

# Using Communities of Practice to Develop Access to Traditional Thai Medicine

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***Abstract:*** This research aimed to study the creation of knowledge management in traditional Thai medicine through the use of Communities of Practice (CoP). CoP is an approach for administering, exchanging, developing and creating databases and guidelines for knowledge management. The sample used in this research was comprised of 1,636 volunteer patients in the traditional Thai medicine health centers in Khon Kaen Province, Thailand. CoP allows patients and members of the community to be healthy solely by relying on Traditional Thai medicine. The patients, physicians, nurses and public health officials all belong to a group that exchanges medical information to help patients cope with sickness.

Communities of Practice (CoP), which consist of leaders, facilitators, knowledge bankers and members, have three development directions. The first direction, represented by Helping Communities, involves the discussion of daily problems. From these discussions come Best Practice Communities, which involve the auditing and publicizing of guidelines to find the best solution to medical problems. The second direction is represented Knowledge-Stewarding Communities, which aim to improve community members' knowledge. The third direction is represented by Innovation Communities, which develop concepts across CoP in order to synthesize the thoughts of members with different points of view into a transfer-knowledge network.

***KEYWORDS:*** Community of Practice, CoP, traditional Thai Medicine, Thailand

## 1. INTRODUCTION

Everybody wants to be healthy. However, sometimes people contract serious illnesses, and when faced with such sickness, visit public health centers or hospitals for treatment. Patients in traditional Thai medicine health centers, physicians, nurses, public health officials, and employees in the Traditional Thai Medicine Department have formed Communities of Practice (CoPs) to develop access to the local wisdom of traditional Thai medicine. The objective of the CoPs is to help the community become healthier by relying on traditional Thai medicine.

Communities of Practice (CoP) are formed by members with a common interest, and are typically driven by the value that they provide to individual members. Members share information and insights and come up with ideas for saving time, money, energy and effort (Wenger & Snyder, 2000; O' Donnell & Porter, 2002; O'Donnell et al., 2003; Hodkinson & Hodkinson, 2004; Gannon-Leary, & Fontainha, 2007). The heart of a CoP is the procedural know-how that members share and develop. CoP, therefore, facilitate opportunities for sharing knowledge, and as a result, the topics most important to the community emerge over time. As topics shift, some members may leave and new members may join, adding different perspectives and helping to shape the organization's future direction. The notable feature of CoP is that the creation and exchange of knowledge depends upon members without needing pressure from outside organizations to compel individuals to join the knowledge-exchange process. Organizations need to understand

the problems, obstacles and needs of a community, and then encourage the CoP members to grow and achieve their potential regarding their interests. The interest in a CoP focuses on practical experience and questions. The associates share their experience, and together they look for answers to their questions and for helpful ways of solving problems (<http://communityofpractice.ch>).

Wenger (1998) and Nickols (2000) document indicators of CoP, including the following: a strong sense of identity tied to the community; the practice itself not being fully captured in formal procedures; people learning how to do what they do and being viewed as competent (or not) in the course of doing it in concert with others; a rapid flow of information among members; quick diffusion of innovation among members; conversations coming quickly to the point; common stories, legends, lore, "inside" jokes etc.

### 1.1 Traditional Thai Medicine

#### 1.1.1 Element Seat

Practitioners of traditional Thai medicine believe that sickness comes from imbalances in the body, which consists of four elements: earth, water, wind and fire. Earth forms the hair, connective tissues, nails, skin, tendons, bones and organs. Water makes up the blood, sweat, tears and saliva, while wind controls body movements such as the stretching and contraction of muscles, circulation of blood, and the digestive system. Fire is the process that burns food to make energy for the body. All four of these elements must be balanced in order for the body to be in healthy condition, as any imbalance causes discomfort and leads to disease. Similarly, the external imbalance

of the planet's elements of water, wind and fire can also cause physical ailments in humans

(<http://www.baanpayakorn.com/index.php>).

The combination of elements causes one or more elements known as "the host" to become present in one's body. Each person has different host elements, and sickness may result from any imbalance in the four elements in a particular individual's body. The original host element is present at the time of conception, and the original host element of each person is determined by their month of birth. This host element reflects that person's personality and behavior. When people are sick, traditional Thai physicians consider what elements could have caused the current disease to occur. People with different hosts are directed to eat foods that match with their host element, and the foods they eat should have tastes suitable to their host element. A person with the earth host element should eat foods that taste sweet, greasy and salty, while a person who has the water host element should eat foods that taste sour and bitter. A person with the wind host element should eat hot and spicy foods, and a person who has the fire host element should eat foods with a plain or bitter taste (<http://th.wikipedia.org/wiki>; <http://www.utts.or.th/>).

### 1.1.2 Causes of Sickness

Practitioners of Traditional Thai Medicine believe that sickness originates from the following influences ([http://webindex.meemodel.com/2health/14\\_thai/](http://webindex.meemodel.com/2health/14_thai/)).

- a. Unbalance of four elements of the body (Element Seat).

- b. Seasonal influence (Meteorological seat): Seasons may be the causes of diseases.

- c. Age-related changes (Age seat): The influence of sun and moon in 24 hours as well as the influence of stars in the universe may be the causes of diseases.

- d. Domiciles (Country seat): Different locations of countries may cause the different diseases to occur.

- e. Influence of time and universe (Time seat): Different days and time may cause different sicknesses happen.

### 1.1.3 Total treatment

Traditional Thai medicine is a total treatment which takes into consideration many factors related to the curing methods:

1. Factors defined by nature, such as host elements, seasons and the universe. By consuming herbal food, taking herbal medicine and improving their behavior, men and women make themselves compatible with factors.

2. Another factor is the improvement of those behaviors that are the origins of diseases by avoiding the activities or poses that put the body's four elements out of balance. Examples of improper behavior are eating too much or too little; working too hard; having too much sex; feeling too angry, sad or happy; breathing unclean air; staying in air that is too hot or too cold; being sleepless; and posing wrongly. All of these cause the body structure to become unbalanced. The solution is to exercise, use the hermit poses, seek out Thai massage (to improve the health of bones and tendons), and to attend to mental health problems

([http://webindex.meemodel.com/2health/14\\_thai/](http://webindex.meemodel.com/2health/14_thai/)).

#### **1.1.4 Local wisdom in traditional Thai medicine**

According to traditional Thai medicine, there is a philosophy, body of knowledge, and a set of ways to practice in order to maintain good health and treat disease. Traditional Thai medicine treats sick people through the use of herbs, hand treatments, traditional bone treatments, Buddhist and ritualistic ceremonies aimed towards caring and curing mental health, and other natural treatments (Chokevivat, Chuthaputti, Khumtrakul (2005). Traditional Thai pharmacy practice involves the use of herbs, animals or minerals as traditional medicines and the art of compounding those ingredients into various dosages according to traditional recipes.

The ways of practice for health care and disease treatment have been passed down from generation to generation, in oral and written forms, through observation and studies at traditional Thai medicine institutions.

The analysis and treatment of diseases of Thai people (<http://ww2.skho.moph.go.th/mass/>) are conducted as follows:

- Using knowledge to completely diagnose, treat and prevent diseases in all parts of the body
- Using diversified methods to prevent and cure diseases
- Using natural raw materials to cure diseases
- Using natural treatments that do not pollute the environment

- Using local raw materials without complicated techniques

#### **1.1.5 Traditional Thai medicine disease treatment**

Traditional Thai medicine uses natural treatment, physical treatment, mental treatment and medicine. Thai traditional medicine use the following tools:

1. Herbs
2. Massage and body exercise
3. Ritual ceremonies and beliefs

Traditional Thai Medicine has not disappeared. It is not out-of-date, but it is innovative and forward-looking.

## **2. DATA AND METHODOLOGY**

### **2.1 Data**

The population used in this study consisted of patients in traditional Thai medicine health centers, public health centers and hospitals in Khon Kaen Province. The sample consisted of 1,636 patients who volunteered to receive diagnosis and treatment for insomnia, headaches, body aches etc. at the Department of Community Medicine, Faculty of Medicine, Khon Kaen University.

### **2.2 Methodology**

This paper studies the use of CoP in knowledge management of traditional Thai medicine. The authors studied the community and acquired knowledge from interviews and participatory/non-participatory observations of the community. When participants entered the health centers, they were treated according to the following process.

First, each underwent a general health check (e.g., measuring of blood pressure and weight by nurses).

Next, a nurse or health official found out the participants' date of birth in order to identify their host element.

Later, the cause of each sickness was checked through open-ended interviews.

Then, physicians performed the appropriate treatment, using traditional Thai medicine pharmaceutical and medical knowledge, Thai massage, Thai pharmacy, Dhamma as well as concentration and meditation practice.

Subsequently, CoP management of knowledge for the exchange of learning was performed by patients, physicians and nurses, physiotherapists, pharmaceutical officials, community public health officials, public health experts and employees in the Traditional Thai Medicine Department. Examples of using CoP to develop access traditional Thai medicine are as follows:

- There are rooms for patients who have recovered from sicknesses such as diabetes, gout and partial paralysis. People who used to be sick but now are well have chances to talk with patients who now face the same sickness that they used to have. The recovered patients share their experiences with current patients, including advice on how to behave in order to not burden family members, what foods to avoid, what foods to eat, how to reduce stress, etc. Sometimes, current patients talk with each other. By talking with people who used to have or are having the same sickness, patients learn how to recover more quickly and thus become more cheerful as they receive support from other people. Sometimes physicians, nurses, or

other community public health officials distribute information on new methods and techniques that will help patients recover more quickly. Through informal interactions with specialists such as physicians, previous patients and other current patients, current patients develop new information about how to act in certain settings. For example, when they feel nervous about their sickness, they should share these feelings with someone, chant or practice meditation. Through collaboration, a CoP generates a common, shared understanding of sickness events and an action orientation for dealing with such sicknesses the next time they arise. For example, after current patients learn from other current patients that herbal fumigation and an herbal compress help restoration from sleepless, the patients will tell their relatives to do salty pot pressing the next time they feel weak.

-Physicians and community public health officials provide patients and community members with information on what foods patients should eat according to each patient's condition and provide information on foods that are harmful to patients with specific diseases, such as diabetes.

-Pharmaceutical officials teach community leaders, district chiefs and patients to eat herbal foods and local anti-disease vegetables in order to prevent disease. Community leaders then convey this information to the neighborhood.

-The chiefs of health centers create herbal gardens to serve as centers wherein people learn about herbs. There are officials to explain the qualities of each herb. Patients can walk in the gardens and pick herbs for eating. This helps patients and their

relatives to learn about which herbs pertain to their sickness. This practice encourages many patients to grow herbs in their own home.

-Community public health officials give massages, herbal steam baths, and compresses in addition to advice on “Ruesi Dud Ton” (stretch exercises) and meditation. These actions reduce stress-induced headaches, body aches, and neck and shoulder pain. In addition, health centers offer massage classes. Community health volunteers who have received certificates of training from the Ministry of Public Health can offer these services. In addition, public health officials open massage activity classes in local schools throughout the community.

-Physicians and nurses teach sick people's relatives how to take care of them and how to massage and use hot herbal compresses.

-The physicians and pharmaceutical officials encourage patients to eat foods according to their host element. The public health centers organize a display case showing which foods people should eat according to their host elements and they also provide information in the form of a brochure.

-The hospital offers herbal juices suitable for each of the patient's diseases.

### **3. RESULTS OF THE RESEARCH**

#### **3.1 The creation of knowledge**

The creation of knowledge about traditional Thai medicine from local wisdom involves the management of knowledge that is based on the characteristics of people who share a common interest in a topic. The knowledge is shared across the working units and agencies as follows:

**3.1.1** Helping communities to discuss health problems that they experience on a daily basis

and exchange ideas within the group to solve those problems. For example, current patients discuss symptoms of diseases and how to use traditional Thai medicine for the initial treatment, such as using a hot herbal compress to relieve body aches and using local herbs that are easily found in the villages.

**3.1.2** Best practice communities emphasize the working process of group members to finalize the best conclusion. For example, knowledge related to curing the symptoms of insomnia, headaches and body aches, which are the matters most frequently asked about on the website would be transferred by the group of people who use traditional Thai medicine as a treatment alternative. Feedback about the knowledge will be kept in the computer database as well.

**3.1.3** Knowledge-Stewarding Communities aim to regulate the communities for the purpose of raising the knowledge level of members who use the medical knowledge regularly to enhance efficiency of the organizations and constantly develop their services. Since the members would have been employees of health centers or hospitals who are in contact with public needs on a daily basis, they would be well informed about the said requirements and pass them on through the knowledge management network or join the small groups during their spare time to transfer such knowledge to other departments' employees who are interested in learning the new requirements in order to develop their own daily working performances.

**3.1.4** Innovation Communities develop ideas that emphasize adaptation across the board and synthesize different ideas from various

members. This happens, for instance, in the knowledge exchange project within Siriraj Hospital, the oldest hospital in Thailand, and through the knowledge transfer network system, whereby clinical personnel discuss best practices of taking care of patients as well as publicizing the knowledge in the public domain. In the past, new bodies of knowledge have been transferred to the third parties who create their own ways to solve their problems, which resulted in the progress of the Thai medicine circle and cost savings for the hospital due to decreasing the amount of sick people in the community.

### **3.2 CoP management of traditional Thai medicine**

If the knowledge transfer is limited to people within the organization, the development will be slower than if the knowledge is extended to include the public in order to brainstorm and thereby find the best solution. Currently, the IT system can be linked to networks worldwide. As a result, people all over the world can participate in brainstorming to find a solution for each problem.

CoPs must develop gradually though. At the initial stage, the development potential arises from the networks of people who are interested in the same matters, who mutually look for interesting issues in preparing to establish the CoPs group. Then, they apply for membership, and the group is ready to debut. At this point, the group leader must determine its usefulness and create an integration plan as well as design the knowledge management patterns.

The next step is to prepare for the change and the growth of the group and define

the learning standards as well as the methods of group development and expansion. Many activities are available for groups to use in their search for the best knowledge, helping them find new solutions that meet the needs of those members who are new to the group, and to create incentives for the development of new CoP groups. The final step is that the common interests of the group begin to decline and the members ask for withdrawal of their membership; at that point, only the memory of the experience-harvesting remains, and then the group dissolves.

The people who join the CoP group must perform the following duties:

1. Leaders provide strategic directions in response to the visions of the organization and the CoP. They communicate to develop sustainable knowledge networks of physicians, nurses, and community leaders.
2. Facilitators work on planning the exchange of knowledge and assist with the technical aspects in order to coordinate with outside groups. They include technical nurses, pharmaceutical officials, community public health officials and public health experts.
3. Knowledge bankers gather group information and place it into the system. They are pharmaceutical officials, community public health officials, public health experts and assistant community leaders.
4. Members of CoP express their learning and opinions, and act as the coordinators for the group and third parties. Members select the leaders of the CoP, and the leaders are often physicians, nurses, technical nurses, pharmaceutical officials, community public health officials, public health experts and people in the community.

The obstacles to communicating within the CoP group often arise when members do not understand what they are supposed to discuss. In these cases, the group leader must help them to understand. Otherwise, the members must leave the group.

In the evaluation process, which is conducted when the group does activities together, the data collector must analyze what kind of groups best suit those members who are sharing knowledge in order to place them in the suitable groups. This will help operations to go smoothly and create the understanding needed in order to produce the cooperation of group members, which in turn leads to good results. Especially if such groups are to be dissolved, the group could later be contacted to lead a future collaboration. For example, people who have problems with diabetes affecting their eyes should be in one group; diabetics experiencing problems with their toes should be in another. At the same time, the evaluator must be the first to know which part of the operation should be evaluated and when. The final step is to gather and synthesize the information so that it may be seen concretely and in a way that conforms with the operation.

The frame of the evaluation must be analyzed to assess the level of member participation. Some groups would have more time to participate while others would have less. The evaluator should assess how much useful information would be benefited from the meeting which reflect in the number of problems being remedied by the knowledge management. In case the evaluator understood those information, it would be effective for the information to be collected for the purpose of assessment since, in the past,

some organizations have high expectations of the operation but less participation. Thus, the operation was successful.

### **3.3 Knowledge management tactics**

**Knowledge management tactics are as follows:**

1. To decide what subjects the organization should have knowledge about and to design a survey that assesses whether those personnel have basic knowledge in those areas or not.
2. To create and seek knowledge by finding out who owns such knowledge and in what form the knowledge should best be collected and stored.
3. To manage the knowledge systematically by classifying it into categories as it is appropriated.
4. To process and select the knowledge so that it may be more complete and easily understood.
5. To evaluate access to knowledge and assess whether such knowledge would be easy to apply in a practical way.
6. To share and exchange knowledge within groups and across the board.
7. To evaluate the learning and knowledge obtained as to the whether it would be useful to the organizations.

## **4. CONCLUSION**

This research aimed to study the creation of knowledge management in traditional Thai medicine through the use of Communities of Practice (CoP). CoP is an approach for administering, exchanging, developing and creating databases and guidelines for knowledge management. CoP management of traditional Thai medicine knowledge for the

exchange of learning was performed by patients, physicians and nurses, physiotherapists, pharmaceutical officials, community public health officials, public health experts and employees in the Traditional Thai Medicine Department. CoP allows patients and members of the community to be healthy by relying on Traditional Thai medicine. The patients, physicians, nurses and public health officials are members of a group that exchanges medical information to help each other solve medical problems. Through informal interactions with physicians and previous patients, current patients acquire new information about how to improve their behaviors and conditions. Through collaboration, a CoP generates a common, shared understanding of sickness events and a plan of action for dealing with such sicknesses the next time they arise.

The results show that knowledge is shared across the working units and agencies as follows: 1) by helping communities, i.e., members share their daily-routine problems; 2) through best practice communities which focus on the best solution for each sickness problems; 3) through knowledge-stewarding communities which aim to improve community members' knowledge; and 4) through innovation communities, which means transferring knowledge to third parties to make knowledge of Thai traditional medicine more widespread throughout the world. People who received medical knowledge know how to behave and thereby become more healthy. Therefore, the CoP save money for the Thai government by decreasing the amount of sick people in the community.

The management of knowledge by

means of CoP on a continuous basis produces mutual learning, and due to the communication mechanisms on which it is base, more knowledge is constantly being gained. Society, community, and organizations thus become learning societies, and individuals are enabled to reach their fullest potential regarding their interests. Some community leaders agree with the use of traditional Thai medicine as an alternative medicine for treating sickness, as a way to reduce expenses for the community, and also as a way to increase the income of the community through the sale of herbs.

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