

## Integrating Sports Medicince and Thai Holistic Health Care to be an Alternative Medicince for Solving Movement Disorders in Chiang Mai Community

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### Abstract

The purpose of this study were 1) to construct a lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine for solving movement disorders, and 2) to evaluate the practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine. The samples were 100 volunteers of Chiang Mai community to be service recipients in Physical Education Therapy Center under Thailand National Sports University, Chiang Mai campus. The instruments used were 1) the lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine for students of Thai National Sports University, Chiang Mai campus, and 2) a package of practical skills for 100 volunteers of Chiang Mai community to be service recipients in Physical Education Therapy Center consisted of an interview form inquiry the background of symptom disorders, a questionnaire inquiring volunteers' opinions concerning the services and their satisfactions including in-depth interview in a case of 9 specific volunteers. The results of the study revealed that 1) the lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine for solving movement disorders to be more efficient than the determined criteria and it could be used for practicing based on the steps; and 2) the evaluation results of practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine, volunteers of Chiang Mai community to be service recipients in Physical Education Therapy Center were satisfaction at the highest level (93 percent), the students viewed as the benefits and feasibility of treatment and rehabilitation of human movement disorders and recommended to be an additional course including practical skills continuously.

**Keywords:** Integrating Sports Medicine; Thai Holistic Health Care; an Alternative Medicine;  
Movement Disorders; Chiang Mai Community

## Introduction

Thai traditional massage is a Thai traditional medical knowledge which is one of the methods of treatment by Thai folk medicine that is called ‘traditional deep-tissue massage’. The ancient massage practitioners will learn the veins, nerves, skeletons, muscles, and various main muscles including the principles of massage processes, how to press weight and appropriate duration, and to have knowledge and understanding in analyzing and diagnosing diseases by checking before and after taking massage. There are an inquiry background recording and symptoms and then choose the appropriate massage therapy method. Moreover, they have expertise skills enough to completely massage therapy which inherit the knowledge from ancestors among the relatives to the lineages until now as well as applying and changing the massage styles different from the original style. Due to the lack of vision in the art of medical ethics and the value of Thai traditional medical knowledge is not paid attention as being inherited from ancestors, the massage process is used to modify for business reasons without consideration, the value, understanding, and importance of the ‘traditional deep-tissue massage’ has changed.

Therefore, it made Thais ignore and give up almost the value of the ‘traditional deep-tissue massage’. In addition, learning like ‘a back-door teacher’ was lack of knowledge of anatomical physiology as basic importance that was being ignored and did not transfer to massage practitioners. As a result, in the ancient form of massage was become a relaxing massage that took only a short time to practice but unable to treat movement disorders or unnatural working. The ‘traditional deep-tissue massage’ required more time to learn and to practice to be expertise. There were also limitations on inheritance learning because it was a massage for treatment, they must have a process, procedures, and the code of ethics that must be adhered to for those interested people in practicing.

Principles and practical skills in accordance with sports medicine principles were added to complement the plan for the 80-hour course of Thai traditional massage therapy practice skills, a course that had been certified by 5 specialists of the Lanna traditional medicine network and was used as a training course in the study of ‘A Development of Local Wisdom Imparting Process on Thai Traditional Massage’ (Pheerapong Boonsiri, 2018) which had been prepared 10 lesson plans in a training manual, starting from learning related to rituals of Thai sacred ceremony to

indoctrinate the art pupils and paying respect teachers, ethics of traditional medicine, rules, conditions for training and learning the physiological anatomy of the human body with the main ten-line until the process of massage different parts of the body. Moreover, organize more knowledge according to sports medicine principles, prevention injuries, treatment injuries, first aid, hot-cold press integrating with massage with a bag of heated medicinal herbs, and operations from the massage process to the massage with a bag of heated medicinal herbs including practicing with for people who had symptom disorders or injuries from sports who were in treatment in Physical Therapy Center for Health and Sports under Institute of Physical Education, Chiang Mai Campus at least 20 cases. Additionally, 9 students for the exchange program from Guangxi University, China with the Institute of Physical Education, Chiang Mai Campus requested to be practiced with interesting. All students had passed the training course and returned to China.

However, students of Institute of Physical Education, Chiang Mai Campus had learned the principles of sports medicine regarding prevention, correction, and treatment of sports injuries as a basic cost, if the students had been enhanced knowledge and skills in Thai folk wisdom medicine by integrating into the teaching and learning process and practice massage therapy skills, the use of massage with a bag of heated medicinal herbs with the use of screening tools for physical checking the volunteers according to general medical principles integrated as Thai Holistic Health Care to use treatment services for injuries and movement disorders, both athletes and general people in Chiang Mai community.

As the important results, Physical Therapy Center for Health and Sports under Institute of Physical Education, Chiang Mai Campus, which had been established since December 2016, which proposed a safe alternative medicine, save money for the treatment of human movement disorders with symptom disorders, help and care to solve sports injury problems including a successful conclusion of massage therapy for other symptoms related to movement disorders of athletes and the general people as well as being a legacy of Thai holistic traditional medical knowledge to be known and remain sustainable in the Institute of Physical Education. the research team has therefore realized on this project and extended of the pilot research project in the fiscal

year 2017 and has also used ‘cooling down yoga’ to be a potential checking of the experimental group to evaluate the efficiency of the movement after being in treatment of symptoms disorders.

### **Research objectives**

1. To construct a lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine for solving movement disorders.
2. To evaluate the practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine.

### **Research framework**

1. The study of the practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine consisted of for components as follows:
  - 1) Input referred to integrating sports medicine and Thai Holistic Health Care as an alternative medicine.
  - 2) Process referred to a lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders.
  - 3) Output referred to the skills to be in treatment and rehabilitation of human movement disorders.
  - 4) Feedback referred to the satisfaction of the trainees.

#### **2. Variables consisted of**

- 1) The independent variable is a lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine.
- 2) The dependent variables are the skills to be in treatment and rehabilitation of human movement disorders.

## Research Methodology

### Scope of Contents

Apply of treatment principles for injury and instruments for physical examination of subjects to diagnose injuries or symptom disorders according to medical principles integrated with Thai holistic traditional medical knowledge, both massage and the use of herbs as a process to be in treatment and rehabilitation of human movement disorders from posture in daily life, working conditions, and injuries from playing sports or exercising of community members in Mueang Chiang Mai District.

### Scope of Population

The population in this study were athletes or general personnel in Mueang Chiang Mai District who had symptom disorders with movement, cannot move easily, and to be service recipients as volunteers in Physical Education Therapy Center for Health and Sports without paying any service fees. Each time of service took at least 90-120 minutes time to be in treatment with a massage by using a bag of heated medicinal herbs or an herbal steam individually and then checked the movement order by physical exercising for relaxing or stretching the muscles.

The subjects were 100 volunteers of Chiang Mai community to be service recipients at Physical Education Therapy Center were interviewed for inquiry the background of symptom disorders, inquired volunteers' opinions concerning the services and their satisfactions including in-depth interview in a case of 9 specific volunteers.

### Scope of Area

It was taken place at Physical Education Therapy Center for Health and Sports, Institute of Physical Education, Chiang Mai Campus every day from 9.00 am.-4.00 pm., except on the Dharma Day. The research assistants who had been trained Thai basic folk massage courses for 80 hours practiced skills under the supervision of specialists who had medical license in the field of Thai traditional medicine.

### Scope of Duration

The research was started on this project in the fiscal year 2017 (2018 October-2019 September). The research team, research assistants, and Thai traditional medical doctor on Thai

massage under the supervision of specialists according to the service period and to follow up in 2019 February.

### Research Instruments

The instruments used were as follows:

1. The twelve lesson plans for practical skills to be in treatment and rehabilitation of human movement disorders which were a massage therapy process applied from the massage therapy manual of the Lanna Traditional Medical Knowledge Education Center, Chiang Mai Rajabhat University that had been developed through seminar course by the Faculty of Folk Medicine of the Lanna Folk Medicine Network (Developed in March 1999) which had been approved by all three experts integrated with sports medicine principles for use in the correction, treatment and rehabilitation of movement disorders as a holistic Thai medicine and integrating sports medicine for students of Thai National Sports University, Chiang Mai campus.

2. A package of practical skills for 100 volunteers of Chiang Mai community to be service recipients at Physical Education Therapy Center consisted of an interview form inquiry the background of symptom disorders, a questionnaire inquiring volunteers' opinions concerning the services and their satisfactions including in-depth interview in a case of 9 specific volunteers.

3. A manual of massage process for the treatment of movement disorders of the Lanna Traditional Medical Knowledge Education Center, Chiang Mai Rajabhat University in the year 1999 to be used to practice skills of students of Institute of Physical Education, Chiang Mai Campus, for a total of 80 hours, including both practical practice skills with volunteers as service recipients at the Physical Education Center for Health and Sports. Institute of Physical Education, Chiang Mai Campus since 2019 March.

4. An interviewed form was used to inquire volunteers as service recipients at the Physical Education Center for Health and Sports. Institute of Physical Education, Chiang Mai Campus and recorded the background data of injuries, duration of injuries, the treatment process, including drugs used for the treatment.

5. The physical check-up form for checking the movement disorders of the symptom disorders by using 6 yoga postures. The record result was only passing or failing.

6. A satisfaction questionnaire was used by volunteers after being in treatment Thai folk massage therapy as alternative medicine, the questionnaire based on the score range from -1 to +1 was evaluated by 5 experts, the Item-Objective Congruence (IOC) scores higher than 0.5, and an in-depth interviewing volunteers' opinions regarding the Thai traditional medical knowledge and feelings after having been in treatment.

7. Instruments for measuring height, weight, blood pressure, and pulse rate. They were measured before and after treatment.

8. Equipment for massage with a bag of heated medicinal herbs: hot herbal press bag, steam pot for hot herbal press bag, local white whisky, hot bag-cold bag, and herbs for hot-cold press.

9. Laboratory room in the Physical Education Therapy Center for Health and Sports consisted of 3 sets of massage bed, size 1.20 x 2.00 m, height 50 cm. and a herbal steam room.

10. Meeting record was to summarize the symptom analysis and results of treatment and operational summary.

### Research Steps

1. Prepare a meeting of research team to determine the mission and how to implement according to the action plan, there were six voluntary students who had practiced skills of the holistic massage therapy for holistic movement disorders as practitioners.

2. Prepare instruments, equipment, lesson plan for practical skills, and revised for understanding with the students as practitioners in the process of checking the symptoms and recording the background and other information as being primary information of volunteers as service recipients to be in treatment with Thai Holistic Health Care from individual interviews.

3. Evaluate the symptom disorders by testing the movements with 6 yoga postures as a physical exercise before and after treatment.

4. Diagnose and record movement disorders before and after treatment for specific cases.

5. Operate services for symptom-specific treatment that required at least 90 minutes of treatment steps depending on individualized symptoms.

6. Massage with a bag of heated medicinal herbs that required rehabilitation of movement by using 6 yoga postures which evaluated the number of times and duration of

rehabilitation. Some volunteers had been suggested to press with a hot water bag, soaked in warm water or mineral water.

7. Interview and ask opinions after completing of the treatment process and fill out the satisfaction evaluation form for the treatment services.

8. Group meeting to summarize results and record the conclusion of study reports, problem conditions, and recommendations for development.

9. Analyze the research summary data.

### **Data Collection**

1. Data were collected from inquiring of the background of illnesses of people who were volunteers as service recipients to be in treatment at Physical Education Center for Health and Sports, Institute of Physical Education, Chiang Mai Campus concerning the injury problems, past treatment background, medical analysis, drug medication, and effect from previous treatment.

2. Collect data from the tests to evaluate symptoms of movement disorders by using 6 yoga postures before and after being in treatment.

3. Collect data on problems, symptoms, and specific injuries to analyze the treatment process.

4. Collect data from interviewing opinions concerning holistic treatment processes.

5. Collect data from satisfaction questionnaire concerning the services.

6. Collect data from group meetings to summarize the causes, symptoms, and achievement of the specific treatment process.

7. Summary of the research findings by reporting.

### **Statistical Analysis**

1. Inquire and analyze the background of symptom disorders, diagnosis, medication, and effect from previous symptomatic treatment by using statistical percentage.

2. The tests to evaluate symptoms of movement disorders by using 6 yoga postures before and after being in treatment by using observing.

3. Analyze the symptom disorders, points, and specific injuries of the symptoms in order to diagnose and determine the treatment process by recording.

4. Analyze the data from interview opinions by using content analysis.
5. Analyze the data from the satisfaction questionnaire concerning the services of the volunteers as service recipients who were in treatment with integrating the principles of medicine and Thai Holistic Health Care by using the statistical percentage.
6. Analyze and summarize the results of the treatment, rehabilitation and movement disorders of the volunteers as service recipients who were in treatment by descriptive analysis.

## Results

### **The results of the study revealed as follows:**

1. The lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders which had been approved by all three experts and integrating sports medicine and Thai Holistic Health Care as an alternative medicine for solving movement disorders to be more efficient than the determined criteria and it could be used for practicing based on the steps.
2. The evaluation results of practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine, volunteers of Chiang Mai community as service recipients to be in treatment at Physical Education Therapy Center were satisfaction at the highest level (93 percent), the details were as follows:
  - 1) As regards the opinions of volunteers of Chiang Mai community as service recipients from interviewing opinions concerning holistic treatment processes, the data were analyzed by content analysis, 55 volunteers suggested for the use of Thai Holistic Health Care in the community should be a curriculum for teaching and learning not only in institutions related to sports training, but also general schools where were ready to provide a course of physical education therapy, or arrange a special course for people who were interested in this course, and 22 volunteers suggested to increase the personnel in this science in order to be opened as a treatment center to help members in each community, and also increasing the potential for health volunteers in each community.
  - 2) As regards the satisfaction questionnaire of 100 volunteers as service recipients to be in treatment and rehabilitation of human movement disorders with Thai Holistic Health

Care. Only 90 cases were evaluated complete responses satisfaction questionnaire in all issues that could be concluded as shown in Table 1:

**Table 1:** Opinions of 90 Volunteers

No.	Lists	Level of Opinions				
		Highest	High	Moderate	Low	Lowest
1.	Physical education therapy has a massage process that can treat movement disorders.	64	26			
2.	After being in treatment the symptom disorders by steps, the movement was better.	60	30			
3.	After being in treatment the symptom disorders, feel relaxing and comfortable movement.	55	35			
4.	Physical education therapy is safe and correct according to medical principles.	74	16			
5.	The correction of treatment process is the treatment for specific point.	73	17			
6.	Physical education therapy is more treatment than a relaxing massage.	65	25			
7.	Physical education therapy is Thai Holistic Health Care for treatment and rehabilitation of human movement disorders efficiency.	70	20			
8.	The treatment process does not cause the other symptom disorders or any effects on the body.	80	10			
9.	Physical education therapy is a process for treating, and rehabilitating better than medication.	72	18			
10.	Physical education therapy is an integration of current medicine and Thai Holistic Health Care appropriately.	55	35			

From table 1, the satisfaction questionnaire of 100 volunteers as service recipients to be in treatment and rehabilitation of human movement disorders with Thai Holistic Health Care. Only 90 cases were evaluated complete responses satisfaction questionnaire in all issues the level of opinions were overall at the highest level. When considering by each aspect, in terms of the treatment process did not cause the other symptom disorders or any effects on the body was at the highest level, followed by the physical education therapy was safe and corrected according to medical principles and the correction of treatment process is the treatment for specific point were at the highest level.

### Conclusion

The benefits of being treated a Thai traditional massage are at the best. Traditional Thai medicine is an integral part of Thai culture. Some study suggested that a Thai traditional massage could be used as a complementary therapy and very obvious and reproducible health benefits for all people in Thailand. That could be said, it felt incredible to relief stress and tension in joints and muscles. It should be preserved for Thai students.

### Discussion

Concerning the lesson plan for practical skills to be in treatment and rehabilitation of human movement disorders which had been approved by all three experts and integrating sports medicine and Thai Holistic Health Care as an alternative medicine for solving movement disorders to be more efficient than the determined criteria and it could be used for practicing based on the steps. In accidence with Cambridge University Press (2018) suggested concerning practical learning that another challenge could be helping students to learn from practical work. It was important to make sure the teacher has clear learning objectives for the piece of practical work to carry out and to understand the role the teacher would play in helping the students reach this objective. Practical work could in fact facilitate learning in the classroom. Using a practical activity could help structure a lesson and improve engagement and knowledge retention. Moreover, University of East Anglia by Clinical Supervision (2019) discussed the essentials of lesson planning that the lesson plan was designed around the learning objective(s), and provided learners with an opportunity to explore, built, and demonstrated their learning. This approach shifted the

learning environment from one which is very teacher-centered to one that is very learner-centered.

Concerning the evaluation results of practical skills to be in treatment and rehabilitation of human movement disorders by integrating sports medicine and Thai Holistic Health Care as an alternative medicine, volunteers of Chiang Mai community as service recipients to be in treatment at Physical Education Therapy Center were satisfaction at the highest level (93 percent), the opinions of volunteers of Chiang Mai community as service recipients from interviewing opinions concerning holistic treatment processes, the data were analyzed by content analysis, 55 volunteers suggested for the use of Thai Holistic Health Care in the community should be a curriculum for teaching and learning not only in institutions related to sports training, but also general schools where are ready to provide a course of physical education therapy, or arrange a special course for people who are interested in this course, and 22 volunteers suggested to increase the personnel in this science in order to be opened as a treatment center to help members in each community, and also increasing the potential for health volunteers in each community.

Concerning the satisfaction questionnaire of 100 volunteers as service recipients to be in treatment and rehabilitation of human movement disorders with Thai Holistic Health Care. Only 90 cases were evaluated complete responses satisfaction questionnaire in all issues. In terms of the treatment process did not cause the other symptom disorders or any effects on the body, the physical education therapy was safe and corrected according to medical principles, and the correction of treatment process was the treatment for specific point. It was consistent with Peerapong Bunsiri (2018), the satisfaction of the students' customers was also evaluated. The results of the study revealed that the local wisdom imparting process model on Thai traditional massage and the training manual used in the study were appropriate and applicable in terms of contents and procedures. This study would benefit health businesses and the conservation of Thai traditional massage.

However, the correcting when aching pain, no relaxation of physical condition, mostly problems were solved with painkillers. When abnormal symptoms occurred, they relied on hospitals. In fact, the abnormal symptoms were not caused by the symptoms of the disease

could recover up to 50 percent with proper exercise, physical rest (Thai Institute of Traditional Medicine, 1995). According to the study of Apiradee Thammasorn (2015) had studied Thai massage effects to health-related quality of life of working age group. The finding showed that Thai massage had the positive effects to quality of life both in physical and psychological health which enhanced quality of life of working age group when they had massage regularly. Consistent with Duanpenporn Chaiphakdee (2016) studied the learning management on folk massage's wisdom in the use of herb community, it was found that treatment methods were evaluated disease symptoms, respect folk medical doctor's teachers, someone was compassionate for persons with previous deeds on each other. Next to cure the patients by herbal medical treatment only, herbal medical treatment with Thai massage herbal medical treatment with magic and fate. Additionally, Chaudhary, N. (2019) stated concerning the benefits of a massage, which helped your brain, emotions, and body relax, used to treat stress and depression. Massage could help to reduce the symptoms of varicose veins, hemorrhoids, swelling, and back or waist pain.

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