs, red lime, and tray. (Data collection was performed by the researchers.)

From the interview with Mrs. Wanpen Thongsawang, a folk healer, it was found that she communicates with her teacher’s spirit and uses the vision to determine the medicines to be used for the patient. Usually, the treatment is done on Thursdays and Sundays, but nowadays she opens her service every day except Buddhist holy days. In the treatment of knee osteoarthritis, sesame oil is often used while reciting and praying a spell for the oil to be applied and massaged around the knee joint.

Figure 2: Sesame oil (simmered and recited and consecrated) (Data collection was performed by the researchers.)

From interviews with Ms. Pensri Sanguansap, a folk healer, it was found that she inherited knowledge from her teacher from the age of 11 to the present for a period of 49 years through action learning until Mrs. Pensri could open Wuttisarn Medicine Clinic. The diseases she usually treated include cirrhosis, psoriasis, menstrual disorders, children's diseases (follicular pharyngitis), and musculoskeletal diseases. In the treatment of patients with knee pain or patients diagnosed with dry knee osteoarthritis, which refers to a condition in which the synovial fluid is dried, she uses massage oil to allow it to penetrate into the synovial fluid and perform hot compress to open pores and allow more medicine to penetrate. She advises the patient to wrap rice with a thin cheesecloth, then applies a compress to the knee, focusing on the area below the knee for 15 minutes, and apply it with Lasikapikarn Oil (prepared by simmering the coconut milk with low heat until it turns into oil and adding herbal medicines such as Derris scandens leaves until the herb leaves crisp) every day in the morning and evening for a week or until the patient’s symptoms improve.
From the interview with Mr. Prasert Kaewngam, a folk healer, it was found that he inherited the knowledge from his ancestors, from his grandfather's generation, and from Khmer and Burmese healers who specialized in reflexology, chiropractic, and sorcery. Until now, he has used his knowledge to treat patients for almost 40 years. There are more than 100 people who come for his service per day. The diseases he treated are such as paresis, paralysis, broken arm, broken leg, snake bite, herpes, shingles. Mr. Prasert is skilled at reflexology. Before performing reflexology massage, he first determines the causes of the pain and assesses the speed and intensity of the pulse in order to reduce the risk of stroke that can harm the patient. In addition, patients are advised to refrain from eating certain foods that affect tendons and muscles, such as taro, all kinds of potatoes, chicken, catfish, squid, as they are injurious food, causing tendon swelling. When the tendons are swollen, they will press on the airway, affecting circulation. This results in pain and muscle hardening and stiffness. For knowledge of knee pain treatment, Mr. Prasert uses simmered coconut oil which was recited with a spell. This coconut oil is applied to the area where the muscles are swollen to reduce bruising after reflexology massage. Patients with knee osteoarthritis are not recommended to eat too many oranges and mangoes as they increase lymphatic production, clogging, and cause severe pain, just like eating a lot of eggplants.

For the current condition and health problems of patients with knee osteoarthritis, knee osteoarthritis is an incurable chronic disease. Knee osteoarthritis causes severe pain and a loss of knee function, resulting in difficulty in performing daily activities and reducing the patient’s quality of life. At present, there are some patients with knee osteoarthritis who received treatment by folk healers because they believe that treatment by folk healers can relieve knee pain and increase their mobility. In addition, treatment by folk healers is convenient, accessible, cheap and the patients do not need to go to the hospital. Moreover, there are some problems with Thai traditional medicine at the hospital. For example, massage cannot be used in patients with knee pain, knee inflammation, and swelling. Therefore, many patients suffer from knee pain and unable to relieve these symptoms by themselves, thus reducing their quality of life.

**Health promotion guidelines for patients with knee osteoarthritis treated with Thai traditional medicine**

The data used in the data analysis and conclusion was obtained from the knowledge collection through interviews and focus group discussions.

1. Health promotion approaches for patients with knee osteoarthritis used by the folk healers
The folk healers use many approaches to promote patients’ health such as history taking, observation of symptoms, and diagnosis. After that, procedures such as massage are used in combination with oil, herbal medicine, spell, and refrain of injurious food. The folk healers do not charge medical expenses, it depends on the patient's willingness.

2. Health promotion approaches for patients with knee osteoarthritis used by Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province

Physical health: Treatment is done by using massage, herbal compress, and herbal medicines and poultices. For example, applying herb on the knee to help reduce pain and knee inflammation and improve blood flow, and hermit exercise to strengthen the muscles and tendons.

Mental health: Counseling is given to patients and meditation therapies are used for relaxation and better sleep. This also makes patients with knee osteoarthritis mentally healthy and patients and their relatives need to understand holistic treatment for the human to help enhance their livelihoods in today’s society.

Social health: If the patient with knee osteoarthritis follows the instructions, they will be in good health and self-reliant. Education is provided to the relatives to understand the patient’s expressions and the patients and relatives are also encouraged to understand the current disease condition and socializing in an appropriate environment.

3. Health promotion guidelines for patients with knee osteoarthritis

The health promotion guidelines for patients with knee osteoarthritis is to integrate the knowledge of folk healers and Thai traditional medicine through history taking, physical examination, treatment with manual therapies and herbal medicine treatment together with a holistic approach to the health promotion for patients with knee osteoarthritis, including physical, mental, social and spiritual. This results in an integrated body of knowledge on health promotion guidelines for holistic treatment of patients with knee osteoarthritis and treatment methods of Prapokklao Thai traditional medicine Model and herbal medicine formulas for treating knee osteoarthritis patients to improve the patient’s quality of life.

Figure 6 Diagram of health promotion guidelines for patients with knee osteoarthritis using Thai traditional medicine
IV. DISCUSSION
From these findings, it can be seen that patients suffer from knee pain and have difficulty in traveling, leading some patients with knee osteoarthritis to opt for treatment by folk healers. In addition to massage, herbal compress, and herbal medicines, oil, and herbal poultices are also used to apply to the knee to relieve pain caused by knee osteoarthritis. In addition, patients can also use these medicines and poultices at their home. For the satisfaction of patients and their relatives who received treatment at the folk healer clinics, it was found that the majority of patients treated with herbal oils and poultices show improved pain and are able to resume normal daily life. This is in line with the theory of Piyaphon Poonsuk, who studied the effectiveness of herbal poultices for relieving knee pain in patients with knee osteoarthritis and found that herbal formulas improve ambulation. In addition, it was also found that the patient’s knee pain was reduced resulting in better ambulation and more convenience. From the review of knowledge, systematic thinking, and health care schemes of folk healers, it was found that some folk healers in Chanthaburi Province still use the magic spell in the combination of their treatment and they still play an important role in the community. Each folk healer has treated at least hundreds of patients with knee osteoarthritis a year.

From these findings, it can be seen that the folk healers have similar basic treatment methods. They often use knee massage with coconut or sesame oil in combination with herbal poultices. Each indigenous healer has his or her observations in diagnosing knee osteoarthritis from years of experience in treating knee osteoarthritis. Therefore, this knowledge should be analyzed and integrated into the diagnosis in the Thai traditional medicine system in hospitals. The existence and role of folk healers are partly due to their effectiveness in reducing knee pain. This makes some patients choose to use traditional treatments.

The health promotion guidelines for patients with knee osteoarthritis in Thai traditional medicine can be divided into 3 areas: physical health; mental health and social health. From the above findings, it can be seen that Thai traditional medicine emphasizes the holistic approach for patient healthcare based on nature and applying the principles of healthy by natural method (Dhammanamai) in living. In addition, the patients and relatives are also educated and encouraged to understand the current disease condition and socializing in an appropriate environment in order to be used as practical and simple practices in their daily lives. All of the above are aimed at patients’ better health.

Suggestions for applying the research results to their benefits are as follows. The results of this study research show that there are many herbal medicine formulas at Thai traditional medicine at Prapokklao Hospital, Chanthaburi Province that can be used in treating knee osteoarthritis at the hospital. Therefore, the hospital by the Ministry of Public Health should disseminate this information to allow patients who are suffering from illnesses to access services. The results show that knee pain can be treated with Thai traditional medicine. Therefore, it is suggestive of the development of a combination of herbal medicine approaches and supports the development of clinical research and the development of herbal medicine recipes. from herbal medicines currently in use. The recommendations for future research are as follows: research should be conducted on treatment for other chronic diseases using herbal formulas and integrated medicine. In addition, researches and experiments should be conducted to establish the simple treatment guidelines and processing of ready-made herbal medicine for convenience and ease of use and there should be researches on reducing the cost of herbal medicine production.

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