AN ETHNO-EPIDEMIOLOGICAL STUDY OF LAY BELIEFS AND EXPERIENCES OF FEVER-RELATED ILLNESS AMONG LAOTIAN PATIENTS LIVING NEAR THE LAO-THAI BORDER

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Socio-cultural studies have shown the wide variety of perceptions on fever. Fever, the most common symptom of infectious diseases, has different names and meanings according to the areas, customs and cultures (Davis-Roberts 1981; Uba 1992; Kamat 2006; Gibbs and Lurie 2007; Rasbridge and Kemp 2007). The objective of the research was, through the adoption of an ethno-epidemiological approach, to better understand lay beliefs, experiences and practices related to fever-related illness among local and cross-border Laotian people from three different communities.

Laotian knows they get fever or '*khaj*' after they are '*jab king*' or touching their body parts (i.e., forehead, neck, arms and legs). They have other terms for 'fever' such as '*jeb*' or '*puiy*'. Moreover, the term related to fever is built on the general term for fever or *khaj*. Fever-related illness is caused by '*sia khwan*' (soul loss), '*plian akard*' (seasonal change), '*hed wieg nak*' (hard work), or even '*tidpad'* (intrusion of foreign particles into the body). This last cause is generally stressed when fever and symptoms of other illness (i.e. an acute febrile respiratory infection, dengue or hemorrhagic fever) are becoming more severe.

Laotian people have different therapeutic methods. I found that their therapeutic choices sometimes did not harmonize with and support previous socio-anthropological researches (Westermeyer 1988). In case of failure of home remedies, for example, they have recourse to Western medicine more than to traditional medicine, especially when the patient is the unique child of a family or when another patient presenting with the same symptoms died in the community. Moreover, they frequently choose to cross the border for seeking health care services in Thailand because of their confidence in the quality and efficiency of the health care system there.

The adoption of an ethno-epidemiology approach to the study of local perceptions on infectious and non infectious diseases will help health care workers and social scientists to understand local beliefs and experiences on health and illness and may lead to right healing and to the promotion of preventive behaviours, especially in case of contagious diseases.

KEY WORDS: FEVER-RELATED ILLNESS / LAO HEALTH CULTURE / LAY BELIEF / ETHNO-EPIDEMIOLOGY/QUALITATIVE RESEARCH

173 pages

การศึกษาเชิงระบาดวิทยาชาติพันธุ์ ว่าด้วยความเชื่อพื้นบ้านและประสบการณ์การเจ็บป่วยด้วยไข้ ในผู้ป่วยชาวลาวบริเวณพื้นที่ชายแดนลาว-ไทย
AN ETHNO-EPIDEMIOLOGICAL STUDY OF LAY BELIEFS AND EXPERIENCES OF FEVER-RELATED ILLNESS AMONG LAOTIAN PATIENTS LIVING NEAR THE LAO-THAI BORDER.

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คณะกรรมการที่ปรึกษาวิทยานิพนธ์: ลือชัย ศรีเงินยวง, ปร.ด., โดมินิค บูชิเย่ต์, ปร.ด., เสาวคนธ์ รัตนวิจิตราสิน, ปร.ด., กนกวรรณ ธราวรรณ, ปร.ด.

บทคัดย่อ

การวิจัยทางด้านสังคมและมานุษยวิทยาที่ผ่านมาแสดงให้เห็นว่ามนุษย์มีความเชื่อ การเรียกชื่อ และการรับรู้เกี่ยวกับการเจ็บป่วยด้วยอาการไข้แตกต่างหลากหลายกันในแต่ละพื้นที่ ขนบธรรมเนียมและวัฒนธรรม ซึ่งในทางการแพทย์ตะวันตกอาการไข้เป็นอาการนำที่พบบ่อยและเป็นอาการแสดงที่สำคัญในโรคติดเชื้อ (Davis-Roberts 1981; Uba 1992; Kamat 2006; Gibbs and Lurie 2007; Rasbridge and Kemp 2007) วัตถุประสงค์ในการศึกษาวิจัยนี้ เพื่อประยุกต์ใช้แนวคิดทางด้านระบาดวิทยาชาติพันธุ์ในการทำความเข้าใจความเชื่อ ประสบการณ์ และการดูแลรักษาตนเองของชาวลาวพื้นถิ่นที่อาศัยใน 3 ชุมชนใกล้แนวชายแดนลาว-ไทย เมื่อเจ็บป่วยด้วยอาการที่เกี่ยวเนื่องกับไข้ รวมทั้งการใช้บริการสุขภาพทั้งในประเทศสาธารณประชาธิปไตยประชาชนลาวและในประเทศไทย

นักวิจัย พบว่า ชาวลาวเรียกขาน '*ไข่*' และรับรู้อาการไข้ด้วยการ 'จับคิง' หรือจับตามตัว (เช่น หน้าผาก คอ แขน และขา) เมื่อพวกเขารู้สึกว่าร่างกายร้อนขึ้นหรืออุ่นขึ้นมาก พวกเขาจะระบุว่ามีไข้ หรือ 'คิงฮ้อน' หรือ '*โตฮ้อน*' ชาวลาวพื้นถิ่นยังมีคำที่ใช้เรียกการเจ็บป่วยด้วยอาการที่เกี่ยวเนื่องกับไข้ ว่า '*เจ็บ*' และ '*ป่วย*' ซึ่งชาวลาวพื้นถิ่นเชื่อว่าสาเหตุที่ทำให้เกิดการเจ็บป่วยคือ '*เสียขวัญ* หรือ *ขวัญเสีย*' หรือสูญเสียจิตวิญญาน '*เปลี่ยนอากาศ*' หรือ ฤดูกาลเปลี่ยนไป เช่น ปลายฤดูฝนต้นฤดูหนาว '*เฮ็ดเวียกหนัก*' หรือ ทำงานหนัก นอกจากนี้ชาวลาวยังเชื่อว่าการเจ็บป่วยเกิดจากการ '*ติดแปด*' หรือ การได้รับสิ่งแปลกปลอมเข้าไปในร่างกาย อย่างไรก็ดีความเชื่อเรื่อง '*ติดแปด*' มีความแตกต่างจากนิยามโรคติดเชื้อของการแพทย์ตะวันตก รวมทั้ง ชาวลาวเชื่อว่าการ '*ติดแปด*' จะนำไปสู่การเจ็บป่วยด้วยอาการที่เกี่ยวเนื่องกับไข้ ที่มีความรุนแรงมากขึ้น

การดูแลรักษาเมื่อเจ็บป่วยในชาวลาวพื้นถิ่นก็มีความแตกต่างหลากหลายเช่นเดียวกับงานวิจัยประชาชนในพื้นที่อื่นๆ แต่วิธีหรือขั้นตอนการเลือกใช้บริการสุขภาพไม่สอดคล้องหรือสนับสนุนงานวิจัยทางด้านสังคมและมานุษยวิทยาที่ผ่านมา (Westermeyer 1988) ผู้วิจัยพบว่า ในกรณีที่การดูแลรักษาที่บ้าน (home-remedies) ไม่ได้ผล ชาวลาวจะแสวงหาการแพทย์ตะวันตกมากกว่าที่จะแสวงหาการแพทย์พื้นบ้าน โดยเฉพาะถ้าในชุมชนเดียวกันมีผู้ป่วยเจ็บป่วยด้วยอาการใกล้เคียงกันอาการที่พวกเขาเจ็บป่วยเสียชีวิต นอกจากนี้ ผู้วิจัยพบว่าชาวลาวเลือกที่จะข้ามพรมแดนลาว-ไทย เพื่อแสวงหาบริการสุขภาพในประเทศ เพราะชาวลาวเชื่อว่าระบบบริการสุขภาพในประเทศไทยมีคุณภาพและประสิทธิภาพเหนือกว่า

ข้อเสนอแนะ ในการวิจัยต่อไป การนำแนวคิดทางด้านระบาดวิทยาชาติพันธุ์มาใช้ในการทำความเข้าใจการรับรู้ประสบการณ์ และการดูแลรักษาตนเองในประชาชนพื้นถิ่น เมื่อเจ็บป่วยทั้งโรคติดเชื้อและโรคไม่ติดเชื้อ รวมทั้งจะช่วยให้บุคลากรทางการแพทย์และนักสังคมศาสตร์ หาวิธีการการให้สุขศึกษา เพื่อให้เกิดพฤติกรรมสุขภาพ และดูแลรักษาเมื่อเกิดการเจ็บป่วย การป้องกันควบคุมโรค โดยเฉพาะในโรคติดต่อร้ายแรงให้มีประสิทธิภาพยิ่งขึ้นโดยสอดคล้องกับขนบธรรมเนียมประเพณีประชาชนพื้นถิ่นเหล่านั้น

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ACRONYMS AND ABBREVIATIONS

ARI	Acute Respiratory Infection (also called Acute Febrile Respiratory Diseases)
CDC	Centre for Disease Control
CMR	Child Mortality Rate
DALYs	Disability-adjusted Life-years
EID	Emerging Infectious Diseases
IMF	International Monetary Fund
IMR	Infant Mortality Rate
IPD	In-Patient Department
Lao PDR	Lao People's Democratic Republic
MOPH	Ministry of Public Health
MOH	Ministry of Health
NGO	Non Governmental Organization
OPD	Out-Patient Department
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization
Tao	Lao equivalent to Mr. or Mister
Nang	Lao equivalent to Mrs-Missis or Ms-Miss
Khaj	'*khai*' or fever

CHAPTER I
INTRODUCTION

1.1. Background and rationale

To date, infectious diseases are still the main causes of illness and death, killing more people than heart disease or cancer especially in developing countries (Krause 1981; Morse and Schluederberg 1990; Epstein 1992; CDC 1998; Mackenzie, Chua et al. 2001). Although scientists and policymakers in the 1960s believed that infectious diseases could be kept "under control" through the combined effects of development, sanitation, new medical technologies, and advances in the pharmaceutical industries, the incidence of infectious diseases has increased in the last two decades. Moreover, one unexpected phenomenon has been the emergence and/or re-emergence of new infectious diseases and drug-resistant diseases, whose incidence is increasing rapidly. This situation will change the global epidemiological scenario in the near future or is beginning to change it now. Actually, globalization, urbanization, and transportation lead to massive migration of people which contributes to increase the risk of epidemic or pandemic occurrence of infectious diseases around the world, in particular of acute respiratory infections (or acute febrile respiratory diseases) [ARI]) such as Severe Acute Respiratory Syndrome-SARS, Avian influenza H5N1, Swine influenza and other respiratory diseases (McConnell and Horton 2005; Taubenberger and Morens 2006) (http://www.euro.who.int/Document/).

When a set of symptoms appears in any person (for instance, fever, headache, muscle pain, etc.), it is the sign of a physical, social and/or moral disorder (Davis-Roberts 1981; Lipton and Marbach 1984; Lillie-Blanton and Laveist 1996) whatever the culture of the individual (Horacio and Manning 1979; Lupton 1995). These symptoms arise a series of questions about the nature of the disorder, its cause, and its treatment, etc. (Kleinman 1980; Hielscher and Sommerfe 1985). To answer to these questions may take some time or not, depending, for example, on the availability of money for medicine or for access to health-care services (Yoder 1989; Sauerborn,

Adams et al. 1996; Kamat 2006; Babones 2008; Luque 2008), availability of health-care services at proximity (Rowley and Jr 1984; Abu-Zeid and Dann 1985; Dutton 1986; Cheng and Chiang 1998; Pillai, Williams et al. 2003) and, also, ideology or world view on health and disease (Leslie 1980; Rose 1985; Thomas 1992; Stephenson 1995; Strathern and Stewart 1999; Sreeramareddy, Shankar et al. 2006; Gage 2007). Even when minor symptoms occur, the patient and his family seek satisfactory explanations for them (Horacio and Manning 1979; Nichter 1980; Lupton 1995). Socio-anthropological literature has shown the wide variety of perceptions on health and diseases, choices of treatment and treatment-seeking behaviours. For example, fever, which is the most common symptom of infectious diseases, has different names and meanings according to the areas and customs (Davis-Roberts 1981; Uba 1992; Kamat 2006; Gibbs and Lurie 2007; Rasbridge and Kemp 2007). Remedies are also varied (Krupinski 1984; Brainard and Zaharick 1989; Pillai, Williams et al. 2003; Lyttleton 2004; Zunzunegui, Forster et al. 2006) as are health-care facilities and providers who may range from Western doctors to different categories of traditional healers (Schiller and Levin 1988; Alberta 1994; Jiang, Elam et al. 2009).

We may wonder what happen in the case of the emergence of a new febrile disease or of a disease with unknown symptoms. For example, what were people's meanings of and reactions to severe acute respiratory syndrome or to avian influenza H5N1 when these diseases spread from their place of origin to other countries and populations? As socio-anthropological studies conducted over the world have shown, lay people's meanings of and treatment-seeking behaviours are shaped by their socio-cultural definition of health and disease (Uba 1992; Gibbs and Lurie 2007; Rasbridge and Kemp 2007) and health-care (Leslie 1980; Krupinski 1984; Brainard and Zaharick 1989; Strathern and Stewart 1999), the organization of health services (Leslie 1980; Krupinski 1984; Lyttleton 2004; Zunzunegui, Forster et al. 2006) and also by the countries' public health policies (Alberta 1994). In addition, treatment-seeking behaviours depend upon the individual's socioeconomic status (Schiller and Levin 1988; Uba 1992; Strathern and Stewart 1999). In 2003, for example, during the first SARS outbreak in Asia and Europe, the disease was perceived by lay populations as a serious threat for health (Jiang, Elam et al. 2009) because it was portrayed by physicians as a disease which develops quickly, which is

incurable (Eichelberger 2007), which has a high potential for transmission and fatal outcome (Eichelberger 2007; Jiang, Elam et al. 2009) and, also, which is of unknown origin (Tzeng and Yin 2006; Chiang and Duann 2009). Many countries launched measures for control and prevention of the outbreak (i.e. quarantine and temperature monitoring of persons arriving from affected areas, isolation of SARS suspected patients, etc.). Moreover, media broadcasting around the world showed Asian people wearing facemasks and avoiding crowded places because of their fear to contract the disease. As Chiang and Duann (2009) have argued, these measures were "the world war against SARS." But there is some doubt if the war was between humans and germs, or between humans (government officers, host countries residents, Western countries) and humans (SARS patients, non-citizen populations or ethnic groups, Asian countries) (Chiang and Duann 2009). In America, for example, Asian residents (especially Chinese people) were blamed for their food habits and practices, in particular: live market of domestic and wild animals (especially the civet cat which is thought to be the reservoir of the coronavirus); consumption of uncooked meat, etc. American people also saw them as a source of a deadly disease (Eichelberger 2007; Nandi, Tracy et al. 2008; Jiang, Elam et al. 2009). In fact, a new disease which spreads to another country poses a serious threat to the daily life of populations, the stability and growth of economies, the functioning of health systems, and the global health security.

As recent experience has showed, many infectious diseases pass easily from one area to other ones and are often associated to migrant populations (both legal and illegal) who are blamed for their bad sanitary conditions and also accused to put a pressure on health-care services in the host countries. We may wonder if the same happens in countries that share a border. For example, does ill-health of non-citizens have an impact on cross-border utilization of health-care services? At the US-Mexico border, for instance, medical and socio-anthropological studies have reported how illegal cross-border people were likely to use more emergency services of governmental hospitals than their legal counterparts (Chavez, Cornelius et al. 1985; Choi 2008) and that they represent a high public health burden for the host country because of low-income and no-coverage of national insurance. Moreover, most of them get ill from infectious diseases that don't exist anymore in the host country

(Stephenson 1995; Newbold and Danforth 2003; McDonald and Kennedy 2004; Wolff, Stalder et al. 2005; Monnickendam, Monnickendam et al. 2007; Pichainarong and Chaveepojnkamjorn 2007). Meanwhile, legal cross-border populations often seek health-care in the private sector and pay for out-of-pocket and thus represent a low public health burden for the country (Dutton 1986; Guendelman and Jasis 1992; Alberta 1994). It would be interesting to know if the same happens in the case of Thailand which shares a long border with four countries, including Myanmar, Malaysia, Cambodia and Lao PDR, by both land (about 3,205 kilometers) and sea (about 2,165 kilometers). Actually, Thailand has a better system of health services than its neighbors (Lao PDR, Myanmar and Cambodia) (Lyttleton 2004). Moreover, the policy of the Thai Ministry of Public Health [MOPH] which refers to border health-care services aims to "*promote the access to health services and improve health facilities: for instance, to improve accessibility of border populations to primary health-care, to develop a cross-border referential system, and to strengthen the capacity of public health personal, etc.*" These factors may attract the border population from neighboring countries to seek heath-care in Thailand, particularly in the case of Laotian people who share since long time natural and cultural environments with Thai people and also similar disease risks.

1.2. Research objectives

The general objective of the research is, through the adoption of an ethno-epidemiological approach, to better understand lay beliefs, experiences and practices related to health and disease among local and cross-border Laotian people.

Specific objectives are:

1) To understand Laotian lay beliefs and experiences related to fever-related illness;

2) To understand Laotian patterns of treatment-seeking behaviours in case of fever-related illness; and

3) To understand the related contexts of use health-care services by Laotian people.

1.3. Research questions

1.3.1. General question:

What are Laotian lay beliefs on health and their patterns of use of health-care services in case of fever-related illness?

1.3.2. Specific questions:

1) What is the local terminology for fever-related illness?

2) What are local perceptions of symptoms, causality, degrees of severity, impact of illness on the daily life, treatment and prevention of fever-related illness?

3) What are the treatment-seeking behaviors in case of fever-related illness?

4) What are the local perceptions of risk and models of occurrence of fever-related illness?

5) Which contexts may be related to or influence the choice of health-care services across the Lao-Thai border?

CHAPTER II
CONTEXTUAL BACKGROUND

"*Baan Pi Muang Nong*" is a Thai proverb meaning that Thailand and Lao People's Democratic Republic-Lao PDR are sister cities. It shows how the relationship between Lao PDR and Thailand is close: ***First*****,** Thailand and Lao PDR are closely related geographically. Eleven Thai provinces (Chiang Rai, Payao, Nan, Uttaradit, Loei, Pisanulok, Nongkhai, Nakornpanom, Mukdaharn, Amnajcharoen, and Ubolratchathani) and nine Lao PDR provinces (Bokeo, Oudomxay, Xayabury, Vientiane, Borikhamxay, Khammuane, Savannakhet, Saravan and Champasack) are adjacent to the border. Whereas some border provinces are located in the highland and difficult to access by road, others are of easy access by bridge or boat across the Mekong River.

Second, transportation between both countries is convenient. People of each side cross easily the border for a variety of purposes, using, for example, one of the three bridges across the Mekong River which have a noticeable impact on trade and influx of tourists (Thai, Laotian, and foreigners); or, in the case of people living along the border, crossing the Mekong in small boats in order to buy and sell goods; and, finally crossing the border or the river by foot as it is usually the case from March to July every year (when the Mekong River is dry).

Third**,** the people of both countries are *Tai people* and are closely related through a common cultural and religious heritage. The Lao People's Democratic Republic and The Kingdom of Thailand share long historical ties since at least a thousand of years; for example, they share the Mekong River, and people of the Northeastern regions of Thailand and of the Central to Southern regions of Lao PDR have relatives on both sides. Moreover, Laotian and Thai languages (especially in the northeast of Thailand) are mutually intelligible for most educated people; and both groups are Theravada Buddhists who share the same religious tradition and cosmology although they have two different political systems: democracy for Thailand and socialist republic for Lao PDR.

In the following, I give some general data on Lao PDR, the health status and the availability of health services in this country and, also, on the use of health services in Nongkhai province by Laotian people.

2.1. Lao PDR: Socio-eco-demographic data

Lao PDR is a landlocked country in Southeast Asia. It covers an area of 236,800 square kilometers, stretching a distance of approximately 1,000 km north to south, and between 200 - 400 kilometers east to west with 16 provinces, 139 districts, 10,530 villages and 958,955 households (http://www.nationmaster.com/). The most significant physical characteristic of Lao PDR is its mountainous terrain. Only 10 percent of the country is not mountainous, and this is for the most part along the flood plain of the Mekong River which is part of the western boundary with Thailand (both countries share a border of 1,800 kilometers), whereas the mountains of the Annamite Chain form most of the eastern border with Vietnam (both countries share a border of 2,000 kilometers). Lao PDR has western and northern borders with Myanmar and China, and a southern border with Cambodia. Vientiane is the capital and it is the increasing political and commercial hub of the Laotian nation. Most of the ministries, embassies, overseas development agencies, NGOs, United Nations, UNESCO and UNICEF are located there. There are also the houses of a large number of commercial banks, airline officers, tour companies and commercial centres, hospitals, packers and shippers, the country's only university (Dong-Dok), and a small international airport at Wat Tay (Lyttleton 2004; JICA 2006).

Lao PDR is the tenth poorest nation in the world. Its population has suffered through decades of war, colonization, wrenching poverty and lack of adequate infrastructure. The country has no railways, although a short link connects Vientiane with Thailand over the Lao-Thai Friendship Bridge in Nongkhai. The major roads connecting the main urban centres, in particular the Route 13 South, have been significantly upgraded in recent years, but villages far from major roads are accessible only through unpaved roads that may not be accessible year-round. In many rural areas, electricity is unavailable or is offered only during scheduled periods. *Songthaews* (pick-up trucks with benches) are used in the country for long-distance

and as a local public transport. Only 64 percent of the Laotian populations have access to safe water and 45 percent of households have septic tanks (www.nationmaster.com).

Lao PDR has a population of approximately 6.3 millions, of which 23 percent are urban and 77 percent rural. Population density varies throughout the country, with a much higher density prevailing in the Mekong River valley. For example, the population density in Vientiane is 177 people per square kilometer, while in Salavan and Sekong provinces in the south there are, respectively, 30 and 11 people per square kilometer (http://www.wpro.who.int/internet/files/hin/CHIPS2008.pdf) (Figure 2.1).

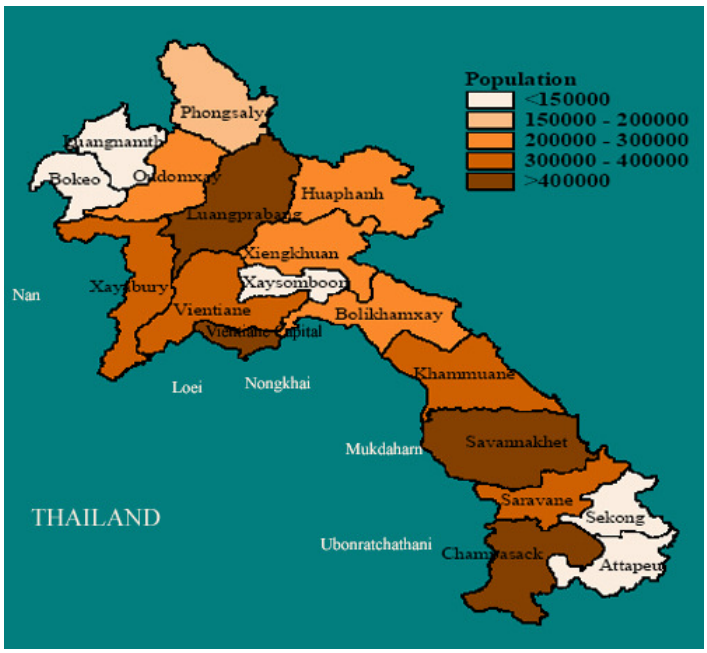

Figure 2.1 Lao People's Democratic Republic Map
(Source: Lao PDR, National Statistical Centre Committee for Planning and Investment)

The median average for all provinces is 24 people per square kilometer (JICA 2006). Lao PDR is the habitat of 47 distinct ethnic groups. Approximately 69 percent of the populations are ethnic *Lao* who constitute the politically and culturally dominant group (the same as the people living in Isan or Northeast of Thailand). The Lao belong to the *Tai linguistic* group. They are the main lowland inhabitants of the country and, together with 8 percent of other "lowland" groups, they form the *Lao Loum*. The rest of the population of Lao PDR consists in different ethnic minorities.

Hmong, Yao (Mien), Tai dumm, Dao, Shan, and several *Tibeto-Burman* speaking peoples live in isolated regions since many years. Mountain/hill-tribes of mixed ethno-cultural-linguistic heritage are found in northern Lao PDR, including the *Lua (Lua)* and *Khmu* people who are indigenous to the country. All these groups are collectively named *Lao Soung* or "Highland Laotians". *Mon-Khmer* tribes, known as *Lao Theung* or mid-slope Laotians, live in the majority in the central and southern mountains. Some Vietnamese and Chinese minorities live in towns. All ethnic groups have their own languages and customs (Lyttleton 2004; Lyttleton 2005; JICA 2006).

2.2. Health status and health services

Lao PDR has a death rate of 11.02 per 1,000 people (in 2008, it occupied the 49th position among 227 countries) and a *healthy life expectancy at birth* of 47 years for male and 47.1 for female, with 47 years for the total population. But Laotian's *life expectancy at birth* was in 2008 of 54.45 years for male and 58.47 for female, with 56.29 years for the total population (190th rank in 2008). Comparatively, Thailand occupies the 108th rank with 72.55 years. A median age (half of the people are younger and the other half are older) is 18.9 for male, 19.5 for female and 19.2 year for the total population (173rd of 224) (http://apps.who.int/whosis/data/Search.jsp).

The Infant Mortality Rate (under 5 years of age) [IMR] is 87.06 deaths/ 1,000 live births (in 2008, the country occupies the 21st of 179 positions). The country has made progress over the past 10-15 years in reducing infant mortality rates: for instance, between 1995 and 2000, the IMR decreased from 104 to 82 per 1,000 live births and the Child Mortality Rate [CMR] decreased from 170 to 106 per 1,000 live births; there is also a decrease in the prevalence of underweight children (13 percent). Nevertheless, IMR and CMR are higher in rural and remote areas where access to health-care is limited. The main causes of death of children below 5 years of age are communicable diseases, primarily acute respiratory infections [ARI], malaria, diarrhea, dengue fever, measles and meningitis. In 2002, for example, 1 percent of children presented an acute respiratory infection. Only 35 percent of children with ARI are taken to health providers and the death rate of children with a respiratory disease is of 120.75 per 1,000 people (www.nationmaster.com/).

According to World Health Organization [WHO] and comparatively with the situation in other Southeast Asian countries (see Tables 1, 2), Laotians' years of life lost to communicable diseases (71 percent) are more important than to non-communicable diseases (19 percent) and injuries (10 percent). In recent years, the most common communicable diseases outbreaks were: malaria (in 2006, the total number of reported malaria cases was 18,058 with 70 percent of the population at risk); dengue fever (2006 accounted for a total of 6,356 cases with six resultant deaths and in 2007, 5,648 cases have been reported); cholera (in 2007, in the Sekong province, in the south of the country, more than 350 cases and three case-fatalities have been reported); measles (in 2007, there were 1,678 cases, mostly in the north of the country). The more recent epidemic outbreak in the country was that of avian influenza H5N1 (2007) in commercial poultry farms and backyard poultry in Vientiane. Then, the epidemic spreads to four provinces in the north, centre and south of the country. In the beginning of the same year, two human cases with the H5N1 strain of avian influenza were confirmed by the Centre for Disease Control [CDC], WHO, and Lao PDR's authorities, both resulting in death (http://www.wpro.who.int/internet/files/hin/CHIPS2008.pdf).

Table 2.1 Years of life lost to communicable diseases, non-communicable diseases and injuries in Southeast Asian countries in 2002

Location	***Years of life lost to communicable diseases (percent)***	***Years of life lost to non-communicable diseases (percent)***	***Years of life lost to injuries (percent)***
	2002	2002	2002
Cambodia	72.0	22.0	6.0
Lao PDR	**71.0**	**19.0**	**10.0**
Myanmar	60.0	29.0	11.0
Thailand	43.0	40.0	17.0
Vietnam	40.0	44.0	16.0
Malaysia	26.0	58.0	16.0

(Source: http://apps.who.int/whosis/data/Search.jsp)

Modern health services in Lao PDR are still limited, particularly in rural areas. 20 percent of the rural population is distant from more than thirty kilometers from a hospital, and 29 percent is far from more than ten kilometers from the nearest health centre (http://apps.who.int/whosis/data/Search.jsp). In a 2002-2003 household survey, 56 percent of the total population reported health problems that disrupted work. One fifth of them did not seek health-care because of the distance and/or the economic cost of health services. Patients who live in rural areas (hence, at long distances from the health centres) generally travel to a health centre only in case of a severe disease (Stoca 1983).

Population per doctor in Lao PDR is approximately 255 people and per nurse and midwife it is about 16,836 people. The proportion of hospital beds is approximately 1.2 per 1,000 people. Lao PDR occupies the 153th range among 191 countries. Comparatively, Thailand, with a proportion of hospital beds of 2.2 per 1,000 people, occupies the 144th rank (see Table 2). The top five countries are Monaco, Virgin Island, Greenland, Japan and Mongolia, with, respectively, 19.6 beds, 18.7, 14.3, 14.3 and 11.5 per 1,000 people (www.nationmaster.com/). However, the discrepancy between one doctor per people in Lao PDR and in Thailand must not overlook the fact that the standard of medical doctors training in Lao PDR may be lower than in Thailand (Lao PDR medical authority, personal communication, June 2009). Actually, comparatively with Thailand, Lao PDR is limited in health-care services (see Table 2.2).

Table 2.2 Comparative data between Lao PDR and Thailand on total population, death rate, number per people of hospital beds, doctors, nurses and midwives in 2006.

Statistics	***Lao PDR****	***Thailand****
Total population	6.3 million	63.4 million
Death rate: 1000	11.2	7
Hospital beds: 1000	1.2	2.2
One doctor per people	255	2,975
One nurse and midwife per people	16,836	2,810

* Source: www.nationmaster.com/

Poor health conditions and health-care services in the homeland may induce people living around the border to seek health services in neighboring countries. Actually, the Nongkhai Provincial Health Office of the Thai Ministry of Public Health reported recently 5,880, 10,398, and 7,760 cases (in 2004, 2005 and 2006, respectively) among Laotian people who seek treatments in the hospitals' Out Patient Department [OPD] in the Nongkhai province, the top five diseases being problems of the digestive, respiratory, skeleton and muscular, blood circulation and urinary tract systems (2,400, 2,050, 1,038, 442, and 440 cases, respectively). In 2006, 1,326 Laotians were hospitalized in a hospital of Nongkhai, an increase from 2004 and 2005 when 1,157 and 1,243 cases of hospitalization have been respectively reported (http://wwwnko.moph.go.th/). It is therefore necessary to better understand why Laotian people seek treatment in the Nongkhai provincial hospital facilities

CHAPTER III
LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Infectious diseases have shaped human history. They have profoundly affected culture (Morley 1978; Mull 1997; Manderson 2002; Nguyen and Peschard 2003) and biology (Morley 1978; Inhorn and Brown 1997). They are the main causes of morbidity and mortality in many developing countries and highlight the limits of humans to prevention and control (Brown 1997; Inhorn and Brown 1997). In the 1960s, medical scientists and policymakers believed that infectious diseases could be controlled by sanitation (i.e. food-and water-borne diseases), medical technologies (i.e. virus and bacteria DNA sequencing), and new drugs or vaccines recovery (new antiviral drug, H5N1 Influenza vaccine), etc. The last three decades, however, have seen the emergence and/or reemergence of infectious diseases over the world. They have also high lightened the difficulties to protect against and control these diseases because the latter pass freely from endemic or epidemic areas or countries through the movements of passengers, goods and animals. Besides the international concern and preparedness for infectious disease outbreaks (CDC 1998), the understanding of local beliefs and practices related to infectious diseases, including the local patterns of use of health services, is important (Manderson 2002). It is important because cultures vary in their perceptions and practices related to the body, health and disease and these differences have an impact on health-seeking behaviors and utilization of health-care services.

In this chapter, I review lay beliefs and practices related to health and disease, health-seeking behaviors and contexts related to use of health-care services by drawing on data through the available socio-anthropological literature. I also describe the ethno-epidemiological approach which I have adopted in this research before to summarize the conceptual framework of the thesis.

3.1. Lay beliefs and practices related to health and disease

Health and illness are social phenomena (Kleinman 1988) because few health disorders occur in a random fashion and illness frequently varies according to social group, class, gender, ethnicity, or age. Health and illness are not only socially patterned but an individual's social position may have an important bearing on his experience with the disease. Moreover, beliefs and practices on health and disease may change according to the time (Fabrega 1997). In fact, health and illness are inevitably caught up into the social relationships that constitute people everyday lives and the wider society. One cannot 'be ill' without being simultaneously aware of the need to account to others one's change in health status.

3.1.1. Perceptions on ill-health

People around the world would like to be healthy throughout their life. The WHO's definition about "health" is:

"*A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*" (http://www.who.int/about/definition/en/print.html;

"Better health is central to human happiness and well-being. It also makes an important contribution to economic progress, as healthy populations live longer, are more productive, and save more. (http://www.who.int/hdp/en/index.html)"

However, lay perceptions on health and disease may be different from the biomedicine view. Actually, they are untimely tied to the definitions and modes of construction of the 'human body' (Helman 1990). Human body has a social as well as a physical reality because the body is a way of communicating information about its owner's position in society, its gender, social status, occupation and membership in certain groups, both religious and secular. Karasz and collaborators (2007) who studied the cultural differences in the experience of symptoms among South Asian migrants and European American women in U.S.A. showed, for example, that episodes of fatigue, body pain and headache were common complaints of Southeast Asian migrants, whereas depressive and anxiety problems were the most commonly health problems reported by European women (Karasz, Dempsey et al. 2007). They

also found that European women were much more likely to draw on biomedical categories in labeling their symptoms than Southeast Asian migrants. In addition, Southeast Asian migrants seemed to be less aware of formal diagnostic labels and often could not generate a specific label for their health complaint. For his part, Russell (1984) in Uganda found increasingly lay expectations for help with patients requiring long term support such as AIDS/HIV patients, cancer, etc., including patients which minor signs and symptom such as fever or mild pneumonia, for example (Russell 1984).

What are the causes of a disease? Actually, the reasons may vary from one group of people to another throughout the world (Kleinman 1988; Kleinman 1988; Brainard and Zaharick 1989). Generally people attribute their illness to more than one cause. In fact, lay perceptions and beliefs on health-ill are varied and mixed up (Klein 1978; Kleinman and Sung 1979; Kamat 2006). For example, Laotian and other Southeast Asian's views of physical and mental wellness are tied to the person's ability to sleep and eat without difficulty. Inclusive, some traditional or popular commercial medicines are intended to increase both appetite and sleep.

According to a Laotian proverb "*bor mee bai ham mae ying tue pa bor hai prasut dai* (nobody can control the delivery of a woman)", "*bor mee bai ham bor hai kruba bor hai la suek dai* (nobody can control when a monk disrobes i.e. leaves the *sangha*)", "*laew ka bor mee bai ham khon bor hai tai dai* (and nobody can control when a person dies)". Thus, there may be an acceptance of fate with the perspective that what happens now is related to the past (including the past life) (Brainard and Zaharick 1989). In this context, Brainard and Zaharick (1989) have shown the variety of perceptions on disease causation among Laotian people. Illnesses may be attributed to: soul loss, spirit aggression, sorcery attack, food poisoning, body imbalance, and germs or viruses as in the biomedical view (see also (Ratanakul 1996)).

Soul loss: Laotian people believe that thirty-two *Kwaun* (or "soul") reside in a person's body at birth and that these souls come from her ancestors. If any one of them wander, is startled, or driven out of the body by any cause such as the seduction by malevolent spirits or being scared by car accident or travel, for example, the person may experience illness, psychological or emotional problems, and even die. Generally, a ceremony for the return of the *Kwaun* to the body is performed. Good health is

restored only when the *Kwaun* returns to the body. Especially travel seems to bring an increased vulnerability to the traveler. Hence, protective spirits (see *infra*) are asking to come into the body before and after traveling. In general, a family member may perform the ceremony before the travel, but an *acharn* ("teacher or healer") is preferred for the ceremony after the return of the traveler (Brainard and Zaharick 1989; Ratanakul 1996). Neighboring peoples (i.e. Thai, Vietnamese, etc.) share the same belief in souls and soul loss (Brainard and Zaharick 1989; Ratanakul 1996).

Spirit aggression: There are many types of spirits or *phii* and they can be benevolent or malevolent. *Phii* are associated with the Buddhist temple, the household, the village, the river, and the forest. Special shrines or altars are often constructed where offerings of food are made to the spirits. Malevolent *phii* may come into being at the death of a child, or when an adult dies suddenly in an accident. Since many deaths occur in hospitals, people fear these places because of the malevolent *phii* that may linger nearby. Other types of malevolent *phii* may possess people, giving them dangerous and often deadly powers. Such people are greatly feared and, in the past, they were put to death by villagers.

Sorcery attack: Sorcerers have supposedly the power to cause serious illnesses or death by inserting, through the use of spells, a "foreign matter" (e.g., spine, skin of animal, needle, etc.) into the abdomen of the victim. These sorcerers also gain their power through the invocation of malevolent *phii.*

Food poisoning: Contaminated food may cause illness when eaten. Food may be contaminated by natural means (micro-organisms) or by the willful action of an agent such as a sorcerer, for example. Conversely, instead of bringing about illness, blessed food is believed to restore health (Brainard and Zaharick 1989; Ratanakul 1996).

Body imbalance: Theories of illness related to the notion of body imbalance include the theories of humoral pathology and of *Yin-Yang* and "are held by the majority of Asians" (Galati 1991). When the four elements (earth, water, air, and fire, according to the Lao people) of the body are out of balance, illness may result (Brainard and Zaharick 1989; Ratanakul 1996). For example, a trouble with the air or wind element may bring a cold or a headache whereas fever may be due to an excess of the fire element.

Germs and/or viruses: This belief is similar to that of Western people. In some cases, germs are seen as the cause of illness.

These are the main causalities of diseases recognized by Laotian people according to the available socio-anthropological literature but there are no indications of how Laotian people resort to these different causes in the case of a specific disease. Since no data exist on Laotian lay beliefs, experiences and practices related to fever-related illness, the next sub-chapter will make use of anthropological data on these diseases from other parts of Asia and of the world.

3.1.2. Perceptions related to fever-related illness

In biomedicine, 'fever' refers to the augmentation of body temperature and it is the most common symptom of infectious diseases, for example, dengue fever (Coreil, Whiteford et al. 1997), malaria (McCombie 1994; McCombie 1996; Kazembe, Appleton et al. 2007), measles (Mull 1997), pneumonia (Cody, Mull et al. 1997), influenza and/or avian influenza (Buranathai 2003; Drosten, Preiser et al. 2003; Doiecek, Jong et al. 2005).

"Fever is the temporary increase in the body's temperature, in response to some disease or illness. A child has a fever when temperature is at or above one of these levels: 100.4 °F (38 °C) measured in the bottom (rectally; 99.5 °F (37.5 °C) measured in their mouth (orally; and 99 °F (37.2 °C) measured under their arm (axillary). An adult probably has a fever when their temperature is above 99 - 99.5 °F (37.2 - 37.5 °C), depending on what time of the day it is." www.nlm.nih.gov/)

"Fever is an important part of the body's defense against infection. Many infants and children develop high fevers with minor viral illnesses. While a fever signals to us that a battle might be going on in the body, the fever is fighting for the person, not against. Most bacteria and viruses that cause infections in people thrive best at 98.6 °F." (The US national library of Medicine and the National Institutes of Health website, www.nlm.nih.gov/).

Actually, fever is one of the body's natural defenses against bacteria and viruses and the body's defense mechanisms seem to work more efficiently at a higher temperature (Guyton and Hall 2000). In this sense, fever is not considered as medically significant until body temperature is above 100.4 °F (38 °C). For an adult, a fever may be uncomfortable, but usually it isn't dangerous unless it reaches 103 °F (39.4 °C) or higher. However, for young children and infants, a slightly elevated temperature may indicate a serious infection. When body temperature rises beyond a critical level (104 °F, 40 °C or higher), the person is likely to develop a *heatstroke* which requires immediate home treatment (tepid sponge, uncovering the body, drink fresh water, medicines to low fever, etc) and subsequent medical attention, as symptoms may result in dizziness, abnormal distress, vomiting, sometimes delirium and convulsions, particularly in children. These symptoms are often exacerbated by a circulatory shock brought on by excessive loss of fluid and electrolytes through the sweat. Moreover, the degree of hyperpyrexia (very high body temperature) damages the body tissues, especially of the brain. Actually, even a few minutes of hyperpyrexia may be fatal for the person (Guyton and Hall 2000).

However, the level of the fever doesn't necessarily indicate the seriousness of the underlying pathological condition because fever is just one part of an illness, many times no more important than other symptoms such as cough, sore throat, difficulties of breathing, etc. A minor illness may cause a high fever and a more serious illness may cause a low fever. Usually, if left untreated, a fever goes away within a few days. A number of over-the-counter medications may lower a fever, but sometimes it is better to leave fever untreated because of its important role in the defense of the body against infections (www.nlm.nih.gov/).

Other medical systems may, however, conceive fever differently. Socio-anthropological studies conducted over the world have shown that names and meanings of fever vary according to the areas and customs. For example, fever is named *khun* in Cambodia, *homa* in Zaire (Davis-Roberts 1981), *paludism*o in Mexico (*paludismo* also means a malaria-like illness, and wasting) (Fabrega and Hunter 1978) and *khaj* in Thailand (Brun and Schumacher 1994). This last term is also used in the more general sense of “being sick” as, for example, in the expressions *khon khaj* which means a “patient”, and *pen khaj* “to be sick or to have a fever”, etc. It may or may not

be prefixed to the name of the disease (Brun and Schumacher 1994). For example, the common cold is denominated in Thai and Lao languages *pen khaj wat* "common cold with fever": here, fever is the first symptom of the disease which is characterized by other clinical manifestations, for example, headache, rhinitis, sore throat, and, sometimes also, cough (Lyttleton 2004; Tomecko 2009). In addition, acute febrile respiratory diseases, Hussain and collaborators (1997) have shown that lay populations in Karachi, Pakistan, have different criteria for recognizing pneumonia. The main indicator of recognition and of severity of pneumonia is *pasli chalna* (chest in drawing) followed by the presence of a high fever and signs and symptoms related to the quality of breathing, lethargy and anorexia (Hussain, Lobo et al. 1997). Similarly, Hildenwall and collaborators (2007) who studied childhood pneumonia in eastern Uganda showed that difficult and/or fast breathing was an indicator of the disease's severity (Hildenwall, Rutebemberwa et al. 2007). Another example is *khaj satog* which occasionally refers to fever with chills and, in other cases, is similar to the febrile convulsions of biomedicine although its meaning is different (Brun and Schumacher 1994). In Thailand or in Uganda, fever may also refer to the beginning of the menstrual period and/or to an amoral conduct (Brun and Schumacher 1994; Graham 1997; Kamat 2006; Hildenwall, Rutebemberwa et al. 2007). Other significations of fever have been reported in the ethnographic literature: for example, it may be seen as a rise in the body temperature which occurs after a seasonal variation of the weather (e.g., passage from a hot to a cold temperature or the contrary) such as at the end of the rainy season and/or the beginning of winter. In some cases, it is associated to a hard work. Finally, a fright may be the cause of fever in children (Westermeyer 1988; Brun and Schumacher 1994; Graham 1997; Lyttleton 2005). While, local perception of the causality of ARIs in Pakistan is the exposure to cold through a variety of mechanisms, for example, climatic changes, hot-cold imbalance, and exposure to cold in a lactating mother, etc. while the concept of contagion is non-existent (Hussain, Lobo et al. 1997).

In *Zaire* (once Democratic Republic of the Congo), the child fever may sometimes be explained by the wrong sexual relations of a parent or of another family member, for example, when sexual intercourse was practiced too soon after the birth of a child (Davis-Roberts 1981). Wrong sexual relations can also be the cause of a mortal illness in infants or of the death of women in childbirth. In Pakistan, according

to Mull (1997), the fever and the rash of measles are associated by local people to the doings of the angry *Hindu goddess Kali*, also known as *Sitala* (Mull 1997). Actually, the goddess *Sitala* is simultaneously regarded as protective and destructive. Her nature is cool, but when she is angry she becomes heated and attacks children with a pox disease. In this case, the parents of a child attacked by measles make worship (*puja*) to render *Sitala* happy in order that the child will recover rapidly. In the case of a measles epidemic, parents may also worship to the goddess in order to prevent the disease to attack their child. According to the biomedical perspective, fever is very high before the rash of measles becomes confluent on the skin (Mull 1997). Comparatively, Davis-Robert (1981) showed that, in Zaire, fever may refer at the same time to the wind penetrating the pores of the human body (in the case of a general fever) and to the chills and coldness that precede the onset of the hot stage of the measles (Davis-Roberts 1981) (see also (Mull 1997)). Obviously, treatment-seeking behaviours are intimately related to the etiological perceptions of the disease (Hildenwall, Rutebemberwa et al. 2007). In the case of the *Sitala* syndrome or child's measles in Pakistan, for example, seventy per cent of mothers interviewed by the researcher said that no doctor should be consulted and no medicines should be taken, even simple fever medications (Mull 1997). Only the worship of the goddess *Sitala* could resolve the situation.

3.1.3. Health-seeking behaviours

The understanding of disease causation, its dynamics, and treatment modalities varies according to the cultures and societies. The appearance of a set of symptoms or of an illness will generate a pattern of actions which are related to the social and cultural background of the ill person (Fabrega and Manning 1979; Calnan 1987). These actions, that we call health-seeking behaviours, include: perceiving and experiencing symptoms (i.e. different terminologies may refer to the symptoms of fever, malaria and pneumonia); labeling and valuating the disease; sanctioning a particular kind of sick role; deciding what kind of treatment to use; applying treatment and valuating the effect of self-treatment and therapy obtained from other sectors of the health-care systems (traditional healers, local pharmacists, Western medical doctors, etc.) (Hildenwall, Rutebemberwa et al. 2007).

3.1.3.1. Self-care treatment

Self-care treatment refers to the activities which are undertaken by the sick persons on their own and which may consist in self-medication (herbal medicines, Western medicines, etc.); self-monitoring of body temperature or breathing; consulting the manuals or other types of health education material which give information and advice about physiology or pathology, etc. (Hielscher and Sommerfe 1985). Self-treatment is usually the first step for the treatment of mild and well-known symptoms in the majority of societies (Hielscher and Sommerfe 1985). It has been found, for example, that in Malaysia, Papua New Guinea and Bahamian island, more than seventy per cent of illness episodes are diagnosed and managed at home or in the community (Halberstein and Davies 1979; Heggenhougen 1980; Hamnett and Connell 1981).

According to the socio-anthropological literature, the means to resolve episodes of fever and respiratory problems are extremely varied. Nsungwa-Sabiiti and collaborators (2004) showed, for example, that thirty-five percent of people in developing countries use traditional remedies, for example, herbal treatment, plants and other materials (e.g., gold, shell, frog or toad skin, etc.) for home management of fever and malaria (Nsungwa-Sabiiti, Ka¨llander et al. 2004). In Zaire, it has been showed that mothers use simultaneously Western medical doctors, traditional healers and diviners in case of a child presenting with a high fever and a swelling on the head (Davis-Roberts 1981) whereas in eastern Uganda, they use at home Western drugs such as antipyretics for high fever and antibiotics for the breathing problems in case of pneumonia in their children (Hildenwall, Rutebemberwa et al. 2007).

With regard to Laotian people, socio-anthropological literature seems to indicate that ill persons look first to the family and/or the community to give a signification to their health problem and that, usually, they use herbal remedies or also Western medicines at home (Lyttleton 2004). According to Brainard and Zaharick (1989), for example, over half of the households sampled in Lao PDR used at home medications purchased from village pharmacies in case of fever, cough, diarrhea, headache, vomiting, and other common illnesses (Westermeyer 1988). However, when the loss of a *Kwaun* is thought to be the cause of the problem, a

ceremony is soon performed by a family member, a elder, or, when possible, an *acharn* or by another kind of traditional healer (*mo*, see *infra*) (Westermeyer 1988; Tomecko 2009). The purpose of the ceremony is to call the *Kwaun* back to the body. Another traditional route of treatment is to go to the temple, where prayers and *lustral water* will be used to address the problem (Westermeyer 1988; Tomecko 2009). In case of failure of this traditional treatment, the last resource in this case is to seek treatment at a clinic or a hospital.

3.1.3.2. Traditional healers

If the self-treatment fails, the patient may turn towards traditional healers and/or Western medical doctors (see 3.1.3.3.). There are different kinds of traditional healers, such as, for example in rural Mali, the herbalist (*furabola*), the magician (*diyosona*) and the diviners (*golonfila* and *tiyendola*) (Hielscher and Sommerfe 1985).

According to the socio-anthropological literature, rural villages in Lao PDR distinguish various types of traditional healers ***(mo)*** whose range of action varies accordingly: the ***mojad*** ('connecting' specialists) who are consulted for broken bones, serious cuts and/or bleeding*;* the ***moyaa*** (herbal specialists) who are consulted for a variety of conditions known to be amenable to herbal remedies, ranging from common ailments like fevers, diarrhea, coughs and minor cuts, to more serious conditions, like, for example, malaria and jaundice; the ***mopau*** ('blowing' specialists) who use a wide range of methods of treatment in addition to blowing, including the use of herbs, and who treat a diversity of health complaints, for example, toothaches, eye infections, mouth blisters, and cuts. Blowing techniques (traditional healer prays and blows wind into an ill person) are practiced in order to expel the evil ***phii*** ('spirits') from the patient's body. Evil spirits are frequent explanations for health problems which resist to symptom-directed treatment which tends to be used for problems assumed to have an organic cause. Finally, there is also the ***motam*** (the ***mo*** 'who has the sacred words') who specializes in communication with the spirit world, attempts to bargain with the spirits on behalf of his patient, whose relatives fulfill their part of the bargain with an offering of alcohol and food to the spirits, including the sacrifice of a pig, chicken, or a cow (Westermeyer 1988; Tomecko 2009).

These traditional healers use different methods of treatment such as the *khout lom* or coining which consists in the use of a coin and mentholated medicine to rub the chest, back, upper arms, or neck in one direction with resulting ecchymosis; the pinching which is used in a prescribed manner (rubbing the temples, pulling forward to the eyebrow and nose, and pinching the nose) to relieve headache; the cupping which is performed by fixing a piece of cotton in the bottom of a glass, lighting the cotton on the fire, and placing the open mouth of the glass on the sick person's back in order to create a vacuum (and contusion) which thus draws the wind out of the body; the massage and body manipulation which is performed by elders and others with knowledge of healing techniques, etc. Herbal medicines play also an important role, the knowledge of which has been passed down through the generations by family members. Such remedies often include the ingestion of water into which herbs or other materials (e.g. corn cobs, clay, bee nests, lizard juice, snake bile, opium, pre-masticated night crawlers, coconut juice, etc.) have been steeped. Some complaints treated with these remedies may include fevers, stomach aches, asthma, kidney stones, mumps, convulsions, toothaches, diarrhea, chicken pox, cough, flu, and rash (Westermeyer 1988; Brainard and Zaharick 1989). Gathering such substances usually involves the reciting of prayers and other prescribed means in order to take them respectfully from the earth or from elsewhere. In some cases, the medicine or combinations of medicines are soaked or dissolved in vodka (called “wine”) and hence consumed in small quantities. Commercial preparations from Asia and elsewhere are also used by many Laotians (Brainard and Zaharick 1989; Manderson 2002).

3.1.3.3. Patterns of use of health-care services

The goal of a medical system is to provide optimal care for all patients (Galati 1991). According to WHO:

Many factors influence health status and a country's ability to provide quality health services for its people. Ministries of health are important actors, but so are other government departments, donor organizations, civil society groups and communities themselves. For example: investments in roads can improve

access to health services; inflation targets can constrain health spending; and civil service reform can create opportunities - or limits - to hiring more health workers. (http://www.who.int/hdp/en/index.html)

Health systems can primarily improve the health of individuals and populations by delivering high-quality services to those who may benefit from them (Hielscher and Sommerfe 1985; Yoder 1989; Shengelia, Tandon et al. 2005). Over the last two decades, an extensive literature on the demand for health-care has emerged. The focus of this strand of research has been on exploring the factors that may explain the volume of utilization of health-care services and the choice of the providers (e.g., price, availability, perceived quality, insurance, communication, etc.). Actually, the decision to use health-care services may depend on various factors, for example, the result of previous treatments, the quality of medicines, the attitude of providers (welcomed, discriminatory, etc.), the quality of the information given to the patient on his illness, the treatment, etc., the quality of the communication between health professionals and patients, and also the conditions of the follow-up of the treatment.

3.1.4. Contexts related to health seeking behaviours

The appearance of fever-related illness in any community poses a serious challenge for the health workers because the sick person and her family use beliefs and values about illness that are part of the cognitive structure of the popular culture and also because of the variability of socio-economic, geographical and organizational aspects that may impact on the disease and its management (Fabrega and Manning 1979; Calnan 1987).

Socio-economic: Economic or socio-economic conditions (i.e. income, educational level, etc.) are often cited as important elements in disease incidence and/or health-seeking behaviours (Hielscher and Sommerfe 1985; Dedeoglu 1990). They affect the health status of a population. Actually, mortality and morbidity inequalities exist between the rich and the poor, men and women, urban and rural settlements, educated and illiterate (Dedeoglu 1990; Nakaya and Dorling 2005). For example, lower infant mortality rates (particularly in children under six years of age) are usually

reported among people with mid-and high socio-economic conditions (Dunn and Dyck 2000). The same is true for adult mortality rates (Anderson 1986; Finegold and Wherry 2002). Moreover, low death rates from infectious diseases, such as respiratory tract infections, have also been associated with higher socio-economic conditions (Wagstaff, Pa et al. 1991) whereas high death rates from the same category of diseases seem to be linked with low income, poor housing, unemployment and malnutrition (Qiang, Biao et al. 2003; Tzeng and Yin 2006).

Socio-economic conditions also affect people's health-seeking behaviours. For example, US citizens who have higher socio-economic conditions tend to use more the private health sector and pay for out-of-pocket while people with lower socio-economic conditions resort more to the public health sector (Guendelman and Jasis 1992). In some communities of South Africa, for example, the access of women to healers or to health-care services outside the community depends on the males permission (i.e. father, husband or male relative) (Anderson 1986; Allotey and Gyapong 2005) or to the men's willingness to take them to the health services (Sermsri, Pummanpuen et al. 2005). In Thailand, Sermsri and collaborators (2005) found that women seek more health-care from the government health centres which are near their home (this may be related to their children's illness) (Hildenwall, Rutebemberwa et al. 2007) while men are more likely to seek health-care in government and/or private hospitals which are sometimes distant from home (Sermsri, Pummanpuen et al. 2005). In a study on the factors that predict treatment-seeking behaviours in the case of a childhood disease, Consistence, Sreeramareddy and collaborators (2006) showed that maternal education, number of symptoms, perceived severity of the disease and family income may influence the use of health-care services according to the society, the contexts, and the times (Anderson 1986). Finally, some studies showed that in response to the same symptoms of a given minor illness, women consult more a general practitioner than men (Celentano, Linet et al. 1990; Wyke, Hunt et al. 1998) and that they prefer to visit traditional healers in their community rather than to travel for seeking health-care services.

Geography: Geographical distance and/or localization have also been recognized as important elements in the utilization of health-care facilities (Wong, Chau et al. 2009). In a study of the relationship between distance and utilization of

health-care services in an elderly group in rural Vermont, USA, Nemet and Bailey (2000) found that an increased distance from health providers reduces their utilization (Nemet and Bailey 2000). The same can be said for rural Nigeria where the density of Western-type health facilities per capita is often low and where utilization per capita was declining exponentially with distance. Actually, the relation between distance and level of use of health-care services varies according to the type of health-care providers, socio-demographic variables and also to local perceptions on health and illness and about specific illnesses (Stoca 1983).

Organization of health-care services: The decision to seek care in health services is also often related to their organization (Shengelia, Tandon et al. 2005). In this respect, Thomas (1992) introduced the concept of typology of access to health-care services in which he distinguished four components: affordability, accessibility, availability, acceptability. In this study, however, we will focus only on three of them (accessibility, availability, and acceptability) because it is difficult to make a distinction between affordability and the other components.

1. Availability: It is a system design protocol and its associated implementation that ensure a certain degree of operational continuing during a given period. Users want their systems, for example wrist watches, hospitals, airplanes or computers, to be ready to serve them at all times. Availability refers to the ability of the user community to access the system, whether to submit a new work, to update or alter an existing work, or to collect the results of a previous work. If a user cannot access the system, it is said to be unavailable. Generally, the term "downtime" is used to refer to the periods of unavailability of a system.

2. Accessibility: It is a general term used to describe the degree to which a product, device, service, or environment is accessible by as many people as possible. Accessibility can be viewed as the "ability to access" and possible benefit of some system or entity. Accessibility is often used to focus on people with disabilities and their right of access to entities, often through the use of technology. Accessibility should not be confused with usability which refers to the extent to which a product (e.g. device, service, and environment) can be utilized by a specific user in order to achieve specified goals with effectiveness, efficiency and satisfaction in a specific context of utilization.

3. Acceptability: It refers to "the quality of being acceptable (or acceptableness) or capable of being accepted; pleasing to the receiver; satisfactory; agreeable; welcome**;** meeting only minimum requirements; barely adequate; capable of being endured; tolerable; bearable." Acceptability of health is viewed as a "commodity", health can be bought and sold and individuals are defined as health-care "consumers, people who are able to make their own decisions about the care they receive, as such decisions about what to drink or to eat, for example" (Henderson, Akin et al. 1994).

Health-seeking behaviours affect the health situation not only domestic but also of neighboring countries as well as international health (Fabrega and Manning 1979; Chavez, Cornelius et al. 1985; Guendelman and Jasis 1992; Alberta 1994). Differences in health standards, treatment protocols and quality of health services between countries which share a border may lead people to seek health-care services across the border (Alberta 1994; Lyttleton 2004). Up to now, there is no information available on patterns of use of health services by Laotian people in case of an acute febrile respiratory disease and this is the purpose of the present research.

3.2. Ethno-epidemiological approach

Ethno-epidemiology is the incorporation and the direct product of efforts to build collaborative approaches between two health-related research disciplines: ethnography and epidemiology (Agar 1976; Agar 1996; Miller 2004).

Ethnography or the ethnographic approach is a qualitative research method often used in social sciences, particularly in anthropology and sociology. It is employed for gathering empirical data on human societies/cultures. Ethnography aims to describe, highlight the system of thoughts, meanings and life styles of a given community (an *ethnos*) (Agar 1976; Agar 1996; Miller 2004); in other words, to emphasize and make understandable the emic (or inside) point of view of the studied people. As Helman (1991) notes in "Culture, Health and Illness":

The ethnographic approach involves the study of small-scale societies, or of relatively small groups of people, to understand how they view the world and

organize their daily lives. The aim is to discover in so far as this is possible-the actor's perspective of member of that society (p.6) (Helman 1991).

Epidemiology or the epidemiological method is the study of the distribution, causes, impact and control of diseases in a population. It is often called the "basic science" of public health (Béhague, Gonçalves et al. 2008). Epidemiology asks the "Who", "What", "When", "Where" and "Why" of the many determinants of population health and disease. The use of epidemiology to battle dramatic outbreaks of infectious diseases is probably the most well-known public fact of epidemiology (www.cdc.gov/mmwr/PDF/wk/mm5418.pdf). As defined by Helman (1991):

The epidemiology is the study of the distribution and determinants of the various forms of disease in human population. Its focus is not on the individual case of ill-health, but rather on groups of people, both healthy and diseased.

The factors most commonly examined are the age, sex, marital status, occupation, socioeconomic position, diet, environment (both natural and man-made) and behaviour of the victim. Their aim is to uncover a causal link between one or more of these factors and the development of the disease (p.267) (Helman 1991).

The development of the ethno-epidemiological approach reflects several trends in public health and medical anthropology, including: 1) the awareness of the necessity of mixed-method research designs and multidisciplinary research teams in the investigation of health risks (beyond the quantitative epidemiological triad of host, agent, and environment); 2) the increasing emphasis in medical anthropology on systematic data collection and analytic strategies and a corresponding decline among quantitative researchers in the critics of ethnography as being unscientific; and 3) the growing understanding of strategies for the triangulation or integration of different types of data (Agar 1996).

Ethno-epidemiology is thus an emergent cross-disciplinary health research methodology that combines the strengths of ethnographic approach (such as, direct participant observation and other qualitative methods) for the understanding of socio-cultural meanings and contexts with the design, sampling, data collection, and analytical tools and strategies focusing on risk factors and disease outcomes developed

in epidemiology but, however, with a shift in the meanings of the latter. For example, if we consider three important analytical tools in epidemiology, such as "host", "agent" and "environment", "host" which refers in epidemiology to "actor" (in the context of this research, any person with a history of fever-related illness) will be translated in ethno-epidemiology as "actor's meanings" (i.e., perceptions of fever-related illness); in the same way, the conception of "agent" (i.e., germs, biological articles, etc.) will shift to a psychosocial unit of study (i.e. reactions to the disease, treatment-seeking behaviours, etc.) and "physical environment" will be more concerned with the context of incidence of a given illness (Agar 1996).

3.3. Conceptual framework

To understand local/indigenous peoples and communities' perceptions and practices related to health and disease (i.e. local perceptions of disease's causation, spread, prevention, and treatment, treatment-seeking behaviours, etc.) requires the understanding of the impacts of beliefs on disease epidemiology, experiences, and health-seeking behaviours. These beliefs provide insights into which kind (traditional, modern) of health-care services people will use or not in particular settings and also the rationality of their choices.

In this context, the present research which was conducted in three Laotian communities in Lao PDR, near the Lao-Thai border (see Table 3), aimed to collect data on:

1. The Ethno-epidemiology of fever-related illness: since the onset of a symptom or of a disease, the patient tries to find a meaning to it and copes with questions such as "What happened" or "What is wrong in my body?" It is the self-diagnosis. The answer to this question is influenced by the patient's social and cultural background, including his eventual past experiences with fever-related illness. Sometimes, he may find the answer by consulting his relationships such as family members, friends and/or community members.

2. Health-seeking behaviours: the patient will engage in a specific health-seeking behaviour according to his perception of the causality of the disease, its severity, his eventual past experiences with it or with a disease with similar symptoms and also according to the availability and accessibility of health-care services in his

community, in the neighbouring city or across the border. The evolution of the disease and, in particular, the appearance of other symptoms or its reaction to the treatment adopted, also influences the recourse to health-care services: self-care treatment (traditional or Western medicines) (2.1), recourse to traditional healers (2.2) and/or to health-care services in the community or in the city, including across the Lao-Thai border (2.3). Finally, socio-economical conditions, geographical distance and localization as well as modalities of organization of health-care services may also influence the health-seeking behaviours of patients (see Contexts related to health-seeking behaviours).

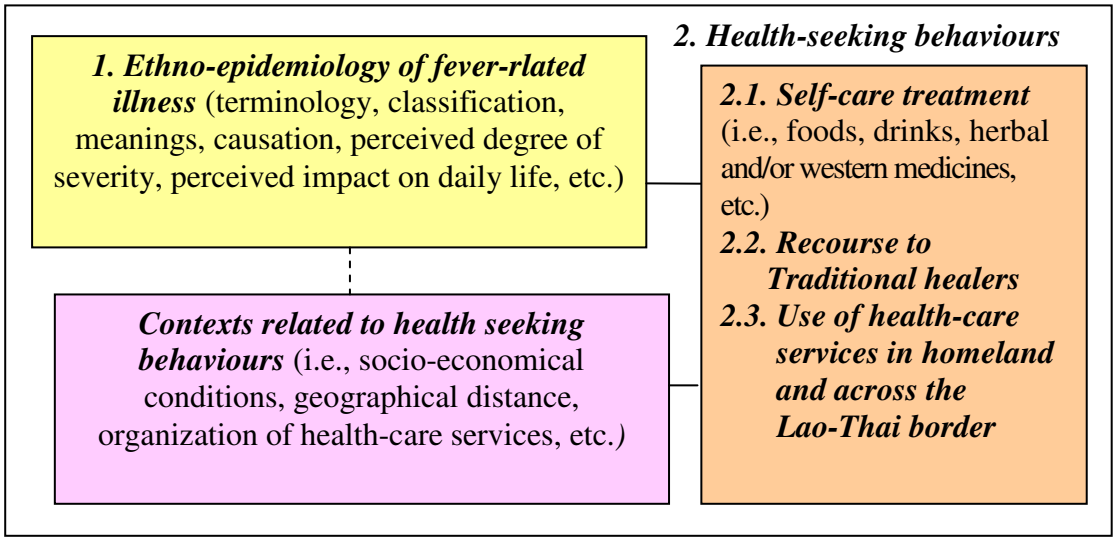

Diagram 3.1 Conceptual framework

CHAPTER IV
RESEARCH METHODOLOGY

This qualitative research aimed to study lay beliefs, experiences and practices regarding fever-related illness, treatment-seeking behaviours, utilization of health-care services (domestic and in Thailand) and local perceptions of risk and models of occurrence of these illnesses among Laotian people who live near the Lao-Thai border. This study adopted two methodological features in-depth interview and participant observation. The research methodology is discussed in details below.

4.1. Study site

The site of the study which was selected through the purposive sampling method was Nongkhai province (north-east of Thailand). It was chosen because of its location at the opposite of Vientiane, the capital of Lao PDR, the high density of people living along the border, the facilities of transportation between both sides and the increasing number of Laotians seeking treatment in the Nongkhai provincial hospital.

4.2. Samples of the Study

4.2.1. Selection of key informants

Key informants were chosen through the purposive selection method. Laotian patients were identified in the Nongkhai provincial hospital through asking to patients of the OUT-Patient Department (OPD) their community of origin and the signs and symptoms of their illness. At first, I performed a rapid survey on about a hundred of Laotian OPD patients at the hospital between May 7 and December 24, 2010. On these hundred Laotians patients, I selected eleven of them who were presenting with fever with/without other symptoms and who were living in three

different communities along the Thai-Lao border: communities *Baan Muangpier*, *Baan Chaitham* and *Baan Thangkhong* (see Figure 4.1)

Then, I followed these informants in their communities of origin for in-depth interviews and participant observation between May 8, 2010 and March 24, 2011.

Figure 4.1 Map of the study area (see red stars). (Source: http://map.google.co.th/)
(Number 13 in blue square is the road number in Lao PDR, numbers 2, 211 and 212 in red squares are road numbers in Thailand)

4.2.2. Community details

During the first week of field work at the Out-Patient Department in Nongkhai provincial hospital, I interviewed three Laotian patients coming from two different communities who were seeking a health-care service because of fever-related illness. Then, I made a plan to follow them in their communities (two of three cases - *Nang Am* from *Baan Mungpier* and *Tao Nun* from *Baan Chaitham*). For the third one- *Nang Nang* from *Baan Muangpier,* I interviewed her and the members of her household at the hospital in June during her hospitalization before to follow her in her community in July.

This was not my first visit to Laotian communities around the Vientiane Metropolitan area and near the Lao-Thai border. When I was acting as the leader of a project on Laotian utilization of health-care services in case of Emerging Infectious

Diseases (EID) for preparedness to Public Health Emergency Response in the context of the Department of Diseases Control, Thai Ministry of Public Health (where I am working since 2001), I visited and realized a rapid survey in Nongkhai province. In this EID project, I selected some international control checkpoints in the Nongkhai province as potential studying sites, for example the *Lao-Thai Friendship Bridge* checkpoint (*Muang Nongkhai* district), the *Baan Moh* boat pier checkpoint (*Sri-chiangmai district*), the *Phonpisai* boat pier checkpoint (*Phonpisai* district), the *Buengkarn* boat pier checkpoint (in the *Buengkarn* district, now *Buengkarn* province). At these checkpoints, I interviewed Laotian people who were traveling across the Lao-Thai border in order to understand their patterns of utilization of health-care services in Thailand. I also travelled to the Vientiane metropolitan area for a geographic survey but without realizing interviews with people in their homeland.

In the study for the thesis, I selected eleven patients who were seeking health-care services in the Nongkhai provincial hospital because of fever and/or an acute febrile respiratory disease. Then, I followed them in their community for in-depth interviews and participant observation. In the following, I present community details. Key informant details will be presented in another chapter.

Baan Muangpier: This Laotian community is located on the left side of the *Maekhong River*. It is far from Vientiane and the *Lao-Thai Friendship Bridge* at about twelve kilometers. *Nang Am* (an assumed name) is the first key informant of this study and from this community. In the early morning of the weekend, many tourists are waiting for stamping at the police immigration, on the Thai side of the *Lao-Thai Friendship Bridge*. I was also waiting with my family at the police immigration post but as *Khun Wisanu* had arranged our border pass documents we waited only a couple of minutes. *Khun Wisanu* is a Thai officer of the Health Control Office (The Thai Health Control Office is the local office of the Department of Disease Control where I am working) and he acted as a community guide. I was traveling with *Moowaan*, my 2 years old daughter, and with my husband because I was thinking that it was easier to build friendly relationships with local people as a visiting family interested in local culture than as a foreign researcher.

When we were waiting for Thai immigration stamping, I bought bus tickets which cost twenty baths per people per trip. The ticket fee in the weekdays and during

the weekend, official hours and out of official hours is different. During the weekday and during official hours, it costs fifteen Bahts per people per trip but it is the double during the weekend and out of official hours. Then, we took the bus to cross the *Maekhong River* on the *Lao-Thai Friendship Bridge* which serves as cross border from Thailand to Lao PDR. It took five minutes. In the Lao immigration post, we had to wait about ten minutes because many tourists were waiting for stamping (see Figure 4.2). As my family and I were using border pass documents, we had to pay forty Bahts per people in weekday and official hours (approximately eight thousand Gibbs, Laotian currency) for the visit in Lao PDR. If we present our passports, we do not need to pay during the weekdays and the official hours. In the weekend and outside the official hours, we have to pay the double when presenting a border pass document (eighty Bahts approximately, i.e. sixteen thousand Gibbs) and forty Baths per people when presenting a passport. Fortunately, we did not have to change the currency from Baht to Gibb even if the Lao government is promoting the use of Gibb in Vientiane and Lao PDR. Laotian people welcome either Baht or Gibb and, including US dollars.

Figure 4.2 Laotian, Thai and European tourists, waiting for stamping at the Lao PDR immigration post (Photo taken: July 25, 2010)

To travel to *Baan Muangpier* there are two possibilities: to take a small truck (fifty to one hundred Bahts per person, i.e. approximately four to eight thousand Gibbs) or a private small van with a whole day fee of eight to eighteen hundred Bahts (approximately twenty to fourty thousand Gibbs). The fee rate depends on distance, time and negociation between the customer and the driver. *Khun Wisanu* negotiated for

us a whole day fee of eight hundred Bahts with a Laotian middle-age driver. It was a good price because the last time that my family and I visited Vientiane, we paid one thousand and eight hundred Bahts. According to *Khun Wisanu*, "*pan pad roi Bahts paeng mak mak* (One thousand and eight hundred Bahts is a very expensive fee)". We were very lucky to travel with *Khun Wisanu* and with *Lung Kham*, the van driver, because the latter knows well *Baan Muangpier* and his relatives are living in this community. He, himself, lives in Vientiane Metropolis.

From the *Lao-Thai Friendship Bridge* on the Lao PDR side, we travelled to *Baan Muangpier* by the Thadeua-Vientiane Metropolis Road which is a branch of the Route number 13. The Route number 13 is a 4 lanes pavement road. It is the main road of Lao PDR which originates in the North and ends in the South. In Lao PDR, people use the left steering-wheel car, so the car is running on the right hand side of the road which is different from Thailand. It is why we were frightened when the driver turned left into a narrow pavement road (*song lak* in Laotian language) two kilometers later. There are two lanes with narrow sidewalk road. The road lifts up higher than villagers' homes and rice fields on the right hand side and *Maekhong River* on the left hand side. *Lung Kham* said "*our wai kan nam toum na khao, baan heun yam na fon* (this is for protecting against flooding into the rice fields and lay people's houses during the rainy season)". A few minutes later, we saw the *Maekhong River* on the left hand side and green rice fields alternating with vegetable plots and households on the right hand side (Figure 4.3), including-four or five small drugstores. These drugstores seem to be modifications of a part of the household in order to sell drugs. However, a sign indicates the pharmacy licence or the medical professional licence in every shop. According to *Lung Kham* "*han ya su han tong mee bai anuyat, poh tha bor mee si tuag jab, suan lai ka tan moh, pad, rue pesat nai vien ma perd* (Every pharmacy must have an authorized document. Most of drugstore owners are doctors, nurses or pharmacists who work in the hospital in the city of Vientiane. If the drugstore has no authorized document, it is illegal, the police are seizing and the fee can be very expensive)"

Figure 4.3 Laotian's rice fields and vegetable plots between two sides of the road (Photo taken: July 25, 2010)

There were first some superficial holes on the road surface. However, after turning into a narrow road about seven kilometers later, there were more and more deep holes. *Lung Kham* had to avoid these deep holes and, also, the automobiles that were sporadically passing. This situation made us excited and worried at the same time. There were different types of automobiles, for example motorcycles, small trucks, and big trucks. For the big truck, *Lung kham* said that "*rod kon hin kon sai hed thanon pang merd, kang na haeng kak gor ni* (This road is destroyed because big trucks are filled up with rock and sand and to drive on this road is frightening)." He told us that he would borrow another route with less deep holes but more distant. Then, he turns on the right to a gravel road or *thanon look lang* in Laotian. I saw red dust spreading out after the car passed (Figure 4.4). The gravel road was narrower than the other one but fewer automobiles were passing and most of the cars were small cars. There was no big truck passing. So, I was less scared.

Figure 4.4 Gravel road to *Baan Muangpier* community during a day without raining (Photo taken: July 25, 2010)

During the trip, I saw green rice fields and vegetable gardens on both sides of the road. According to *Khun Wisanu* said, "*Khon Muangpier pluke bak kai talad* (*Baan Muangpier* villagers grow vegetables for selling in the market"). I agree with him because I saw more vegetable plots than rice fields. *Khun Wisanu* continued to say "*chao baan pluke bak kad khao nae, bak kad kiaw nae, kaprao nae, horapa nae, bakkuated nae* (Villagers grow many kinds of vegetables, for example, Chinese cabbage, Chinese mustard, basil, holy basil, tomato, etc.)." In some plots, there were plants higher than vegetables. According to *Lung kham* "*tha si kiew kiew pen tone ya, tha mee si liang sam kue si pen ton dao heung* ('The higher green one is tobacco plant, when mixed green and yellow they are marigold.')" (Figure 4.5).

Nang Am's home is located nearby the community's temple, the health-care volunteer's home (*asa sata* in Laotian) and the house of the vice-head of *Baan Muangpier* or *rong nai baan* in Laotian (the head of community is called '*nai baan'* in Laotian). *Nang Am*, *asa sata Mae Ngam* and *rong nai baan Por Ngern* were relatives of *Khun Wisanu*. Therefore, it was easier to approach them and to build a friendly relationship with them. I interviewed *Nang Am* and her family during a few hours. After lunch, I walked around the community with *Mae Ngam*, a health-care volunteer. The majority of the houses in *Baan Muangpier* were two floors wood unfenced houses with a high plain basement. The villagers use the basement for many purposes, for instance, living room, storing room seeds and/or automobiles, children playground, and sometimes also kitchen. I saw that every household had an automobile parking in the basement for motorcycle, small truck, small van, van and/or tractor. In addition, they have marigold bags ready for selling in the market, tobacco leaves in packages and in threshing baskets. Around their home, there are many vegetable plots and herbs. *Mae Ngam* and *Por Ngern* said that "*Baan Muangpier* villagers are farmers. They grow many things, for example, rice, vegetables, flowers, especially marigold for *bai sri* or *kan mak beng*. *Bai sri* or *kan mak beng* is a worshipping object made from different kinds of flowers and banana leaves. They do it for paying respect to *Lord Buddha*, *Gods*, *Spirit*, *and senior people*. Besides, villagers also grow fruit (or *mak mai* in Laotian), for instance, papaya, banana, sapodilla, sugar apple, etc. The villagers are selling these fruits in Vientiane markets. Some villagers also grow tobacco plant for

supplying to the tobacco factory which is located in this community" (Figures 4.6, 4.7 and 4.8).

Figure 4.5 Tobacco plant and marigold plots (left), A villager collecting marigolds (right) (Photo taken: July 25, 2010)

Figure 4.6 Marigold bags waiting for trade at the market (Photo taken: July 25, 2010)

Figure 4.7 Tobacco leaves waiting for slice (Photo taken: July 25, 2010)

Figure 4.8 Sliced tobacco leaves kept at the basement (left),
Sliced tobacco leaves exposed to sunlight (right) (Photo taken: July 25, 2010)

As said before, *Mae Ngam*, a health-care volunteer, and *rong nai baan Por Ngern*, vice-head of the community, are *Khun Wisanu* relatives. They took me to the houses of my key informants and introduced me to the other villagers. In this way, these key informants accept to answer to in-dept interviews and allow me to join their activity. Actually, my family and I am Buddhist like the villagers and thus I could join them in any important Buddhism festivals such as, *wan Asalha Puja, Buddha Lent day, the end of Buddha Lent day*, etc. This gives me more opportunities to talk and discuss with them and to observe more closely their daily life. The fact that I was travelling with my family and, in particular with my small daughter, also helped to build a relationship with the villagers. Villagers were very kind with me and my daughter (Figure 4.9). Sometimes, I had a lunch with my informants in their home, in the house of the health-care volunteer or at the temple. Very often, my family was invited to join us at the lunch. The food they prepared sometimes was *khao nuew nueng*- sticky rice streaming, *kaenng noh mai*- bamboo shoot curry, *som tum Lao*- Laotion style papaya salad, or *ping pla*- fish barbecue, etc. This is what they eat normally (Figure 4.10).

Figure 4.9 My daughter has a lunch and is cared by a villager (left), *Mae too* – a senior woman in *Baan Muangpier*, is tying *Sai sin*-holy thread on the wrist of my daughter and mine (right). (Left photo taken: Oct 23, 2010; right photo taken: Jan 12, 2011)

Figure 4.10 A key informant prepares food for our lunch, *kaeng noh mai* and *ping pla* (Photo taken: Oct 19, 2010)

Moreover, *Mae Ngam*, a health-care volunteer is very kind. She took care of me and gave me a lot of information on the community and also allowed me to look the community's projects. These projects are for strengthening the community, for example, sufficient economy programme, women empowering, alcohol and drug free community and traditional community etc. I found in these documents a lot of useful information on the community.

Baan Muangpier is an ancient community although no document indicates the year of its founding. According to the abbots of the temple, *Baan Muangpier* was established more than two hundred years ago. In *Baan Muangpier*, there are one hundred and ninety-nine households, two hundred and twelve families and nine hundred and fifty persons. Only one family is Christian and more than two hundred

families are Buddhist. I realized in-depth interviews and participant observation with fifteen families, including the four families that I have selected as key informants because they were seeking health-care services in a Nongkhai provincial hospital for problems of fever-related illness. The other eleven families were the families of the health-care volunteer, of local administrators and villagers who had experienced fever-related illness during the previous month. *Por Ngern-* vice-head of the community said that "The Laotian parliament has selected *Baan Muangpier* to be a conservative community model, a drug free community, a sufficiency economic society. Villagers are growing vegetables (*pluk buk*) and fruits (*mak mai*) to sell in the Vientiane markets and grow marigold flower to make *bai see.* They plant also tobacco for the tobacco factory in the community. But villagers do not smoke, and are alcohol and drug free. The monthly income of each household is approximately two millions Gibb (i.e. eight thousands Bahts or two hundred and fifty US dollars) which is sufficient". *Mae Ngam-* a health-care volunteer said that "There are five health-care volunteers (*asa satha* in Laotian) in this community. There is an herbal traditional healer (*moh ya*) but as he is very old, he does not cure ill person now. There is no other traditional healer. The health-care center is located in this community for presting first aid care only and a district hospital is far two kilometers from the community. When a villager is ill, he/she will seek health-care at the health-care center, the district hospital, or at a hospital in Vientiane, the nearest being twelve kilometers far. Now, the Laotian parliament is promoting a government health-care coverage card for all population groups (Figure 4.11). In the middle class and higher, they seek health-care services in Thailand". *Mea Ngam* also said that "Most villagers are getting ill (*pen jeb pen puiy*) from common cold (*payad khaj wat*) and other acute respiratory diseases (*payad han jai*) and that there are no communicable diseases found in this community, such as dengue fever."–These informations were collected from the health-care volunteer, the vice-head of the community (interview date: Oct 20, 2010) and, also, from the documents related to the community projects that the vice-head of the community kindly allowed me to photography.

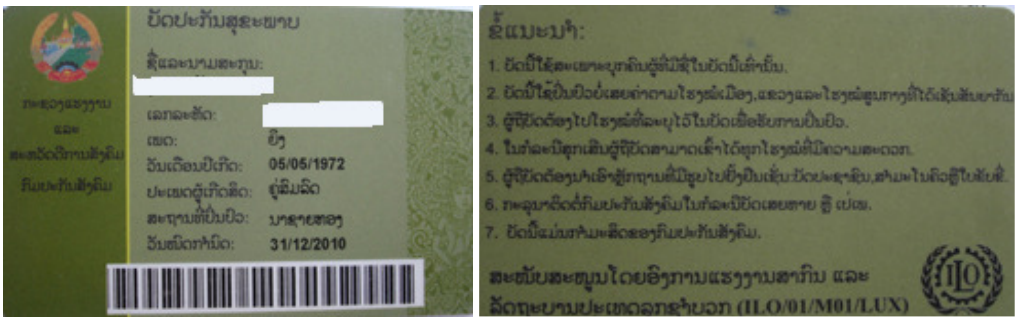

Figure 4.11 Laotian's health-care coverage card
(left-right, front-back, photo taken July 25, 2010)

Baan Chaitham is a Laotian community located on the left hand side of *Maekhong River* but deeper into land in contrast with *Baan Muangpier* which is localized near the *River*. *Baan Chaitham* is located on the south and far from Vientiane at about six kilometers and from the *Lao-Thai Friendship Bridge* at about twenty-two kilometers. In order to travel to *Baan Chaitham* we had to use the road (the Thadeua-Vientiane road) that we used when going to *Baan Muangpier*. However, at the 7th kilometer, we had to take the direction of the South for about sixteen kilometers. During this journey, I used some tactics for making friends with Laotian people that I have learned in the previous community. For example, when I was saying "*sabaidee jao* (or 'good morning')", the Laotian immigration officer looked immediately at my face with a smile and turned to my passport again and again. I learned this word from *Mae Ngam*- a *Baan Muangpier* health-care volunteer. And this officer smiles again when I said "*khob jai*" for 'thank you'. I decided to adopt this tactic in all the Laotian communities that I will be visiting. So, both Laotian immigration officers and villagers were smiling to me and receiving me well. Sometimes, when I was meeting an officer who had been checking my passport before and who recognized me, he/she will first smile to me and talk friendly to me, saying, for example, "*ma eek laew ti* ('Are you here again?')" or "*tua ni ma jak mue la* ('How long you will stay here?')" etc. I was answering "*doe or doe ka noi* ('Yes mam or yes sir'- which is more polite more than *jao* or 'yes')". In the Laotian language, there are various words to say "yes": '*jao'* is used for general people, '*doe*' ('yes mam or yes sir') when talking to seniorities and government officers, and '*doe ka noi* when talking to members of the privileged class. I

think that because I was showing respect to them, they repected me also. *Khun Saeng-arun* said that "*man bor koy kerd kab khon Thai du toh dai dok ua* ('this is not happening normally with Thai people')".

On the first day, I travelled to *Baan Chaitham,* with *Khun Saeng-arun* as our guide. *Saeng-arun* is a student of the Master of Arts Programme in Health Social Science, Faculty of Social Sciences and Humanities, Mahidol University at Salaya. We know each other and each other's family very well since he was studying at Mahidol University three to four years ago. Therefore, when I told him that I will visit Vientiane and *Baan Chaitham,* he immediately volunteers for organizing the travel. *Khun Saeng-arun* said that "he had been visiting *Baan Chaitham* for promoting dengue fever control a few months ago". At this time, my family and I took a private small truck to go to the study area. During the travel, I saw a pick-up truck with benches passing away (see Figure 4.12). According to *Khun Saeng-arun*, most of people in Lao PDR take this truck (or *songthaew* in Laotian) for travelling at a short distance and a bus when travelling farther. I said jokingly to my daughter that next time we will take a *songthaew* to go to *Baan Chaitham*. My daughter said "COOL mum, when?" But my husband replicated "You could not take a seat there. It is too hot *MooWaan*." However, when *Khun Saeng-arun* said that "Do you want to try now", my daughter said no, and that she wanted to take Uncle *Khun Saeng-arun*'s car today.

Figure 4.12 *Songthaew* or pick-up trucks with benches which most Laotian use.
(Photo taken: July 24, 2010)

When we were at seven kilometers from the *Lao-Thai Frienship Bridge*, *Khun Saeng-arun* said that "We have to turn right to *Boulevard Kampaengmuang*." It is a bypass to the Route number 13 and to *Baan Chaitham.* When going to *Baan Chaitham*, I saw green rice fields on both sides of the road and two to three floors commercial buildings (Figure 4.13). I saw also two big national hospitals, *Setthathilat* and *130 beds hospital. Setthathilat* is under the control of the Lao PDR parliament whereas *130 beds hospital* is under military control.

Figure 4.13 Two sides of the road to *Baan Chaitham*
(left-right, Thadeua-Vientiane Road to *Baan Chaitham* (Photo taken July 24, 2010)

16 kilometers after, we turn left from *Boulevard Kampaengmuang* and I saw crowded people walking along the two sides of the road. *Khun Saeng-arun* said "This is a market fair. Because today is weekend, many people will come and buy things". He said also that "most villagers here are industrial employees. There are many factories of big Laotian and Thai companies, for example textile factory, food factory, weaving factory, etc. (Figure 4.14)". In fact, I saw many factories as *Khun Saeng-arun* said.

Figure 4.14 Factory and building which had turned into a commercial company (Photo taken: July 24, 2010)

Khun Saeng-arun asked me "*uay yak pai yam hong moh muang bor, nong si pa pai, pen thang pan pai baan asa satha bor dee* ('Sister, would you like to visit the district hospital? It is on the way to the health-care volunteer's home)". I thought that it was a good idea and said 'yes'. "*Hong moh muang*" is the district hospital which looks like a Thai hospital with thirty to sixty beds. In Lao PDR, the levels of administrative areas are: nation-*prathed*, province-*kaeng*, district-*muang*, subdistrict-*tambon* and community-*chumchon* or *moobaan*. The meaning of a province in Lao PDR and Thailand is different. A province in Thailand is a group of districts. But in Lao PDR, the province or "*kaeng*" is equivalent to the district in Thailand. So, the '*hong moh muang*' or district hospital as I saw is a group of one-floor building and car park in the centre. The Out-Patient Department and Emergency Room-ER are located at the left hand side, laboratory building and dental building are situated at the centre, and the In-Patient Department-IPD is located at the right hand side (Figure 4.15-4.17). The flow chart revealed that there are two doctors, one dentist, four nurses, a laboratorian and a pharmacist working there. This hospital provides many of primary services, for example, intenal medicine, obstetrics and gynecology, dental services, etc. and there are ten beds for patient hospitalization which were full at the time of our visit. In case of a severe disease, this hospital sends the patient to the hospital in Vientiane. I had a chance to talk about fifty minutes with a health-care worker in this hospital and with two dengue fever patients before to visit *Mae Kham Bang*- a health-care volunteer of *Baan Chaitham*.

Figure 4.15 The district hospital name signboard (in blue signboard is '*nakhon lueng* Vientiane, *hong moh muang*…- Vientiane Metropolis, ...district hospital')
(Photo taken: July 24, 2010)

Figure 4.16 Out-Patient Department of the district hospital (Photo taken: July 24, 2010)

Figure 4.17 In-Patient Department of the district hospital (Photo taken: July 24, 2010)

Mae Kham Bang is a health-care volunteer, a head of *Baan Chaitham* and also a leader of the women in this community. She is a middle-aged woman. She was very kind, especially to my daughter. She gives me information and accepted to be interviewed although it was the first time that I was meeting her. *Khun Saeng-arun* said "*dee na ti auy ao Moowaan ma num, pakati nai baan bern bor koi hai kor mun ngai ngai, haeng pen khon thang prathed haeng kuck* ('It is so good to take *Moowaan* with you. Normally, the head of community did not answer to questions related to the community, especially when the interviewer is a foreign person".) This confirms my belief that children make everything easier. There are no boundaries in the children world. Adults will take more care and mercy children. I think that *Mae Kham Bang* felt love and kindness towards my daughter because she has no nephew or niece (Figure 4.18).

Figure 4.18 *Mae Kham Bang*, my daughter and *Khun Saeng-arun*
(Photo taken: July 24, 2010)

Mae Kham Bang said that "*Chaitham* is an ancient community. In the past we were farmers, we grew rice and vegetables, and fish into a big community pond. But today, everything is changing. A four lanes road is passing through Vientiane. The factory comes, villagers never back to farm again and their fields are now occupied by an industry. Most villagers turned into a private or a government employee. In this community there are two delicatessen or instant food factories and three textile industries. Rice and vegetables, we need to buy from the community market or the market fairs." I saw less vegetable plots and rice fields there. Some houses have only a little backyard garden.

Mae Kham Bang continued saying that "*Chaitham* villagers are all *Lao lum,* (there are) about eight hundred and fourty households, nine hundred families, more than two thousand people. All are Buddhist. Monthly income is approximately one point five millions Gibb (about six thousand Bahts, three hundred US dollars). This community has no traditional healer. Five health-care volunteers take care of villagers' primary needs, for example, children and women health, mosquito larva control, etc. A health-care centre is located in this community and the district hospital is about 1 kilometer far (see above Figures 16-18). When villagers fall ill, most of them seek health-care services at the health-care centre, the district hospital or the hospital in Vientiane (*hong moh nai Vieng* in Laotian) because they have a health-care coverage card. Some people of the middle-high economic class seek health-care services in a private hospital, especially the employees of industries".

Mae kham Bang said also that "Common cold *(khai wat)* and other respiratory diseases *(payad han jai)* are the main causes of disease in the community. But during the rainy season, *payad khaj yung* is the main illness manifestation. *Mae kham Bang* believes that there is a big pond in this community which is related to dengue fever cases during the rainy season (*sahed thi jeb yam nai fon, hour kued wa yon mee nong nam yai yoo nai chumchon).* This pond is ancient and covers three subdistricts *(nong nam nee pen nong nam kao yai krob sam thumbon)* (Figure 4.19). These are the informations that I have collected from *Mae Kham Bang* on July 24, 2010.

Figure 4.19 A big pond located in *Baan Chaitham* (photo taken: Juy 24, 2010)

For the realization of in-depth interviews and participant observation in *Baan Chaitham*, *Khun Saeng-arun* acted as our guide in the community. There is a difference between *Baan Muangpier* and *Baan Chaitham*. Most of the houses in *Baan Chaitham* have a modern style which fences and they are made of brick, soil and wood. According to *Mae Kham Bang*, "during the daytime only elderly people and children stay at home while adults go out to work, except *Mae Kham Bang*, patients and their families, and other key informants that *Mae Kham Bang* introduced to me. Because of this, I never had a chance to talk to other villagers although I visited *Baan Chaitham* several times. The reasons are: villagers are employees of industries during the week. During the weekend, they like to cross the border to Thailand for buying goods and things. Some elderly people who stay in their house surrounded by a fence did not allow me to come into their house. Another difference from *Baan Muangpier* is that while I was visiting *Baan Chaitham*, villagers never invited me to join lunch at their home even if it was close to noon or afternoon. This is probably because *Baan Chaitham* is an urban locality or is more urbanized than *Baan Muangpier*. Thus, villagers are independent and tend to mistrust outsiders.

Baan Thangkhong is located on the main road of Lao PDR in the direction to the South. *Baan Thangkhong* is far from Vientiane about twenty kilometers and from *The Lao-Thai Friendship Bridge* about fourty kilometers. *Poo Paan* is a hundred and four years old traditional healer (Figure 21) who said that

"*Baan Thangkhong* was established about fifty years ago" and that he emigrated from a Northeast province of Thailand once the community was established.

He also said that "mostly villagers in *Baan Thangkhong* are Thai people who have moved with their parents and/or married with Laotians. I interviewed several *Baan Thangkhong* villagers who had sought health-care services in Thailand.

At first, I did not select this community because it was too far and difficult of access. But after I had visited two communities, I could not recruit any traditional healer. Although I found one in *Baan Muangpier*, she was very old and communication with her was very difficult. So, I changed my mind. I followed *Poo Paan* and his patients to their community. *Kruba Boon Thavee-* the abbot of *Baan Muangpier* temple invited *Poo Paan* to leave *Baan Thangkhong* for teaching meditation during the

Buddhist Lent. I met *Poo Paan* at *Baan Muangpier* temple on September 21, 2010. I was so lucky that I could see him healing an ill person who had followed him from *Baan Thangkhong* on September 29 (Figure 4.21).

Figure 4.20 *Poo Paan*, a hundred and four years old traditional healer
(Photo taken: Sep 21, 2010)

Figure 4.21 *Poo Paan* healing a patient who comes from *Baan Thangkhong*
(Photo taken: Sep 29, 2010)

My travel to *Baan Thangkhong* was similar to the travel to the other communities. I rent a small van. First, I took *Poo Paan* and *Kruba Boon Thavee* at *Baan Muangpier*. Then, I travelled to *Baan Thangkhong* by the Route number 13. From *Baan Muangpier* we took the direction of the *Lao-Thai Friendship Bridge*. One kilometer before the bridge, we turned on the left to a rough road. About five hundred meters later, the driver turned left again. A big four lane concrete road ahead made me

surprised (Figure 4.22). *Lung Kham* the driver said that "*rathabal dai ngern thun thang pratad ma plaeng, pua tor kab thang lek 13, khao Vieng kab pai tai* (This road was established with foreigner fund. It connects to the Route 13 for travelling to Vientiane. And it bypasses Vientiane for transportation of goods and people to the South)". *Lung Kham* continued saying that "*yang bor laew sed dok, tae tha laew kue si saduek sabai lai* ('It is still under construction. When it will be finished it will be very convenient')".

Figure 4.22 The four lanes concrete road to *Baan Thangkhong*
(Photo taken: Sep 21, 2010)

During the travel I saw brown rice fields on the two coasts of the road. There are no green rice fields as in *Baan Muangpier*.

Poo Paan said that "*thaew ni pen din dan, pluek yang ka bor ngam, khao ngam kue khao ti pluek kai khong rue khaj nguem tor nan* ('This rice field area is hard and with compact soil which can not grow vegetables and rice. The rice grows well nearby *Maekhong River* or *Nguem River* only')". During the travel, I saw a big bus with air-conditioning passing away. On the side of the bus it was written in Laotian and English "Vientiane-Jampasak".

Poo Paan said that "*rod lan yang mue yang kuen* ('This bus runs overday and overnight')". Besides the brown rice fields, I saw a large field with fencing.

Poo Paan said that "*nun kue dern bin thahan, thang sai ni mee nouy ngan rachakan tang yoo lai* ('This is a military airport. There are many important

government offices located at the two coasts of the Route number 13')". I could see during the travel that it was true.

Baan Thangkhong is located on the main road of Lao PDR. *Baan Thangkhong* and *Baan Chaitham* are semi-urban. But *Baan Thangkhong* is more rural whereas *Baan Chaitham* is more urban. I say this because I saw that most of the houses and buildings in *Baan Thangkhong* are only one and two floors buildings. Some of them are fenced with fences made from bamboo or woods and others are made from concrete and iron. Some buildings were modified to become shops or restaurants (Figure 24 left). There is a permanent fresh market and market fair during the weekend. Almost every house in this community had an automobile. But agricultural automobiles are less seen. *Poo Paan's* house locates at a side of the Route number 13. He modified his house to become a motorcycle garage. When I was talking with *Poo Paan* and *Nang Duan* (a patient), I could see big trucks, cars and buses passing (Figure 23 right).

Poo Paan said that "*rod lan yang mue yang kuen, pai sai ma sai ngai* ('These cars are running day and night, travelling is very easy')". *Poo Paan* continues to say "*pai Muang Thai pai rod ka dai, pai heu ka dai, kham pai Phonpisai ka dai Muang Nongkhai ka dai, kao deuw* ('Going to Thailand is very easy and takes a short time, we can travel by bus, car or by boat)"

Figure 4.23 A half-wood half-contrete building which was modified to become a shop or a restaurant (left) and a big truck passing away (right) (Photo taken: Sep 21, 2010)

Nevertheless, when travelling to *Baan Thangkhong,* I did not interview health-care volunteers or local administrators because they didn't allow. Thus, I interviewed *Poo Paan*, fever and ARIs patients and their family, and key informants who experienced fever-related illness during the previous month. Actually, I got most of the community details from my interviews with *Poo Paan*. In addition, *Poo Paan* acted as my community guide.

PooPaan said that "*chao baan suan lai pai hab jang nai Vientiane soo mue, Baan hao bor mee dog hongngan* ('Most of *Baan Thangkhong* villagers are employees even if there is no factory in this community. The villagers go everyday to Vientiane Metropolis for working in the factory.')"

He also said that "*bang khon ka kha khaj, hab rachakan ka mee, hed hai hed na ka mee tae bor lai* ('Some villagers are merchants, others are government officers, but farmers are less seen*).*"

"Yoo nee mee praman roi khao sib lung, song roi kau, praman ha roi khon nee la, nab tue Buddha merd ('In this community, there are one hundred and ninety households, two hundred families and approximately five hundred people, all of them are Buddhist)."

"*Rai di tor duan bor lai song lans* Gibb ('The monthly income of each family is about two millions Gibb or approximately eight thousands Bahts')".

Sometimes, when I was interviewing *Poo Paan, Ya Noi –Poo Paan*'s wife joined to our discussion and also gave me some data (Figure 4.24).

Figure 4.24 *PooPaan, Ya Noi* and I during a discussion at *Baan Thangkhong* (Photo taken: Sep 21, 2010)

I saw a bunch of plants nearby an artificial small pond. This plant looks like a palm tree but it was smaller with only one foot of length (Figure 4.25).

Poo Paan said that "*wai nam nee our ma jak khao, our ma pau khaj* ('I took ''*wai nam'* from the hill for curing fever'). *Por chai mai pauk nee pin pau khon jeb* ('I uses these herbs for healing an ill person'). *Nai baan nee mee por pen terng moh ya kab moh tham khon duaw* ('In this community, there only is one traditional healer and it is me. And I am also a *moh tham*').

The health center located in this community has five health-care volunteers. The nearest hospital is ten kilometers far from this community. Therefore, when villagers fall ill, they seek health-care at the community health-care center, the district hospital and in hospitals in Vientiane Metropolis. But most of the factory employees seek health-care services in Thailand because of illness under coverage of their factory insurance".

Poo Paan continued saying that "*Baan Thangkhong* villagers mostly fall ill from common cold and other respiratory infectious diseases. There are no cases of dengue fever here" (These data were collected from interviewing *Poo Paan* and his family on Sep 21, 2010, Oct 23, 2010, and Nov 20, 2010.)

Figure 4.25 '*Thon wai nam',* the herbal medicine collected in a hill and which villagers use as a remedy for fever (Photo taken: Sep 21, 2010)

4.2.3. Informants recruitment

Informants and key-informants were recruited according two approaches:

Approach 1 - **Patients or Cases Sampling**: selection of Laotian patients presenting with fever with/without other symptoms through the use of a questionnaire (see Annex A). The cases were chosen according to three criteria: nature of the illness (patients presenting with fever; localization of the community of origin near the Lao-Thai border, in an area between Vientiane and Nongkhai provincial hospitals; and agreement to be interviewed. In case of a child illness, the member of his/her family who is taking care of him/her would be interviewed. All questions were made in the Lao language. The first questions aimed to know the signs and symptoms of his/her illness (for example, '*khun mae pen yang ma'* or *'khun mae mee agarn jang dai nae'* 'What about your illness' or 'How about your symptoms') and if he/she had visited a Nongkhai provincial hospital before (*'pai ha moh yu sai khon ma ni bo'* or *'kin ya yang khon ma rong moh mong ni boh'* or 'Did you visit any doctor before (in Thailand)?' or 'Did you take any medicine?'). Then it was asked to them the localization of their community of origin ('*ban khun mae yu sai'* or *'ban khun mae yu khaj boh'* or 'Where is your home?' or 'How far from this hospital is your home?'). If the person agreed to be interviewed, I asked if I could follow with the questionnaire (see Annex B). Then, I asked the permission to follow them in their community for in-depth interviews and participant observation. If they agreed, I marked an appointment with them and asked information about the location of their home and how I can contact them (such as home telephone number, mobile telephone number, mail address, etc). Actually, most of the key informants gave a mobile number, except the first one from *Baan Muangpier*, that is, *Mae Nang* who is a Laotian cousin of *khun Wisanu*.

Approach 2 - Seeking **key informants** into the patient's community. During the first week spent at the Nongkhai provincial hospital, I interviewed 10 patients but selected only two cases from 2 different communities, *Baan Muangpier* and *Baan Chaitham*. I then followed them into their communities in the same week. For example, I met *Tao Nun* of *Baan Chaitham* at the Nongkhai provincial hospital on July 21, 2010, and followed him to his community on July 25, 2010. I interviewed *Nang Am* at the hospital on July 23, 2010, and in her community on July 24, 2010. Actually, key informants would be also sampled according to the purposive selection method. For finding key informants (such as local authorities, drug-sellers and health-care volunteers and traditional healers), I asked to the patients I was interviewing

about the members of his/her household and community patients members who had suffered of fever-related illness during the previous month. I also asked her/him for introducing me to other key informants. Then a questionnaire (see Annex B) aiming to check which illnesses they had suffered during the previous month was passed to the patient's household members and also to the surrounding households in the community. In case of other key informants such as local authorities, drug-sellers, health-care volunteers and traditional healers, the questionnaire aimed to elicit data on the incidence of episodes of fever-related illness in the community in the past and, with traditional healers, on traditional management of fever-related illness. The recruitment of key informants in *Baan Muangpier* was somewhat different. I recruited some key informants by visiting the temple of the community during the "*Khao Phansa*" festival (which marks the beginning of *Phansa*, also known as the "Buddhist Lent" period) to which most villagers participate for merit-making and acquiring good Buddhist practices.

4.3. Data collection methods

In the three Lao PDR communities, I used two main methods: in-depth interview with key informants and participant observation.

4.3.1. In-depth interview with informants and key-informants

An in-depth interview was conducted in three groups of Laotian: patients with fever-related illness, family members, and other people such as traditional healers, elder people, and households of the same community (see above). In-depth interviews were useful when I wanted to collect detailed information about a person's thoughts and individual behaviours during a given episode of fever-related illness. This technique is used in ethnography to elicit a vivid picture of the participant perspective on the research topic. During it, the person being interviewed is considered as the expert of the matter whereas the interviewer is seen as the student. Interviewing techniques are motivated by the desire to learn everything the informant can share about the research topic (Boyce and Neale 2008).

In this study, I engaged an in-depth interview with informants using different methods: for example, in the case of *'Nang Am'* who was taking care of three children, A, B and C (eight, five, two years old, respectively) I allowed '*MooWaan*' (my daughter) to play with the youngest one (Figure 4.26), and asked general questions such as, *'luk jak khuanb pee laew'* or *'lukluk jeb pauy du boh nai tae la pee'* ('How old is she?' or 'How many time your children get ill each year?'). Another example: '*Poo Paan*' is a one hundred and four years old traditional healer who visited *Baan Muangpier* because a monk in this community invited him to teach Buddhist practices during the "*Khao Phansa*". I met him at the temple. In this case, I began with such questions as *'khun poh ayu thor dai laew ka'* and *'hed jung dai kue ayu yaun tae'* ('How old are you?' or 'How are your practices for a healthy long life?'). If a key informant agreed to be interviewed, I would pass the questionnaire B (see Annex B). However, during the interview, I would pose questions in a neutral manner; listen attentively to their responses; give them a chance to talk and not accelerate in order to get information; and ask follow-up questions and probes based on their responses. I did not lead informants according to any preconceived notion, nor encourage informants to provide particular answers by expressing approval or disapproval of what they said (inclusive by non-linguistic means). When I was not sure to understand what the informant said, I would repeat the question by asking, for example, "Did you mean… and yes or no." Each interview had approximately the duration of 1 to 1.5 hours and I would eventually interview the same informants twice or more according to the progress of the fieldwork. Notes were taken during the interview which would be in time recorded if the informants agreed. In each household, the informant was the head of the family, his wife and, ultimately also, the person who was or had recently suffered from an episode of fever-related illness.

Figure 4.26 Informant's daughter and my daughter playing together
(Photo taken: January 15, 2011)

During the interview, I tried to get information on the following subjects: frequency in the family of episodes of fever-related illness during the year; denomination and classification of fevers-related illness; perceived causality; signs and symptoms; degree of severity; perceived risk and vulnerability; perceived disease contagiousness (eventual modes of contagion); preventive practices; household or specialized management of episodes of fever-related illness (self-care, western medicines, recourse to traditional healers, drug-sellers, hospitals, etc.) and contexts which have influenced the choice of the treatments at each phase of the disease in order to reconstruct the therapeutic itineraries adopted by the patients. Traditional healers were interviewed on perceptions, classification and causalities of fevers-related illness and also on their management of disease cases. Elderly, local authorities and health volunteers were mainly interviewed on the incidence of these diseases in the community and on the therapeutic management of individual cases or in a period of epidemic.

4.3.2. Participant Observation

Participant observation is a standard approach of anthropological and sociological research through which researchers become immersed in the day-to-day activities of the people that the researcher is trying to understand. It is useful for providing an in-depth and holistic view of a community or of a particular phenomenon under study. Extended periods of participant observation allow researchers to apprehend the people's knowledge, beliefs, attitudes, behaviours and practices in the

daily life and related to ill-health. It is typically used in conjunction with other qualitative and quantitative methods, such as surveys, questionnaires and interview. It has the advantage to observe people's attitudes and behaviours into their natural context, and especially, when it is necessary, to follow them in-depth over time. The three advantages of participant observation are the following: 1) an ability to collect data on a wide range of behaviours; 2) a greater variety of interactions with the study participants; 3) and a possibility to assess the differences between what people say and what they do in reality.

In this study, the data collected through participant observation include: physical environment (site of housing, landscape, sewage, grow up of herbs or plants that can be of use for treatments, etc.); people life style (i.e., economic and/or ritual activities, domestic animal raising, eating habits, etc.); preventive behaviours in general and in case of an acute febrile disease (i.e., covering nose and mouth after coughing and sneezing, cleaning hands, staying at home when getting ill, wearing mask in order not to contaminate others, using plants for disease prevention, etc.); treatment behaviours (i.e., prescribed or prohibited foods and drinks, self-treatment, traditional healer visiting, utilization of health-care services in homeland and across the border, etc.), etc. For example, I observed what people in communities did or made during the "*Khao Phansa*" and "*Oke Phansa*" events. Customs related to health and illness include, for example '*bun sad yai*' or 'ancestor worship festival' when villagers offer vegetables, food and fruits to the ancestors including *Gods* and *Phii* (see in picture 4.27).

Figure 4.27 Laotian worship to ancestors, *Gods* and *Phii*
(Photo taken: Oct 20, 2010)

4.4. Data processing and analysis

4.4.1. Collecting data

4.4.1.1 Set up interviews with key informants. The purpose and outcome of the interview are explained;

4.4.1.2 Seeking informed consent of the interviewee (written or documented oral);

4.4.1.3 Re-explain the purpose of the interview, why the stakeholder has been chosen, the expected duration of the interview, whether and how the information will be kept confidential, and the potential use of a note taker and/or a tape recorder;

4.4.1.4 Conduction of the interview after the agreement of the interviewee;

4.4.1.5 Summarization of key data immediately after the interview; and verification of the information given in the interviews with the interviewee if necessary.

4.4.2. Analysis of data

A qualitative data analysis was applied in this study. The analyzing process was not totally separated from data collection, but data collection and data analysis were performed simultaneously in the field. Firstly, data collection started from the Laotian patients that I have recruited because they were seeking health-care services in a Nongkhai provincial hospital for fever-related illness. Individual data were then analyzed. Patients should come from a community near the Lao PDR and Thailand border. The community should be opposite to *Nongkhai* province (i.e. *Muang Nongkhai* district, *Phonphisai* district and *Thabor* district), in Thailand. In addition, they would accept to be interviewed and allow me for participant observation in their community. Secondly, during my stay in their community, I would analyze personal demographic data, for example, income, level of education, occupation, etc. And finally, in some cases, these data may relate to their beliefs on the epidemiology of infectious diseases, their beliefs, experiences and practices related to health and disease (i.e. illness meanings, causation, perceived degree of severity, perceived

impact of the disease on their daily life, therapeutic itineraries, use of health services in cases of a fever-related illness).

4.5. Ethical Considerations

In this study, the rights of key informants were consciously respected through the obtention of the informed consent. It was explained to them that they could decided whether to participate or not and that their decision would have no impact on their staying, leaving or utilization of health-care services in Thailand. The information given to them included:

- The nature of the research project: key informants were explicitly informed about the purposes of the research, the modalities of informants' recruitment, and the origin and name of the researcher;

- The process of study: they were informed about the methods of data collection which will be used and asked if they accepted to be recorded during the interviews;

- The participation in the research was voluntary, the informants could quit at anytime and had the right to address nothing or even to stop the interviewing process at anytime; moreover, it was made clear to them that they will receive no money for their participation in the research;

- Protection of confidentiality, by keeping privacy and confidentiality of the data; and

- The results of the research will be presented only for academic purpose and the names of informants will not be revealed.

CHAPTER V
DEMOGRAPHICAL DATA OF KEY INFORMANTS

This chapter is the result of the analysis of the first part of my field data. I will present the details of each Laotian patient who is seeking health-care services in a Nongkhai provincial hospital because of fever-related illness during the period of May 7, 2010 - December 26, 2010 (eight months). During this period, I interviewed about twenty patients but recruited only eleven coming from three different communities. These communities are located in Lao PDR and nearby the Lao-Thai border. I then followed them into their communities, for in-depth interviews and participant observation from May 8, 2010 to March 23, 2011 (10 months). The patient names, key informant names and community names were changed for confidentiality purpose. The details of these patients follow:

1. 'Nang Am'. *Nang* in Laotian mean either Miss-Ms or Misses-Mrs. *Nang Am* is a middle-aged (thirty-six years old) married Laotian woman. She and her husband live together with her husband's family in *Baan Muangpier*. Her husband lives there since he was borne. *Nang Am* was borne in another community nearby Vientiane. *Nang Am* and her husband cultivate tobacco trees for supplying a tobacco factory in the community. Besides, her husband grows vegetables and fruits for sale at the *Thalad Chao* in Vientiane. *Thalad Chao* is the most famous and biggest market in Vientiane. There are two big parts in this market, department-store for tourists shopping and fresh market. They are hard workers. They do not drink any kind of alcohol and do not smoke either. The monthly family income is more than three million Gibbs (approximately twelve thousand Bahts, or four hundred US dollars). This amount of money is adequate for the survival of the whole family, the studies of the children and also for saving for unexpected events. *Nang Am* has been educated under the Laotian government procedures and is graduated junior high-school. Laotian is her mother language. She can understand, speak, read and write Laotian

very well. Regarding the Thai language, she can understand, read and speak but not write. There are five people in *Nang Am* family: her husband, *Nang Am*, and three children; eight, five, and two years old, boy, boy and girl respectively. As I said before, *Nang Am* family built the home nearby her husband's family and neighbors who are also relatives. Therefore, there are more than three generations living together. These generations are grand-grandparents, grandparents, parents and children. In addition, they all support, take care of each other and nurture the younger generation.

Nang Am said that "*nong ka terb yai ma jang si kue khan* ('I grow up in the same way'.)"

Nang Am usually travels with the car of her relatives for crossing the Lao-Thai border to Thailand every month. She crosses the border for buying goods (which in Laotian is said '*sue kiang*') such as seasoning, soup, toothpaste, shampoo, and so on. Sometimes, she goes to Thailand to visit her relatives who married Thai people.

Nang Am said that "*nong koey ma prasut hong moh Nongkhai song pee laew ma, poh yad yad bok wa than moh yoo nee dee lai* ('Two years ago, I gave birth to my youngest child at Nongkhai provincial hospital, because my relatives said that the doctor there is very good')."

The first time I interviewed *Nang Am*, she visited Nongkhai provincial hospital because her youngest daughter got ill.

She said that "*era noi nee jeb, pen khaj mee kee mook, jeb kor ma sam mue laew* ('My youngest daughter got ill. She had fever, running nose and sore throat about three days ago'.)" "*Nong pa era noi pai ha thanmoh ceenic kai baan ka bor dee kuen ka loei pa ma nee, nong mee tura ma yam yad ka loei ma ha than moh nam khan* ('I took my daughter to a private doctor clinic in Lao PDR but she was not better. And I also visited my relatives in Thailand, so I took her to visit Nongkhai provincial hospital'.)"

Nang Am continued saying that "*suan lai yam khon nai baan jeb khaj thammada nong ka sue ya nai Lao kin, tha jeb lai mue bor sao rue jeb haeng or prayad tidpad haeng, bang thua ka pai ha tan moh ceeniic nai Vien rue kham ma nee* ('When a member of the family get a general illness (such as, fever, headache, muscle pain, etc.), I usually use self-medication by buying medicines from the community pharmacy. If illness symptoms persist, or if the person got a severe illness (such as,

high fever, more cough, difficulty to breathe, take long time for healing, etc.) or a communicable disease, I seek health-care services at the private doctor clinic in Vientiane or across the border in Thailand'.)" "*Hed tee yam jeb haeng see ma pua pee poh our chia thang nee, chia khunnapab ya, khunnapab than moh, laew ka bor paeng lai* ('The reason for seeking health-care services in Thailand when a severe illness occurs is because of the quality of medicines and doctors and treatment fee is not expensive'.)"

Nang Am explained in the following manner her beliefs on health and illness:

"*sukkapab dee khong dek noi kue kin dai, len dai, non lab, pai hong hean dai, poo yai hed wieg dai* ('Healthy children are children craving, playing, sleeping well and being able to go to school. Healthy adults are adults who are able to work.)"

"*Hed tee nong chia jang san, yon nong liang dek noi sam khon nee*, *yam dai tee dek noi sukkapab dee nong kab fan ka pai hed wieg nai na nai suan dai*, *laew ka pa nang noi nee pain am dai* ('I believe in this way because I take care of my three little children. Therefore, my beliefs on health and illness are related to taking care of children. When my children get healthy, my husband and I are able to work in the fields and in the garden. Moreover, we can take my little daughter with us)".

"*Fan nong plaeng tieng mai pai pen hong noi noi, hai ee nang noi sao yam pai suan* ('My husband modified a bamboo bed to be a small room with no covering for my daughter, so she can plays around here while we go to the garden')".

The researcher's daughter "*Moo Waan*" was very surprised and excited when she saw the bamboo small room. She asked to my husband to allow her to play in it. When she played in the bamboo, she looked a bit surprised, excited and scared at the same time (Figure 5.1).

Figure 5.1 The modified bamboo bed which *Nang Am* husband made
(Photo taken October, 19 2010)

Nang Am continues saying that "*yam look jeb bor lai yang tho hon king hone, rue yam thong fao wieg keb bai ya sub, nong ka fak look wai kab poh too mae too rue yad yad kan berng ngaeng, tae tha jeb lai* ('I would ask to my grandparents or relatives to take care of my children when they get a general illness, for example, a fever or when I have to speed up in selecting the tobacco leaves')".

"*Tae tha puey bor haeng rue bor fao wieg ka berng ngaeng eng* ('If my children get a severe illness or my work is not hurry up, I will take care of them myself')". "*Yam dai dek noi king hone, tai thong, bor yak khao bor yak nam, man pua pan kab kan yao yai khong dek noi, poh jak tee koey boh ma dek noi jeb yam nang ma khan, khan ma yuan, yuan ma yang, era noi nee ka kue kan kab uia ai* ('When my children get fever, diarrhea and have no appetite, these symptoms are related to their growing up or changing their age. My experience is my children get ill during their tender period. My youngest daughter is like my brother and sister')".

"*Samrab poo yai, nong kued wa, jeb yon hed wieg nak, bor dai pak, agarn ka kue kan, mee puad hau, king hone, jeb kham, pen wat, pen ai* ('I think that illness in an adult is because he is working hard and does not relax. Adult illness signs and symptoms are quite the same as in children, such as, they have headache, muscle pain, running nose and cough')".

Nang Am, therefore, grows up in a traditional society. But she also applies her education and experiences on Western medicine to relieve her children illness. I will give more details in the next chapter.

2. 'Mae Serm'. *Mae Serm* is a "*mae too chao Lao*", or a Laotian elderly woman. Generally, women in Laotian are called "*mae ying*" while men are called "*poh sai*". Moreover, elderly woman are called "*mae too* or *mae yai*" and elderly men "*poh too* or *poh yai*". Therefore, I will call *Nang Serm* "*Mae Serm*" because she is about sixty years old. *Mae Serm* is a grandmother. Six persons live together in her family: *Mae Serm*, her husband, her daughter and son-in-law, her son and daughter-in-law, and two granddaughters and one grandson. *Mae Serm* was not educated according to Laotian government procedures but she can read and write Laotian very well. She is also able to understand, read and speak the Thai language. But she cannot write Thai. She has a small grocery store in *Baan Muangpier.* She sells any commodities, for instance, seasoning, toothpaste, soap, shampoo, toilet paper, etc. In addition, she is also taking care of her grandson and granddaughter. Her monthly family income is approximately five million Gibbs, from her grocery store, the selling by her husband of tobacco leaves, and the transport of villagers by her son's small van to the market, Vientiane Metropolitan area and/or cross-border to Thailand. These incomes are adequate for the survival of the family members. *Mae Serm* lived in this community since her birth. Her parents are *Baan Muangpier* villagers. *Mae Serm* is crossing by private car the Lao-Thai border for buying goods every month. But she never stays overnight. Actually, she visits the doctor in Nongkhai provincial hospital every two months.

She said that "*tan moh bok mae wa pen kham dun kab bao waan ma ha pee laew, mae ka loei me pau yoo nee prajam* ('The doctor told me that I was sick because of hypertension and diabetes about five years ago, so I frequently visit the doctor there')".

When I met her for the first time, she was visiting the doctor at Nongkhai provincial hospital because of fever, cough and sore throat for about three days. She said that she did not visit any doctor or seek any health-care service before coming there.

She said that "*mae yan, yon our mee prayad prajam, yam jeb yam khaj ka fao ma nee load* ('I am afraid because I have a chronic disease, so when I get ill I come here without delay')". "*Yam jeb mae ka kin ya tee dai pai jak nee* ('When I get ill, I do take medicine from this hospital)". "*Yam mae jeb rue khon nai baan jeb, see jeb noi rue jeb lai rue prayad tidpad ka pa kan ma hong moh mong nee, poh our chia nai borikan, khunnaparb ya, laew ka bor paeng* ('When I fall ill or when members of my

family get ill of a general illness, a severe illness or a communicable illness, we visit the doctor here, because we respect the quality of the service, of the pharmacy and also because services fee is not expensive'.)"

Mae Serm defined health and illness in the following terms: "*sukaparb kue bor jeb bor khaj, kin dai, non dai, hed wieg dai, namtan bor lai*, *bor muay bor pia lai* ('Healthy people are not ill, they have no fever, they have appetite, they sleep well, they can work normally, the level of sugar in the blood is normal and there is not too much weakness')".

She continued saying "*tee mae chia jung see, pen yon thon pen sao our sukkaparb dee bor koy jeb bor khaj hed wieg dai, thon nee taokae ma sukaparn man bor dee kue thon pen sao* ('I believe this because when I was young I was healthy, I was never ill nor had fever, but since I turned into elderly I feel I am not healthy any more')".

"*Our pen bao waan our bor hoo dok namtan huen noi kuen lai tor dai, tae tee our hoo kue man see wing wing wien wien, muay lai hed wieg bor dai* ('I have diabetes, I do not know about blood sugar level but I know when it is low or high because I feel more weak and cannot work as when I am healthy or normal')".

About fever-related illness, she said that

"*man hoo sue khon hon nao nao nai thon nai tho, bor jak kao bor jak nam, pen muay pen loy* ('I feel when I become feverish, burning and shivering at the same time, anorexia and weak')".

She continues by saying "*mae khaj kue see puapan kab prayad tee pen yoo, our bor khaeng haeng yam akard plian ka jeb laew, bang tua tha mee bai nai baan puoy our ka puoy kue kan* ('I have fever which may be related to my chronic illness, I am not healthy, so when the season changes I am often ill, and sometimes when there is some member of my family ill, I am also ill')".

"*Mae kued wa kue see tidpad kan nor* ('I think it may be contagious')". "*Nai dek noi mae kued wa kue see jeb see khaj paupan kab kan yaudyaoyai* ('In children cases, I think that fever or illness is related to their growth')".

"*Pooyai jeb kue see paupan kab hed wieg nak, bor dai pak, bang tua see puad hau tho hon, pen wat pen ai* ('Illness in adulthood is supposed to be related to hard work and stress, sometimes the symptoms are headache, fever, running nose and cough')".

"*Sahed khaj bang tua yon pid phii poo phii ya, pid phii baan phii heun, pid phii hai phii na* ('Sometimes the causes of illness are doing something wrong to the ancestor's spirits, house's spirit, field's or farm's spirit')".

"*Phii ka mee terng dee kab bor dee, kue phii dee ka soy our, phii bor dee ka hed hai our jeb, tae bang tua phii dee ka hed hai our jeb dai kue kan tha our hed pid rue bor dai hed bun pai hai* ('Spirits are of two kinds: goods spirits and bad spirits; good spirits are helping us while bad spirit are making us ill, but goods spirits sometimes create illness in us if we had wrong behaviours or did not perform meritorious deeds for them')".

3. 'Mae Nang'. *Mae Nang* is a married fifty-four years old Laotian woman, with a white yellow skin and plump appearance. She studied under the Laotion procedures until graduation at primary school (grade six or '*por hok'* in Laotian). She is helping her husband to grow tobacco plants and to plant rice. She has two offsprings, one boy and one girl. They are married already. She also has two nephews and one niece. So, there are nine persons in her family. *Mae Nang* was born in *Baan Muangpier*. Her parents left to her rice fields and garden as heritage. Thus, she used this heritage for living by growing tobacco plants and vegetables. During the harvest season, she collects the best seed keeping as seedstock for the next cultivation season (Figure 5.2). She said that

"*suan lai khon baan nee ka hed jung see, kue keb med pak wai pook tua na, our bor thong sia ngern sue* ('Almost all of *Baan Muangpier* villagers collect the perfect seeds for the next cultivation season so there is no need to waste money for buying new seeds')". She continues by saying that

"*tee suan suan nueng mae pook thon ya soob, our ma soi pen sen noi noi, tak haeng laew song hong ngan* ('In some parts of the garden, I grow tobacco plants for slice to small line, drying and supply to tobacco factory')". "*Rai dai eek suan nueng dai ma jak look sai mee road hab jang, hed hai baan mae mee rai dai si lan*

ngern Thai kue see muan hok pan, *por cai jai nai baan laew ka lia kab* (‘The monthly income comes from the small van of my son which he uses for sending and receiving passengers to the city and across the border. All of this makes that my family has a monthly income of about four millions Gibbs, which is about sixteen thousands Bahts. It is sufficient for the spendings and savings of the members of the family’)”.

Mae Nang crosses every couple of months the border to Thailand for buying goods. Besides buying goods, she also visits Thai relatives in Nongkhai province.

Figure 5.2 Vegetable seeds which *Mae Nang* keeping for next cultivation
(Photo taken: October 9, 2010)

Mae Nang never seeks health-care services in Thailand because she has the Laotian health coverage card. This card allows her to seek all kinds of government health-care services in Lao PDR. So, she does not need to find health-care services in Thailand. However, when she gets ill with fever and stiff neck, her family in Lao PDR and her relatives in Thailand say that she should cross the border for seeking treatment in a hospital in Thailand.

Mae Nang said that “*mae jeb jed-pad mue, pai ha than moh yoo suksala bor dee kuen*, *sue ya jak han ya ma kin ka bor dee kuen, song mue khon pai Nongkhai pai ha than moh nai Vien, look look kab yad pee nong pueksa kan hai yai pai hong moh Nongkhai, tha bor yai kue see bor lia, than moh yoo nee dee lai, hab thon dee, ya ka dee, kiang mue kiang sai ka dee, tia na kue see ma nee eek* (‘I got ill about seven-eight days ago and I went to the doctor at the community health center but I was not better. Then, I bought medicines from the drugstore and I also felt the same. Then I

visited the doctor in Vientiane. Then, my children and my husband conferred with my relatives in Thailand and decided to move me to a Nongkhai provincial hospital. If I did not moved to a Nongkhai provincial hospital I think that I would be already dead. The doctors, pharmacies, instruments and services in the Nongkhai provincial hospital were very nice with me and when I will be again ill, I will seek health-care there)".

About health and illness, *Mae Nang* said that "*sukkapab kue yoo dee mee haeng, kin zab, non lab, hed wieg hed ngan dai* ('Healthy people are good livings and strong, they have good appetite, sleep well and are able to work')".

"*Jeb khaj dai pouy kue bor mee haeng, kin bor dai, non bor dai, hed wirg ka bor dai* ('During illness periods they are weak, with anorexia and they are not able to work')".

"*Yam our pen khaj pen ai, tho see hon see hum, tha bor lai ka hed wieg dai, tha jeb lai ka thong sao wieg* ('During illness with fever and cough the body temperature will increase, if the illness is mild we can continue to work, but if illness is more severe we have to stop working')".

"*Suan lai ka khaj yam plian na, plian agad, agard nao nao hon hon ka see pen wat pen ai, dhoy chapoh dek noi, bang tua ka mee payad tidpad yung tee hen kue pen hat khong dek noi, than moh pern wa jung san* ('People mostly get ill because of seasonal change, hot and cold at the same time, making people get fever or common cold, especially young children. Sometimes, illnesses are transmitted, for example, measles. The doctor said like that')".

Mae Nang continues saying that "*mae bor koy jeb koy khaj dok, thang tae pen sao laew, mee tua nee la man kuk lai, terng khaj terng san, kin bor dai kluen namlai yang bor dai loei, thon lak kued wa kue see tai laew* ('I am not often ill, I am strong since I am adult, but this time it is terrible, I could not either eat and swallow. I thought at first that I would die')".

Notice: One day before, at noon, I met *Mae Nang* and interviewed her while she was under medical observation in the observation room of the Nongkhai provincial hospital. She was fully conscious and could perfectly answer to the interview. Then, at late night, the doctor moved *Mae Nang* to the intensive care unit because her state was getting more severe with difficulties to breathe, and the respirator was applied. I visited *Mae Nang* again in the next early morning. She could not speak or breathe. So,

I interviewed her husband, her son and her daughter. Then, I visited and interviewed her in *Baan Muangpier* one month after I met her.

4. 'Nang Suk'. *Nang Suk* is a '*mae ying chao Lao*' or Laotian woman. She was married when she was twenty-four years old which is too old for Laotian women. She said that mostly Laotian women get married when they are twenty years old. She married with a government officer working as an engineer in the Northern Lao PDR. Her husband is back to home every couple of months. Today, *Nang Suk* is thirty-three years old. She has two little boys, of four and two years. *Nang Suk* and her family live together with her parents in *Baan Muangpier*. In addition, her grandparents and her younger sister live with them. Thus, her family members are eight persons. Indeed, her family is similar to most families in *Baan Muangpier* where there are three to four generations living together. *Nang Suk* said that

"*nong hian job san mor hok hong hian khong rathaban, kern aan pasa Lao kab pasa angish dai dee, pasa Thai kern dai noi nueng, nong koei hed wieg borisas farang khon thaeng ngan*, *por thaeng ngan nong ka hed han serm souy* ('I graduated grade twenty under the Laotian government procedures. I can read and write Laotian and English very well. For Thai language, I can read well but can write only a little. I was working in a foreigner company before being married. After being married, I established my own small beauty salon')".

"*Dian nueng rai dai hian our tor si lan Gibb kue see praman muen hok pan, por sai jai laew ka lia keb* ('Monthly income is approximately two millions Gibbs (about sixteen thousands Bahts) which is sufficient for family expenses and savings'.)"

Nang Suk continues saying that "*Rai dai suan nueng ka ma jak ngern dian fan, suan nueng ka ma jak han serm souy, suan nueng ka hai na kab saun dok mai tee por mae hai* ('Monthly income comes from my husband salary, my beauty shop, my rice fields and my garden of flowers')".

"*Nong keb dok dao hiang song kai nai Vien, mee khon ma hub hod baan, pern our pai yeb khan mak berng* ('I collect marigold flowers for selling to the merchants in Vientiane market. They use marigold flowers for making '*khan mak berng or bai si*') (Figure 5.3)."

Figure 5.3 *Nang Suk* and her mother in the marigold flowers garden
(Photo taken: October 19, 2010)

Nang Suk crosses the Lao-Thai border every month for buying goods, utensils and to bring her children to department stores. Sometimes, she takes the bus, her relative's car or her husband's car. Last year, *Nang Suk* visited a private clinic in Thailand because of fever and pneumonia. This time, she is visiting a Nongkhai provincial hospital because of fever and muscles pain. She got these symptoms two days ago. After visiting the doctor, she wanted to go to the market for buying goods.

She said that "*suan lai yam jeb yam khaj nong sue ya jak han ya, rue bor san ka pai ha ceenic than moh nai Nongkhai, tha jeb lai mue bor sao ka pai ha than moh hong moh luang yai, nong kued wat ha pen prayad tidpad ka kue si pai mong diaw kan, poh nong chia khunnaparb borikan kab khunnaparn kiang mue* ('When I or a member of my family is ill, I buy medicines or visit a private clinic in Nongkhai. If the illness is more severe, I visit the government Nongkhai provincial hospital. I think that in communicable illnesses, I will seek health-care services at the same place because I trust the quality of services and instruments')".

Regarding her views on health and illness, *Nang Suk* said that "*sukkaparb kue kin dai, non dai, hed wieg dai, dek noi len dai toh bor hon, bor suem bor shao* ('To be healthy means to have good appetite, good sleep and being able to work. For children, they are able to play; there is neither fever nor weakness)". *Nang Suk* continues saying that

"*pen yon nong liang dek noi song khon nee, yam dai dek noi len dai kin dai kue yam bor jeb bor khaj, nong ka hed wieg dai, pai hai pai na ka dai, bang tia poh too mae too ka choi berng ngaeng, yam dek noi jeb khaj dai pouy, ka thong shao*

wieg berng, tha jeb noi mae too ka bern hai, tha jeb lai nong ka thong shao wieg ('I believe this because I am taking care of my two little children. If my children can play and have good appetite, this means they are healthy. So, I can work at my beauty shop and in my fields. Sometimes, my grandmother helps me to take care of my children. When they are ill, I have to stop to work in order to take care of them. If they got a mild illness, my grand-mother takes care of them. But if they got a more severe illness I do it')".

Nang Suk also said that "*dek noi song khon nee ayoo khai kan thae thang kan lai, khon yai jeb doo, yuad yao yai ka jeb, agard plian ka jeb, thae khon noi bor koi jeb, khaeng haeng see yuad yao yai rue plian agard, thae plaeg kue yan khon, hen khon plaeng na see lob* ('My sons have about the same age but are different in character and health. My older son has a mild weakness. He usually gets ill when the weather is changing. But my younger son is healthy. He is so different from his brother. He does not like foreigners and escapes when he is facing them')".

Nang Suk said jokingly that "*look khon noi nee kue see pen sao khao, bor man sao our, kee ai bor mak khon plaeg na, thae khaeng haeng, sao khao pern khaenghaeng, bor koi jeb koi khaj, thon nong tuepa pai yoo kin kab fan yoo chao therng poon* ('My younger son is possibly a high hill-tribe person. He is not Lao Lum. He seems to be shame and does not like foreigners. However, high hill people are strong and healthy. I was living with my husband at the high mountain in the North of Lao PDR when I got pregnant')".

She continues saying that "*yam dek noi jeb see toe hon, tai thong, bor yak chao bor yak nam, our chia wa kue see puapan kab dek noi yao yai, pho jak tee nong liang dek noi song khon nee ma, see jeb yam plian jak nang ma kha ma yuan, tha pen poo yai see jeb yon hed wieg nak, bor dai pak rue tidpad poo aun ma, suan lai ka see king hone, pen wat pen ai, ka mee kue khan tee pai hed bid phii hai phii na phii poo phii ya* ('When children get ill, they have fever, diarrhea and anorexia. I believe that this illness is related to their growth. All my children were getting ill when they arrived at the age of sitting, standing and walking. In the adult case, I think that they are getting ill because of hard work and they don't relax. And sometimes, they get ill because other people are contagious and made wrong things to ancestors' spirits and/or fields' spirits')".

5. 'Tao Nun'. *Tao Nun* looks like most Asian people with a light-yellow skin. He is a middle-aged, thirty three years old, Laotian man. His wife is a house-wife. She is taking care of a four years old girl and helps *Tao Nun* in the rice field. *Tao Nun* finished his secondary school under the Laotian government procedures. He said that

"*tha hed dai khoi ka yak hien sung sung, tae khon our yak bor mee ngern bor mee thong, loei og ma hed na, tae rai dai bor dee, ka loei ma hab jang khab rod* ('If I could, I would have studied until the higher level but I was too poor in the past. Thus, I had to leave the school for working in the rice fields. But the income was too low and I changed to be a car driver')".

He continues to say that "*thon raeg raeg ka shao chao, khab hab song nuk thongtiuw jak khua chao Vien, tor ma por thao sue hai pen khuan thung lung kin dong, poo chai Lao suan lai khuad wa karn khab rod hab song nuk thong tiuw pen chong thang ha rai dai dee khaw hed na, bang khon thong kai hai kai na ma sue rod lan* ('At first, I was renting a car to carry tourists from the bridge to Vientiane. Then my father-in-law gave us a car as wedding gift (Figure 5.4). Most Laotian men believe that driving a car for taking tourists is the best way for enchanted income. Some men have to sale their rice fields or garden for buying a car')".

Figure 5.4 *Tao Nun*'s small van (Photo taken: July 25, 2010)

Tao Nun said that "*khab rod, hed na ruam khan rai dai ka ha lan Gibb, por cai, por song ka rod ka por mee kreb,* ('The monthly income is about five millions Gibbs and it comes from car driving and rice fields. This income is sufficient for the family's expenditures, car payments and savings')".

Tao Nun lives with his wife family in *Baan Chaitham*. Family members are nine people, i.e. *Tao Nun*, his wife, his daughter, his father-in-law, his mother-in-law, his sister-in-law, and her family. *Tao Nun* crosses the border to Thailand every week. Sometimes, he takes his family for buying goods, and sometimes he takes villagers to cross the border. As *Tao Nun* grandfather is Thai, he sometimes crosses the border for visiting his relatives.

Tao Nun continues saying that "*koi koei ma ha than moh yoo clinic yon puad thong lai, than moh bok wa pen rok kapoh, pua yoo song sam dian ka sao, thia nee jeb yon khaj, ai, jeb khor sam mue ma law, koi yan khaj wad pan mai tee og khao soo mue,koi yan poh wa koi puapan kab nuk thongtiuw soo mue, yam jeb yam khaj koi ka me pua yoo pee la, koi chia wa hong moh yoo nee kue see dee khwa* ('I have been visiting the doctor at a private clinic last year. I had a stomachache; the doctor said that I had a peptic ulcer. I felt better after visiting the doctor about a couple months later. This time, I visit the doctor here because I had fever, cough and sore throat for three days. I am afaid of the newly influenza which was mentioned at the television. I fear this because I am in contact with foreigners' everyday. When someone of my family or I get ill, I prefer to visit the doctor here [i.e. in Thailand]. I trust the doctors and health-care services in Thailand')".

About health and illness, *Tao Nun* said "*yoo dee mee haeng kue hed wieg dai bor mia, yak kin yang ka kin dai, wala jeb yak kin yang ka thong kalam* ('*yoo dee mee haeng* or to be healthy is when we can work without weakness. We can eat as we want'). He continues saying "*yam jeb wieg ngan ka thong sao, yang poh tao koi pen prayad taiwai prayad baowaan, kin yang ka thong kalam, thong pai hong moh soo dian, tae khon ka pai hong moh nai Vien, thor ma bor dee khuen, pen lai khuen, khon nee ka wao khon nan ka wao, wa hong moh laung Thai dee lai, ka loei pa ma pua yoo nee, yam kam ma nee pa poh thao ma ha than moh nae pa ela ma tiuw nae sue khiang nae* ('When we are ill, we have to stop to work. For instance, my father-in-law is getting ill because of renal failure and diabetes. He had to stop to work and cannot eat as he wants. In addition, he has to visit the doctor every month. Before my father-in-law visited the doctor in Thailand, he had been visiting the doctor in a Vientiane hospital. But he did not feel better. Then, my neighbours, my friends and relatives said that doctors in the government hospital in Thailand are the best. So, we took my

father-in-law to Thailand to seek health-care services there. Sometimes, we cross the border for taking my father-in-law to the hospital, sometimes for buying goods, and sometimes for taking my daughter for a tour in Thailand')".

About his occupation, he said that "*koi thong puapan kab nak thong tiuw lai, terng khon Thai hon farang, jang san koi thong hab hoo khao san yoo tarhod, pia thong sai wao kui rue nae nam nak thong tiuw tee ma tiuw nai Vien rue nai Lao, our loei thong aan nuengsue, berng khao, sob tham khon tee hoo jang siuw koi pen than moh ka mee, yad yad khan ka hed wieg hai kathueng sata ka mee* ('I have to contact tourists either, Thai people or western tourists. Thus, I have to know more about the world situation and also about Lao PDR facts. I have to talk and tell to tourists. I can get data and more details by reading newspapers, watching television and asking to friends. I ask either to my close friends or relatives, they are doctors')". He continues by saying that "*samrab koi, koi chia hong moh samai mai lai kwa moh puen baan, poh koi chia wa pern hien hoo ma lai, yook ya dee, borikarn ka dee* ('For me, I trust more Western medicine than traditional medicine. I say this because I believe the Western doctors study more; they have pharmacies of good quality and also good service')".

6. 'Nang Sao'. *Nang Sao* is a seventeen years old Laotian girl with a dark-yellow skin. She is single and is a first year student in the Faculty of Education in the university in Lao PDR. She wants to be a good teacher and to teach at the primary school. She lives with her parents and two younger sisters in *Baan Chaitham*.

Nang Sao said that "*por kab mae pen look jang hong ngan hed ahan krapong*, *nong mee na yam bor dai pai hong hien ka pai soi por kab mae dam na, khao suan nueng keb wai kin suan nue kai, rai dai nai baan nong bor koi hoo, tae bor bok wa boh sai, kue see lan song lan nee la* ('My parents are employees of a food factory. We have a rice field. When my sisters and I do not go to school, we help our parents in the rice fields. We sell rice and keep rice for family consumption. I do not know precisely about the monthly family income. However, my father said it was adequate for our expenditures. I think that monthly income is approximately two millions Gibbs')".

She said that she could listen, speak and read the Thai language, but could not write and that she had been visiting Thailand before but has never sought health-

care services there. She said "*nong ma hong moh tia nee yon bor kab mae pa ma, nong toh hon puad hau, mee puan daeng daeng kuan nam kaenka, ma song mue laew, mae pai sue ya jak hanya yoo nai baan ma hai kin bor sao, soo tia yam jeb khaj mae ka sue ya hanya nai baan hai kin, tha jeb haeng kuan ka pa pai ha than moh nai muang rue nai Vien, tae tia nee bor kab mae yan nong pen khaj liad oog ka loei pa ma nee, pern see pai sue kriang nai talad, ka loei pa nong ma nam* ('I visit this hospital because my parents are willing too. I had fever, headache and red rash on legs and arms two days ago. My mother bought some medicines from a pharmacy in my community for me, but I was not better after taking them. Everytime I don't recover from illness, my parents take me to the district hospital or to the hospital in Vientiane. But this time my parents fear that I got dengue haemorrhagic fever, so they take me here. In addition, my parents wanted to buy goods in the Nongkhai market')".

About health and illness, she said that "*yoo dee mee haeng suburb nong kue sabai thon sabai toh, bor jeb bor khaj* (*yoo dee mee haeng* or to be healthy is to feel good and not fall ill)". *Nang Sao's* father said "*yoo dee mee haeng kue hed wieg dai, kin dai non dai, tha jeb kuen ma see man our jeb rue look jeb, wieg ka thong sao, look jeb our ka thong berng ngaeng, toe our erng tha bor lai ka bor thong sao, tha jeb nak ka thong sao* (*yoo dee mee haeng* or to be healthy is to be able to work, to have good appetite and to sleep well. When a family member falls ill, we have to stop working. I have to stop working to take care of my children when they fall ill. However, if I have a mild illness, I continue to work, but if it is severe I have to stop working')".

She said that "*suan lai nong jeb yon tidpad jak moo, yang pen wad yam moo pen nong ka pen, tia nee ka mee moo nai hong jeb, tae nong khued wa bor dai tidpad ma jak moo, nong kued wa yon nong tuek yung gad thon nong pai tak nam sang lang baan, kai kai sang mee yung lai, kue see pen khaj yung* ('I believe that most of my illnesses are transmitted by my friends. When my friends catch a common cold I also catch it. But this illness is different even if my friend is also ill. I think that I fell ill because the mosquitoes bite me when I was taking water from a well in the backyard (Figure 5.5). Near the well, there are many mosquitoes. I think I get *khaj yung* or mosquitoes fever')".

Nang Sao father said that "*koi kued wa kue see kin see arb nam tee mee nonnam khao pai ka loei jeb, baan our bor mee nam papa, thong kin thong sai nam sang, tae baan taew kai thanon kab baan nai talad mee nam papa sai* ('I think that my daughter drunk or took a bath in water with *nonnam* or larvae of mosquitoes, so she catched mosquitoes fever. There is no tap water in our home. So, we have to consume water from the well. But there is tap water supplied to homes in the center of community and in the market')".

Figure 5.5 A well in *Nang Sao's* home backyard
(Photo taken: August 25, 2010)

7. 'Nang Sai'. *Nang Sai* is a middle aged (fifty-one) Laotian woman. She is married with a retired government officer. *Nang Sai* has 2 children, a son and a daughter. Her son has a graduated bachelor degree. Now, he is an employee in a Western company in Vientiane. Her daughter is studying at the National University and is at the last year of the bachelor's degree.

Nang Sai said "*na bor dai hian soong yon bor mae yak, na job san por hok, por mee look ka loei yak hai khao hian soong soong, dee nae tee yoo kin kub bor deknoi ka loei por mee por yoo, pern hed wirg hai rat, our kai kiang num, kai khao num ka loei mee kin mee sai, rai dai tor dian bang tia ka noi bang tia ka lai, tae bor tham kwa jed lan ha*, *por cai laew ka lia keb* ('My parents were poor, so I did not graduated in high level, only in primary school. When I have my offsprings, I would like they study as high as they want. I am a lucky woman. I am married with my

husband who makes my life better. He worked as a government officer. I also have a small grocery, a restaurant and a rice field. Our monthly family income is sometimes high, sometimes low, an average about seven point five millions Gibbs. It is sufficient for our family's expenditures and savings')".

Nang Sai lives with her family in *Baan Chaitham*. She can listen and speak the Thai language very well. She reads fluently but writes Thai poorly. She often crosses the border by private car to Thailand, e.g., every week for buying goods (i.e. meat, vegetables, seasonings, etc.) for her restaurant, her grocery and for the consumption in her family. Her family does not have any Thai relatives. She said that 'she had been looking for health-care services in Nongkhai provincial hospital because of a car accident during her travel to Thailand two years ago. This event made her appreciate Thai health-care services. Since then, she and her family visit Nongkhai provincial hospital when they fall ill'.

About this visit in a Nongkhai provincial hospital, she said "*na jeb yon khaj ai ma sam mue laew, tia nee ma ha moh mae sue kiang num, suan lai yam jeb noi ka kin ya tee sue pai jak muang Thai, tha jeb lai ka kham ma nee, na chia wa borikarn kab than moh yoo nee dee* ('I fell ill with fever and cough symptoms three days ago. After visiting the doctor, I wanted to go to the market. When I or a member of my family falls ill of a mild illness, we take medicine bought in Thailand. In case of a severe illness, we cross the border to Thailand for visiting the doctor. We appreciate the quality of the services and doctors.')".

About health and illness, *Nang Sai* said that "*yoo dee mee haeng kue kin sab non lab, yiew tai pokati, hed wieg dai, yam jeb kue our kin bor sab non bor lab, kabtai bor dee, our ka thong sao wieg, jeb khaj dai piuy man thammada, haeng tao haeng kae ma diew ka pen nan pen nee, yang dee nab or mee prayad eyang pracham toh, pen wad pen ai thammada, na jeb ka thong pao pinpau, por bor mee pai soi wieg,* ('*Yoo dee mee haeng* or to be healthy means to have a good appetite, to sleep well, to have normal excretions and to be able to work. When we fall ill, we have anorexia, we do not sleep well, the excretions are abnormal and we are not able to work. Illness is a common event in our life, especially when we become too elderly. I am very lucky and healthy; I only catch a common cold or a mild fever but no chronic illness. But

when I fall ill, I have to rush to the doctor. Nobody helps me to work in grocery and in the restaurant.')"

8. 'Tao Kham'. *Tao Kham* is a tall slender teenage man. He studied until the last year of high school. He lives with his parents and grandparents in *Baan Chaitham*. His father works as an employee and his mother owns a small grocery in this community.

His father explained "*our hab jang kab hed na rai dai tor bor lai kue see lan Gibb nee la, bor por chai tae our ka thong prayad kin prayad chai, yam diad hon ma ka yibyuem pormae rue phinong* ('I work as an employee and grow rice with a low income. Our monthly income is about one million Gibb which is not enough for family expenditures. In urgent situation, we have to borrow money from our parents or relatives.').

Tao Kham said "*mae nong kham ma Thai soo atid*, *sue kiang pai kai pai cai nai baan, nong ma num bang tia ma coi tue khong, bang tia ka ma yam por too, por too nong pen khon Thai, mae nong pen khon Thai, tae por nong pen khon Lao, nong kerd nai Lao, nong pen khon Lao, nong arn, fang, wao pasa Thai dai dee, tae kian bor dai* ('My mother usually crosses the border every week to buy goods for sale and family consumption. Sometimes, I cross the border with her to help her to bring goods. Sometimes, we visit our grandfather, he is Thai people. My mother is also Thai but my father is Laotian. Therefore, I am a Laotian on the side of my father. I can speak, listen and read Thai very well, but I cannot write.')"

Tao Kham said, "*nong bor koei ma ha moh nai hong moh Nongkhai rue hong moh uen nai Thai ma khon*, *tia nee nong pen khaj, puad hau, puad mia klam, mee puen ma song mue laew, mae sue ya jak han ya nai moobaan ma hai kin bor sao, nong bor koi jeb, tia nee mee prayad khaj liad oog mee khon tai nai baan, bor kub mae yan nong pen ka loei pa ma nee, poh moh laew ka see pai talad tor* ('I never visited the Nongkhai provincial hospital or a hospital in Thailand before. This time, I fell ill and had fever, headache, muscles pains and red rash symptoms for two days. I took medicines which my mother bought in the community pharmacy. I was not better. My parents feared that I had the dengue haemorrhagic fever which appears now

in our community and kills some persons. Thus, they take me here. After meeting the doctor, we will go to the market for buying goods'.)"

His mother said "*yung taew baan lai pod lai po, our yan yan lai por baklakham pen lookdod, bor mee eiu ai, our bor koei hen khon jeb yon prayad khaj liad oog tai, loei pa ma nee kon kue see sabai jai kwa, yang wa noh our ka chia thang nee, ka yook ka ya ka bor paeng, bang tia ka pua fee, tae tia nee our jai erng* ('There are many mosquitoes around the house. I feel very scared because *Tao kham* is the only child we have. And I have never seen a case of dengue haemorrhagic fever with death before. Thus, we took him here. We trust the health-care service here. The service fees are not too expensive. I heard that sometimes the doctor does not take money from poor patients, however, we can pay.')"

About health and illness, *Tao Kham* said "*nong chia wa sukkaprb dee rue yoo dee mee haeng kue kin dai non dai pai hong hian dai* ('I believe that *yoo dee mee haeng* or healthly people can eat, sleep well and are able to study'.)" His mother said "*kin dai non dai hed wieg dai man pan thammada, dek noi thong bor pen sang, bakla Kham ton pen deknoi pensang, sang kue joi bor kin khao bor kin nam, poong lo kon pod jeb doo, tae por yai kuen ma bor koi jeb bor koi khaj, nai poo yai our see jeb khaj yam hed wieg nak, bor dai sao* ('We can eat, can sleep and are able to work in normal life. Regarding children, they must not have '*sang*'. *Sang* appears in a very young age with thin body or malnutrition, anorexia, big belly and lean buttocks'. *Tao kham* had *sang* when he was a child but he was strong as a teenager. Regarding adults, illness appears when they work hard without relaxing')".

9. 'Tao Tham'. *Tao tham* is a thirty-five years old married Laotian man. He has a daughter. His wife is graduated like him in the primary school or '*por hok* in Laotian'. *Tao Tham*, his wife and his daughter are living in a home nearby the house of his parents in *Baan Thangkhong*. His family grows rice and seeks the productivity of the forest, such as, bamboo shoots, herbs and wild animals, etc.

Tao Tham explained "*rai dai bor lai, dian nueng see kue pad saen Gibb, man bor por dok, asai yib yuem por mae yam thong sai* ('My monthly family income is not much, about zero point eight million Gibbs. This income is not sufficient for our family expenditures. In case of urgent needs we borrow from my parents')."

He also said "*our arn our fang our wao pasa Thai dai, tae our kian bor dai, our bor mee pii nong khon Thai, our mak see pai prated Thai soo dian, pai sue kiang sue khong*, *our koei pai ha moh ceenic yoo poon yan khaj, puad klam dian laew ma, tia nee our pen khaj, mee puen daeng tam ton tam toh ma jed mue laew, kuad wa ha moh laew kue see pai sue kiang*, *suan lai yam our jeb our ka kham ma nee la poh ma ngai pai ngai, thang rod ka dai, thang hia ka dai, thang rod ka pai Nongkhai, thang hia ka pai Phonpisai, yook ya ka sue pai jak nee*, *ka moh ka ya ka bor paeng* ('I can listen, speak and read Thai language very well, but I cannot write. My family has no Thai relatives. I cross the border every month to Thailand to buy goods. Last month, I visited a private clinic in Thailand because I had fever and headache. This time, I am visiting the doctor because I have fever and red skin rash. Then, I will go to the market. Generally, when we fall ill, we often cross the border for seeking health-care services in Thailand because travelling is easy by car or by boat. If by car, we go to the Muang district, Nongkhai. If by boat, we go to the Phonpisai district. And health-care services fees are not expensive.')"

About health and illness, he said "*yoo dee mee haeng man pen thammada kue kin dai, non dai, dek noi pai hong hian dai, hed wieg dai, yam our dee our ka pai ha khong pa dai, hed hai hed na dai, yam jeb kue ton nee la toh hon mee puen daeng kuen, our ern wa tanten*, *ton haeng our kued wa kue see tuek kai mai kai ya rue pid phii pa phii khao, our pai ha moh tham pern pao ha, hai yam or ma tom kin, chao laeng tia la jok atid nue bor cao*, *moo pern wa pen tanten thong ma ha moh, tha bor pai ha moh see pen haeng kuen, ka loei ma* ('*yoo dee mee haeng* or to be healthy is to have a normal daily life which means that we can eat, we sleep well, we are able to work and children can go to school. For example, when I am healthy, I can go to the forest to look for forest products and I am also able to grow rice. When I fall ill, I have to stop going to the forest and seek treatment. At first, I thought that my illness was caused by a tree or a grass poison and/or because I did something wrong to the forest spirits. Thus, I rushed to the '*moh tham*' who gave '*blowing*' on me and a pot of traditional medicines. I took a glass in the morning and in the evening during one week. However, I was not recovering. My family and friends said that I had to visit the western doctor because my illness was '*tanten*'. It will be too horrible if I am not getting the right treatment. This is why I am here')."

10. 'Nang Dao'. *Nang Dao* is a little plump fourty-eight married woman. She was graduated junior at high school or '*mor sam*' in Laotian. She and her husband grow rubber trees. They have three children; two are graduated bachelor degree and are working in Western private companies. The youngest is studying the last year of the bachelor degree.

She said that "*rai dai our dee por kin por cai laew ka lia keb, toh dian bor tam kwa ha lan Gibb, kue see song muen Baht, na yoo kab por mae, pern dai coi berng ngang look look hai num, por our pen khon Thai, yai ma yoo baan thangkhong tae tayai*, *mae na pen khon Lao, thon nee ka yang mee pee nong tee yoo nai pratad Thai, yang pai yam ma yam kan yoo talod our wao pasa Thai dai arn dai kian dai, our kham ma Thai soo dian, ma sue kiang nae, ma yam phi nong nae* ('Our monthly income is five millions Gibbs or about twenty thousands Bahts. This is sufficient for life and savings. I live with my parents. They are helping me to take care of my children. My father is a Thai man. He and his parents moved to *Baan Thangkhong* when he was a child. My mother is Laotian. We still have some relatives in Thailand and I often visit them. I can speak, listen, read and write Thai very well. I cross the border every month, sometimes for buying goods, sometimes for visiting relatives')."

She also said that "*our koei ma ha moh yoo Thai, puad khao pee tee laew ma, than moh yoo hong moh egkachon, pern pinpua dee tae ka pinpua paeng, our ka loei yai pai pinpua yoo hong moh luang, ka yook ka ya tueg kwa tae pinpua dee kue kan, ka loei pinpua ma talod, tia nee pen khaj, man hon hon nao nao, laew ka than moh nad ma tuad hua khao, tuad laew kue see kab baan loei, poh thong fao pai berng hanka* ('I visited a private hospital in Thailand two years ago because of knee pains. The doctor and the private hospital were very nice but the services fees were very expensive. Thus, I seek now health-care services in the government hospital. The fee is low for the same quality. This time, I had fever and chills. In addition, the doctor appoints me for a knees examination. After meeting the doctor, I will go directly to my home and to my shop')."

About health and illness, she said that "*yoo dee mee haeng kue hed wieg hed ngan dai, kin sab non lab, tae khon our puad thong yam liad ma, mee toe hon nao,our earn khaj liad, hed wieg bor dai, kue see pen liad lom our bor dee, thon nee bor puad thong laew tae puad hua khao, our kin ya samunpai kab ya jak hong moh fang poon la*

(‘*yoo dee mee haeng* or to be healthy is the state where you are able to work, you have a good appetite and you sleep well. In the past, I had abdominal pain, fever, chills and I was not able to work during the menstruation period. We called this *khaj liad*. May be my blood circulation was not functioning very well. Now, I have no abdominal pain anymore, but I have knees pain. For curing these symptoms, I take herbs juice and medicines which the doctor in the Thailand hospital ordered’).” *Nang Dao* showed me the herbs juice bottle and its leaflet (Figure 5.6).

She also said “*our hen kosana jak kable teevee, our loei hai fan sue ma hai, raka kuad la pan, our kin ma song dian laew, dian la kuad, kin kaew noi noi tia la kaew chao laeng, thon nee akarn jeb puiy our dee kuen* (‘I have seen this herbs juice on cable television. I asked my husband to buy it for me from Thailand. The price is one hundred Bahts a bottle. I use it since two months, one bottle each month. I take a small cup in the morning and another in the evening. Now, my illness is better’).”

Figure 5.6 Herbs juice bottle and its leaflet
(Photo taken Sep 24, 2010)

11. ‘Nang Dian’. *Nang Dian* is a Laotian woman of twenty-three years old. She is married with a Thai man. They have a four years old daughter. They live in *Baan Thangkhong* with her parents.

She explained that “*nong job por hok fan nong jab kue kan, nong hed na, por mae nong hed na, fan nong hab jang, pai jang yang ka hab merd, our yoo kan ha khon, rai dai ka bor lai dain nueng lan Gibb, kue see si ha pans Baht, rai dai baan*

nong bor por chai tae our ka bor pen nee pen sin, tae our bor thong sue ha khong yoo khong kin, keb pak keb ya num hua num saun rue ha poo ha pla ka dai, taew nee ka phi nong nong merd, kor yoo kor kin kan dai, tae toh pai kue see thong keb ngern keb thong laew por looksao see khao hong hian ('I am graduated primary school or *por hok* in Laotian. I am a rice farmer. My parents are also rice farmers. My husband is a general employee. Five people live in our family. Our monthly family income is about one million Gibbs or approximately four thousands Bahts. This income is not sufficient for our family expenditures. But we have no need to buy food. I can collect vegetables around the home or the community. I can find fishes in the pond. Most of the villagers nearby are my relatives. Thus, we can ask them for help. But, in the near future, we will have to save money because my daughter will go to school')."

She continued saying *"nong kham pai Thai soo dian, nang rod rab jang, yam phi nong fan nae, sue kiang nae, baan por mae fan yoo muang Nongkhai, nong koei pai prasud yoo hong moh Nongkhai thon era nee kerd si pi ma laew, poh nong jeb thong thon pai yam pi nong fan, tia nee era noi mee toe hon, ai, bor yom kuen chao kue see jeb koh ma song sam mue laew, yang tee bok wa era noi kerd yoo nee, yam pen yang ma nong ka pa ma nee, ha moh laew kue see pai sue kiang talad, saun lai tha jeb, pen khaj pen ai nong sue ya jak han ya nai moo baan, tha pen era noi kin ya laew see hai poo yai pao hua hai, mue song mue ka sao, tha jeb lai kuen ka kham ma nee la* ('I use public transportation for crossing the border to Thailand every month. I cross the border for buying goods and visiting my husband's relatives. My husband is a Thai guy and the home of his parents is located in Nongkhai. I gave birth to my daughter in a Nongkhai provincial hospital four years ago. I gave birth when we were visiting the parents of my husband. Now, I am visiting the doctor because two or three days ago, my daughter had fever, coughs and does not swallow food. Perhaps, she has a sore throat. As I told before, my daughter was born in Thailand. So, when she fell ill, I took her to the health-care services in Thailand. After visiting the doctor, I will go to the market. Usually, when family members fall ill, we buy medicine from the pharmacy in the community. If my daughter falls ill, I give her medicine. And my father '*blows*' her head as a cure. After one to two days, she will recover. In case of a severe illness, we cross the border for seeking health-care services in Thailand')."

About health and illness, she said "*yoo dee mee haeng kue bor jebbor puad, hed wieg dai, dek noi bor king hone, len dai kin dai, bor pen sang, yam dek noi pen sang see ngor ngae, poh our liang dek noi, our loei chai jang san, era kin nom mae jon sam kuab kerng, era loei kaeng haeng bor koi jeb bor koi puiy, yam era jeb kue toe hon, tai thong, bor yak kao yak nam, kue see puapan kab kan yued yao yai khong dek noi, poh era see puiy yam yuad yao,* ('*yoo dee mee haeng* or to be healthy means to live well, to have no sign and symptom of disease and to be able to work. For children, they are able to play, have a good appetite, no fever and have not '*sang'*. When the children get '*sang*', they will be ill-disciplined. I take care of my little daughter, so I think like this. My daughter got breastfeeding until three and a half years of age. Thus, she does not fall ill frequently because breastfeeding fragilizes the baby. When she falls ill, she has fever, diarrhea and difficulties to eat. I think these illnesses are related to her growth. She gets ill each time she changes of age)."

About illness in adults, she said "*poo yai suan lai jeb yon hed wieg nak, bor dai pak bor dai sao, poo yai yam jeb ka see toe hon, puad hua, pen wat, pen ai, kin ya mue song mue ka sao, nong koei pen khaj tab liad tab lom thon pen mae ying loon loon, khaj liad tab lom kue toe hon, puad thong and hon hon nao nao, suan lai mae ying pen sao see pen kan, por nong tue pa, pasut era ka bor pen eek* ('Most adults fall ill because they work hard without relaxing. Illness signs and symptoms in adults are fever, headache, running nose and cough. They take medicine a couple of days and then they recover. I had menstruation fever when I was a teenage woman. The signs and symptoms of menstruation fever are fever, abdominal pain, chills and heat at the same time. Most of the teenage women fall ill because of their menstrual periods. After I was pregnant and after delivery, these symptoms disappeared')."

In the diagrams 5.1, 5.2 and 5.3, I summarized the data obtained from these eleven Laotian patients who were seeking health-care services at the Nongkhai provincial hospital, including demographical data, beliefs and experiences on fever-related illness.

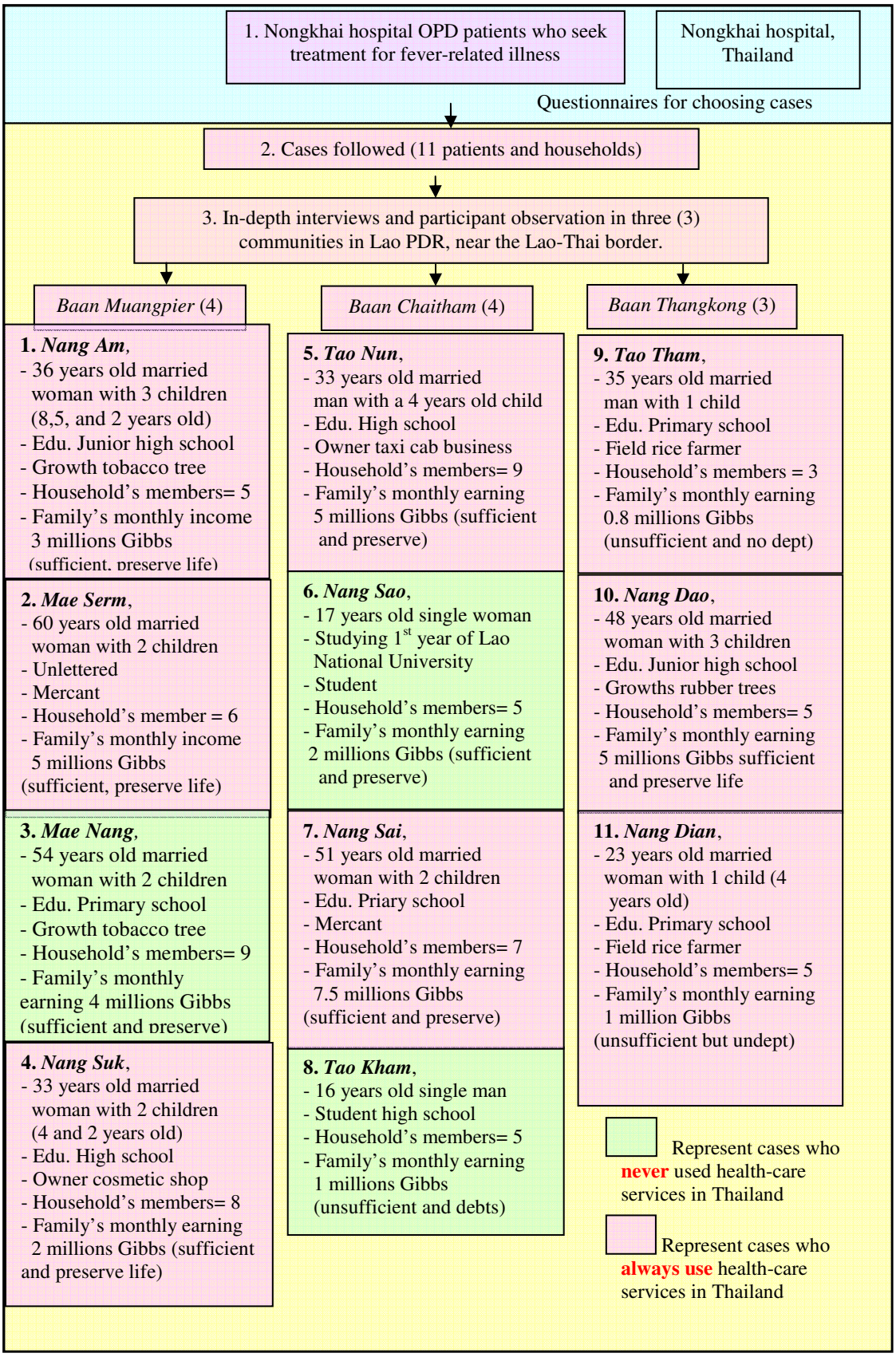

Diagram 5.1: Basic data of eleven key informants

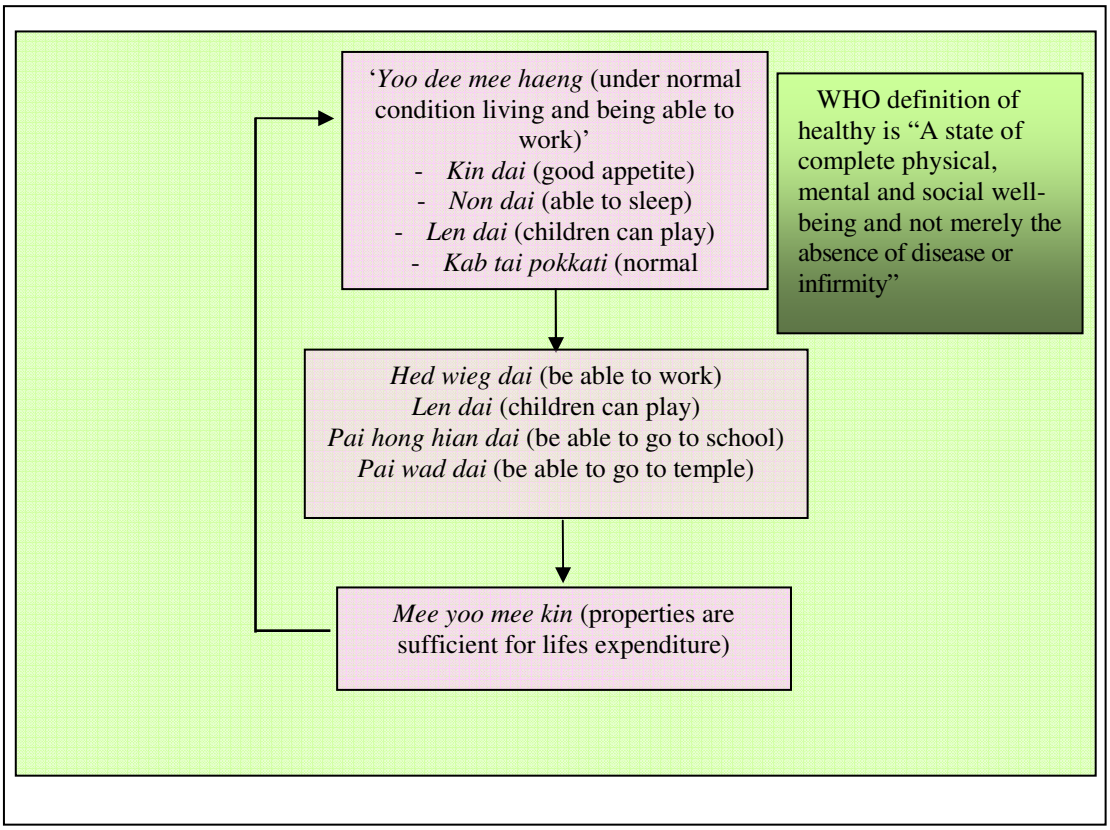

Diagram 5.2: Laotian's beliefs on health

In diagram 3, I gave the details of Laotian beliefs on health and being healthy. Firstly, Laotian call to have health or to be healthy '*yoo dee mee heang*' which means that people, under normal conditions, are living well and are able to work. Thus, '*yoo dee mee haeng*' means for example, '*kin dai*' (ability to eat), '*non dai*' (ability to sleep), '*len dai*' (children are able to play), '*kab tai pokkati*' (normal excretions), etc. In this perception, the Laotian belief is similar to the World Health Organization definition of health and to be healthy. Secondly, a healthy person is '*hed wieg dai*' (is able to work), '*len dai*' (children can play), '*pai hong hian dai*' (children are able to go to school), '*pai wad dai*' (the elderly are able to go to the temple), etc. Thirdly, '*mee yoo mee kin*', i.e. their monthly family income is sufficient for life expenditures which permit them to '*yoo dee mee haeng*' again and again.

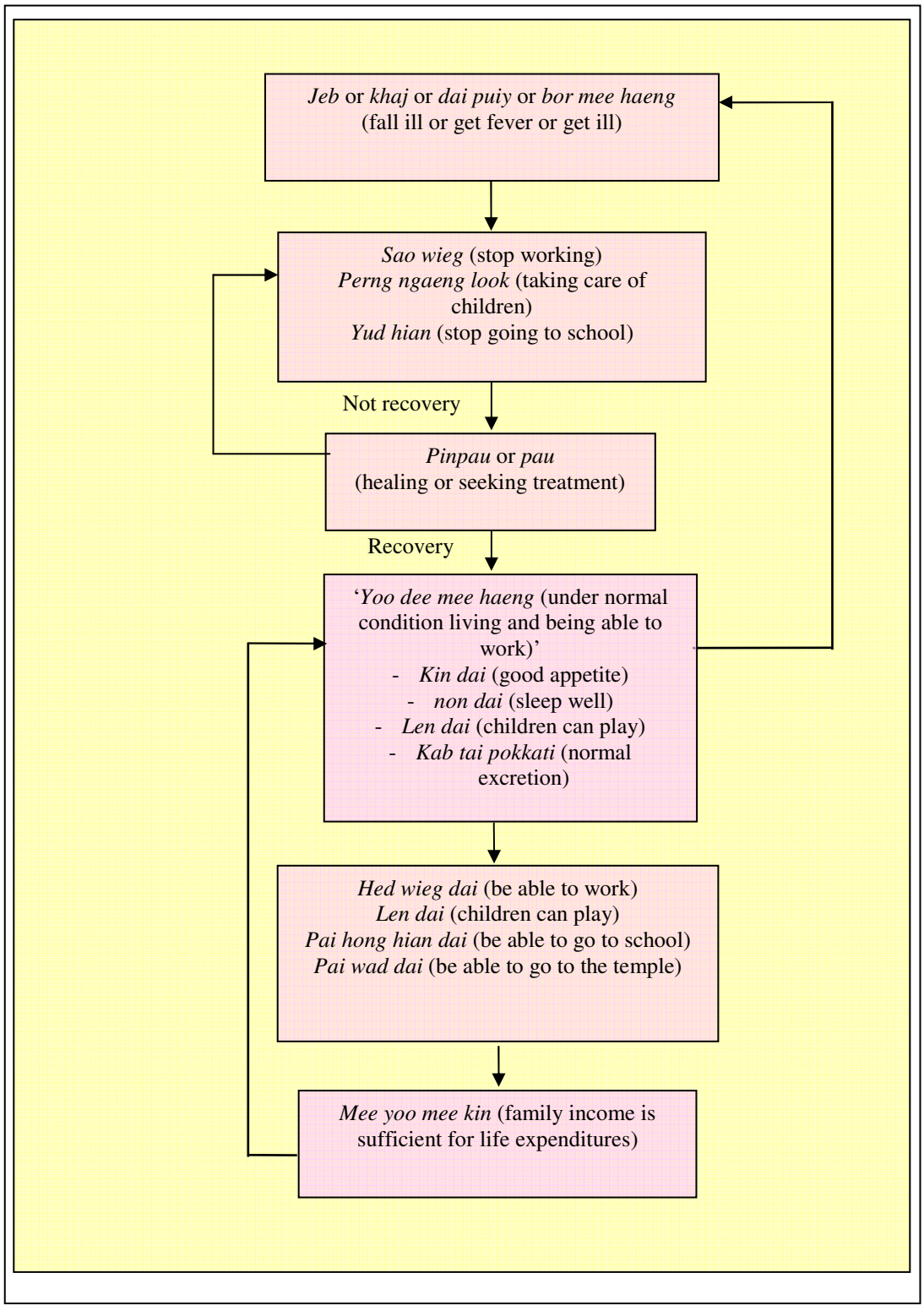

Diagram 5.3: Laotian beliefs on health and illness

In the diagram 4, when Laotian people fall ill (‘*jeb khaj dai puiy*’), they will ‘*sao wieg*’ (stop working), ‘*perng ngaeng look*’ (take care of their children), ‘*Yud hien*’ (stop going to school), for ‘*pinpau* or *pau*’ (heal or seek treatments). When they recover, they perceive that they are back to normal life or healthy (as shown in the Diagram 3). But in case they don’t recover or recovery takes time, they will be retreated or seek other health-care services, such as, traditional healer, private clinic, or government health-care services. Sometimes, they will seek treatment in their homeland and, sometimes, they will cross the border as it is shown in the following chapter.

CHAPTER VI
LAY BELIEFS AND EXPERIENCES OF FEVER-RELATED ILLNESS

The beliefs and experiences of fever-related illness of the eleven Laotian patients and other key informants are presented in detail below. In this chapter, I will adapt three important analytical tools in epidemiology ("host", "agent" and "environment") for an ethno-epidemiological perspective. Thus, "host" which refers in epidemiology to "actor" (in the context of this research, any person with a history of fever-related illness) will be translated as "actor's meanings" (i.e., perceptions of fever-related illness); in the same way, the conception of "agent" (i.e., germs, biological articles, etc.) will shift to a psychosocial unit of study (i.e. reactions to the disease, treatment-seeking behaviours, etc.) and "physical environment" will be more concerned with the context of incidence of a given illness (Agar 1996). In the last chapter, I gave details about actors or key informants (i.e. first analytical tool). In the chapter seven, I will present environmental issues which are related to the context surrounding key informants (i.e. the third analytical tool). Thus, in this chapter, I will present in detail the second issue of ethno-epidemiology i.e., the actor's meanings.

6.1 Informants' meanings on health and illness

The eleven Laotian key informants were chosen through the purposive selection method. They have been identified in the OPD of the Nongkhai provincial hospital because they were presenting with fever and/or symptoms of fever-related illness such as cough, difficulty to breathe, pain in the chest, etc. Moreover, they were living in three different communities along the Thai-Lao border: communities *Baan Muangpier*, *Baan Chaitham* and *Baan Thangkhong*. I realized in-depth interviews and participant observation in forty five households, divided in two groups: patients and their family (eleven households) and other key informants in these communities (thirty-four households). In this chapter, I will emphasize the beliefs and experiences of

patients and their family. Data obtained from other key informants will be used in the discussion. The Tables 6.1 to 6.11 resume the data on beliefs and experiences of fever-related illness of the eleven patients.

Table 6.1 Laotian lay beliefs and experiences on health (***health definition***)

Details /Cases	*Nang Am*	*Mae Serm*	*Nang Nang*	*Nang Suk*	*Tao Nun*	*Nang Sao*	*Nang Sai*	*Tao kham*	*Tao Tham*	*Nang Dao*	*Nang Dian*
Health definition	'*kin dai nonlab hedwieg dai dek noi lendai pai honghien dai* (ability to eat, sleep well, could work, for children, they can play and go to school normally)'	'*bor jeb bor khaj, kindai, namtan bor lai, hed wieg dai, bor mue bor pialai* (not ill, have no fever, able to work, low blood sugar)'	'*kin sab non lab dee, hed wieg dai, mae kaeng haeng bor jeb bor khaj, hed wieg saun hai na dai tae sao hod kae* (ability to eat, sleep well, able to work, I am too strong since teenage, not often ill and able to work)'	'*kin dai, non lab dai, hed wieg dai, deknoi len dai, toh bor hone, bor suem bor sao* (ability to eat, sleep well, able to work, in children they can play without fever, being not weak and dull)'	'*hed wieg dai, kabrod dai, bor mua, yak kin yang ka dai kin bor tong kalam* (able to work, able to drive, is not weak, we can eat what we want, never have to restrict what we are eating)'	'*sabai ton sabai toe, bor jeb bor khaj, hed wieg dai, kin dai, non dai* (feeling good, not feel pain nor ill, ability to eat, sleep well)'	'*kin sab non lab, yiew tai pakkati, hed wieg dai* (ability to eat, sleep well, able to work)'	'*kin dai, non dai, hed wieg dai, thammada, bor pen sang* (ability to eat, can sleep, able to work, feel normally, have not '*sang*')'	'*kin dai, non dai, dek noi pai hong hian dai, wela our dee our ka pai ha kong pa dai, hed hai hed na dai* (ability to eat, sleep well, children can go to school, when we are healthy we can go to the forest)'	'*hed wieg hed ngan dai, kin sab non lab* (able to work, ability to eat, sleep well)'	'*bor jeb bor puad, hed wieg dai, dek noi king bor hon, len dai kin dai bor pen sang* (is not ill, able to work, for children they have no-fever, ability to eat, sleep well, play and have not '*sang*')'
summary	- *kin dai yak kin yang ka kin dai* ability to eat, can eat anything - *non lab*-sleep well - *hed wieg dai*- able to work -*dek noi len dai, toe bor hon, bor sue bor sao, pen thammada, bor pen sang*-children have no fever, ability to eat, sleep well, play and have not '*sang*' - *pai hong hien dai*-can go to school - *sabai thon sabai toe*-feeling good - *yiew tai pakkati*- normal excretions -*namtan bor lai, bor mia, bor pia-low blood sugar, not weak*										

6.1.1 Laotian meanings of health and illness, for example, perceived signs and symptoms, perceptions of causes, perceived severity of the disease, etc., which may be similar or distinct from Western medicine. Most of the details come from the eleven households who visited the Nongkhai provincial hospital because of fever and cough (five households); fever, headache, muscle pain and red rash (two households); fever and running nose, fever and red rash, fever and stiff neck, and fever and headache (one household each).

In the Table 3, we can see that Laotian meanings of health or to be healthy ('*yoo dee mee haeng*') is related to their daily life such as, for example:

- Eating: *Nang Am* said, for example, "*kin dai* ('ability to eat')', *Tao Nun* said "*yak kin yang ka kin dai bor thong kalam* ('can eat anything without restriction')" and *Nang Dao* said "*kin sab* ('good taste')."
- Sleeping: *Nang Suk* said, for example, "*non lab dai* ('can sleep')" whereas *Nang Nang* and *Tao Kham* said respectively, "*non lab dee* ('sleep well')" and "*non dai* ('can sleep')."
- Working: *Tao Nun* said "*hed wieg dai, kab rod dai, bor mia* ('can work, can drive, not too weak')" whereas *Nang Dao* said "*hed wieg hed ngan dai* ('able to work')."
- Children are able to practice a normal activity: Thus, for *Tao Tham* and *Nang Dao*, healthy children are "*dek noi lendai pai honghien dai* ('children can play and go to school'.)"
- Normal functioning of the body: *Nang Sao* said "*sabai ton sabai toe* ('body feel good')" and *Nang Sai* "*yiaw tai pakkati* ('excretions are normal')."
- Absence of sign or symptom of an illness: *Mae Serm* said "*bor jeb bor khaj, namtan bor lai, hed wieg dai, bor mue* ('don't fall ill, low blood sugar, able to work, not weak)."

In addition, most key informants gave more than one definition of health or to be healthy. *Nang Nang* said, for example,

"*kin sab non lab dee, hed wieg dai, mae khaeng hang bor jeb bor khaj, hed wieg saun hai na dai tae sao hod ka* ('appetite, sleep well, able to work, I was strong since teenage, I don't fall ill too often')."

In the following Table, I present the Laotian terminology of fever-related illness.

Table 6.2 Laotian terminology of fever-related illness

Details /Cases	***Nang Am***	***Mae Serm***	***Nang Nang***	***Nang Suk***	***Tao Nun***	***Nang Sao***	***Nang Sai***	***Tao Kham***	***Tao Tham***	***Nang Dao***	***Nang Dian***
Fever-related illness Termino-logy	*'khaj kue toh hone king hone, payad han jai kue toh hone king hone ai sao* (fever is body getting higher temperature, ARI is fever, cough and hyper -ventilation)'	*'khaj kue king hone rue toh hume hume* (fever is named while body is getting higher temperature)'	*'khaj kue toh hone rue toh hume hume* (fever is named while body is getting higher temperature)'	*'khaj rue jeb pen wat pen ai* (fever or to fall ill is getting cold and cough)'	*'jeb rue khaj chai dai kue kan, terng king hone rue king bor hone ka chai dai kue kan* (to be ill or to have fever have the same meaning, to be ill or *khaj* can be used to express fever; body is getting higher temperature or not)'	*'jeb kue khaj un diaw kan* (to fall ill or to have fever are the same)'	*'khaj see khaj noi khaj lai king hone king bor hon ka ern khaj, bang tia ka ern jeb* (*khaj* means fever or to fall ill with low or high fever or sometimes without increase of body temperature; we also call fever, sometimes we call fall ill)'	*'khaj rue jeb pen wat pen ai* (fever or to fall ill is to get cold and cough)'	*'yam jeb kue thon nee toe hon, pen tanten* (falling ill is like I am feeling now, I have fever and *tanten*)'	*'khaj rue jeb, liad bor dee, lom bor dee, ka jeb ka khaj* (fever or fall ill is something wrong in blood circulation or ventilation)'	*'jeb, puiy, khaj ka kue kue kan* (to be ill, falling ill or *khaj* are the same)'
summary	- *'Jeb*(ill)' - '*Puiy* (falling ill)' - '*Khaj* (fever)' - *' liad bor dee, lom bor dee* (something is wrong in the blood circulation or ventilation)' - *'king hone rue king bor hone* (body is getting higher temperature or not)' - '*pen tanten* (is *tanten*)' - '*pen wat pen ai* (getting common cold or cough)' - '*toe hon toe hume* (increase of body temperature)										

6.1.2 'Laotian teminology of fever-related illness' '*Khaj*', '*jeb*' or '*puiy*' have the same meaning for Laotians. These are the words they use when they fall ill because of fever-related illness. However, there is a little difference between these three words. Regarding what they said, these names can be used during daily life or serve to qualify growing conditions such as, in the following expressions '*khaj yued khaj yao'* (children fall ill when they are changing of age) or '*khaj liad'* (female fall ill during their menstruation periods). In addition, '*Khaj*', '*jeb*' or '*puiy*' express also the conditions under which the symptoms occur, for example in the expressions '*khaj yon hed wieg nak'* (occur after hard work) and '*khaj lom'* (fall ill because of seasonal change).

- <u>*Khaj*</u>: According to *Nang Am, Mae Serm* and *Poo Paan*,

'*our earn khaj yam toh hone, bang tai tha hoo suek hon hon nao nao, hoo suek bor sabai toe, wing wing wien wien, puad mia tam ton tam toe*, *ka earn khaj* ('*Khaj*' or fever means increase of body temperature; sometimes there is no increase of body temperature, sometimes we have flashes of hot and cold at the same time. To feel not better, [to have] vertigo, muscle and body pain, are also called '*khaj*')'. '*Khaj*' in these meanings means any symptom which occurs inside the body, with exception of 'increase of body temperature' which can come from outside.

- <u>*Jeb*</u>: According to *Tao Thong* and *Mae Bang*,

'*tuek hon tuek nao ka loei jeb, hed wieg nak laew jeb* (to fall ill because of seasonal change or doing hard work)'. In this way, *'Jeb'* has the same meaning that '*Khaj*'. *Tao Tham* said '*our pai khao pa tuek kai mai kai ya laew jeb pen tanten* ('When we fall ill after coming back from the forest it is because of plant poisoning or '*tanten'*). In this way, *'Jeb'* is a little different sense to '*Khaj*' symptom and more consider about '*injurious*' or '*painful*' symptoms. In addition, '*Jeb*' names the signs and symptoms of external lesions because of an accident.

- <u>*Puiy*</u>: All key informants said that '*Puiy*' is more similar to '*Khaj*' than to

'Jeb'. However, they use sometimes the expression '*Jeb khaj dai puiy'* or falling ill.

Regarding acute febrile respiratory diseases, they use alternatively the terms '*payad hanjai*' and '*khaj pod*' which refer to fever and any other symptom, for example, cough, sore throat, difficulty to breathe, etc. In the following Table, I present the Laotian classification of fever-related illness.

Table 6.3 Laotian classification of fever-related illness

Details /Cases	*Nang Am*	*Mae Serm*	*Nang Nang*	*Nang Suk*	*Tao Nun*	*Nang Sao*	*Nang Sai*	*Tao Kham*	*Tao Tham*	*Nang Dao*	*Nang Dian*
Fever-related illness Classification	'*khaj wat, khaj hau lom, khaj yued khaj yao, khaj liad rue khaj tab radoo* (cold, fever caused by seasonal changes, menstrual period fever)'	'*pen pai tam thammachat, bor pen untarai, yang khajwat, khaj ai, khajyuad khajyao, tha pen khaj jag payad untharai yang payad tidpad, tong fao pua* (life is normal, nothing is harmful, for example cold, fever and cough, growing condition with fever, contagious diseases are harmful)'	'*khaj thammachat yang khaj liad, khaj lom, khaj yaud, khaj hang yang khaj kor khaeng* (fever is natural in the life, for example menstrual period fever; fever can be severe, for example, fever with stiff neck)'	'*pen thammchat yang khaj liad kue khaj yam hao pen liad, khaj lom kue yam akat plian, khaj payad yang khaj yung, khaj liad ook, khaj pod nai deknoi* (fever is natural in the life, for example menstrual period fever, seasonal change fever, pathological fever for example, in dengue and pneumonia)'	'*mee khaj wat pid akat khaj tanten, khaj yuad khajyao* (common cold because of seasonal change, '*tanten*' and growing fever)'	'*khaj wat pid akat, khaj yung, khaj liad ook* (common cold because of seasonal change, '*khaj yung*' or mosquitoes fever and dengue fever)'	'*khaj mee khaj noi khaj lai, khaj wat pid akat, khaj yuadkhajyao, khaj sang* (fever are mild and severe ,common cold because of seasonal change and growing fever)'	'*khaj wat, khaj liad ook, pen khaj puad hua* (common cold, dengue fever, fever with headache)'	'*khaj wat, khaj ai, khaj pid phi, pid phi poo phi ya, khaj pis ya kai mai, khaj plian akart* (common cold, fever with cough, fever because one made something wrong with ancestors, spirits, plant poison fever and seasonal change fever)'	'*khaj liad, khaj lom, payad mae ying, khaj yued khaj yao khong dek noi* (menstrual period fever, common cold because of seasonal change, female fever, growing fever in children)'	'*khaj nai dek noi yang khaj yued khaj yao, khaj wat khaj ai, pen sang khaj nai poo yai yon hed wieg nak, khaj mae ying* (growing fever in children, common cold, '*pen sang*' , fever because of hard work for adults and menstrual period fever'
summary	- *khaj wat* (common cold) - *khaj lom* (seasonal change fever) - *khaj noi khaj lai* (mild fever and severe fever) - *khaj liad ruee khaj tab radoo rue khaj mae ying* (menstrual period fever) - *khaj khor kaeng* (fever with stiff neck) - *khaj yung rue khaj liad ook* (mosquitoes or dengue fever) - *khaj pod* (pneumonia) - '*tanten*' - '*pen sang*'										

6.1.3 Laotian's classification of fever-related illness. Symptoms reported on fever-related illness can be classified into various categories: 1) *khaj*-fever; 2) *khaj ai*-fever with cough; 3) *khaj mee kee mook*- fever with running nose; 4) *khaj liad or khaj tab radoo*-menstrual period fever; 5) *khaj puad hua*-fever with headache; 6) *khaj puad klam*-fever with muscle pain; 7) khaj febrile *puad thong*-fever with abdominal pain; 8) '*tanten*' or *khaj mee puen daeng puad sab puad hon*- fever with red rash and flash pain; 9) *khaj kor kaeng*- fever with stiff neck; 10) *khaj yung*- get fever because mosquitoes bite; 11) *khaj liad oog*- dengue fever; 12) *khaj pa*- get fever after went to forest; 13) *khaj yued khaj yai*- growing condition fever; and 14) *khaj hanjai*-fever and respiratory symptoms. Details on fever from 1) to 8) and 14) were given previously. In this section, I give some examples.

Tao Phon is the husband of a patient presenting with fever and stiff neck. According to him, '*Mae oog khong poh king hone, hanyai yak, kor kaeng, kuen bor long, baan our hong khaj kor kaeng, bor hoo moh earn eyang* ('My wife had fever, difficulty in breathing, stiff neck and difficulty in swallowing. We call this '*khaj kor kaeng*' or fever with stiff neck. I do not know how medicine calls this condition)'.

Tao Kham visited the Nongkhai provincial hospital because of fever and red spots appear on his inner arms. The doctor made a diagnosis and gave him a treatment as haemorrhagic fever.

Tao Kham explained '*nong kued wa nong pen payad khaj yung, yon yung kad, bor man payad khaj liad oog, tha pen payad khaj liad oog see jeb haeng kor nee* ('I think that I fall ill because of mosquitoes fever. I got this fever because mosquitoes bite me. If I got haemorrhagic fever, I may have more severe symptoms)'.

Poo Paan, a one hundred and four years old traditional healer, practices as a traditional healer since his thirty years old.

He explained '*payad khaj mee lai yang, khaj yuad khaj yao kue khaj dek noi yam terb yai, khaj liad kue khaj mae ying sao yang bor mee look, khaj hua lom kue khaj yam plian ruedoo plian lom fon pen nao, khaj pa kue khaj nao san kerd kuen yam kab ma jak pa* ('There are many kinds of fever such as, the growing condition fever is the fever which happens during the growing of children, menstrual period fever happens during menstrual period of an un-pregnant woman, seasonal change fever is the fever which occurs during the change from the rainy season to the winter, and '*khaj pa*' happens when people come back from the forest)'.

Table 6.4 Signs and symptoms of fever-related illness as recognized by Laotian patients

Details /Cases	***Nang Am***	***Mae Serm***	***Nang Nang***	***Nang Suk***	***Tao Nun***	***Nang Sao***	***Nang Sai***	***Tao Kham***	***Tao Tham***	***Nang Dao***	***Nang Dian***
Fever-related illness Signs and symptoms	*'tue king khaj rue toe hon tai tong boe yak khao boe yak nam, king hone haeng ka sak* (body is getting a higher temperature diarrhea, no appetite, there will be convulsion if high fever)'	*'hone hone nao nao nai ton nai toh, bor yak kao bor yak nam* (feeling flash of hot and cold in body, do not want to eat or drink-anorexia)'	*'nao nao kue si pen khaj, king hone toh hone hume, han jai tidtid katkat* (feeling shivering as having fever, body temperature increasing, difficulty in breathing)'	*'toe hone, tai tong, bor yak khao bor yak nam* (body temperature increasing, diarrhea, do not want to drink or eat)'	*'terng toe hone ai jebkor kaunkhao kaun namyak,* (body temperature increasing, cough, sore throat, difficult to swallow)'	*'toe hon, puad hua, jeb tam ton tam toe* (body temperature increasing, headache and pain on the whole body)'	*'pen noi noi ka mee king hone, pen wat pen ai, pen lai ka mee sao, suem king hone haeng* (mild illness are body temperature increasing, running nose and cough, symptoms of severe illness are difficulty to breathe, dull and high fever)'	*'toe hon, puad hua, jeb tam ton tam toe, mee kia liad nam kaen ka* (body temperature increasing, headache, whole body pains, and rash)'	*'toe hon, mee puen daeng tam na earg* (body temperature increasing and red rash appear at the upper body trunk)'	*'man khaj, man hon, tae la tia bor kue kan, bang tia ka mee ai* (fever, body temperature increasing, symptoms different each time, sometimes cough, sometimes no cough)'	*'hon, puad hua, dek noi bang tia tai thong, bor yak khao bor yak nam* (body temperature increasing, headache, in children do not want to drink or eat)'
summary	- *tue king khaj rue king hone* (body temperature increasing) - *puad hua* (headache) - *tai thong, bor yak khao bor yak nam* (diarrhea and do not want to drink or eat)' - *hon hon nao nao* (flash hot and cold) - *nao nao kue see pen khaj* (feeling shivering as if having fever) - *toe hon, mee puen daeng* (body temperature increasing and red rash appears)										

6.1.4 Laotian perceptions about signs and symptoms of fever-related illness. Laotian informants distinguish many signs and symptoms in fever-related illness but the major and basic symptom is the fever or '*khaj*' or '*king hone'*, as previously mentioned. The other conditions are: *ai*-cough, *mee nam mook* or *mee kee mook*-running nose, *jeb kor*-sore throat, *hanjai yak*-difficulty in breathing, *nao san*-chills, and *puad thong*-abdominal pain, *puad hua*-headache, etc.

Nang Am, for example, said about children '*dek noi tue king khaj, toe hon, mee kee mook, see yak nam tae bor yak khao, bor len* ('Children fall ill of fever, rise of body temperature, running nose, thirst but rejection of food, and they do not play')'. '*Tha pen haeng rue tid pad yang uen see ai lai, sao lai, yang khaj pod rue khaj ai khaj*, *khaj ai khaj see king hone haeng, ai lai, ai jon siang hab siang haeng, bor mee siang* ('If the fever is more severe or if the disease is contagious, children will have more cough, difficulty to breathe, for example, in '*ai khaj*' or '*khaj pod*')'.

Tao Nun explained '*payad tanten kue see mee akarn king hone, song sam mue see mee puen daeng daeng kuen* ('*tanten* disease' begins with fever, then a couple days after a red rash and flash pains appear)'.

Poo Paan said '*king kue toe our nee la, king hone kue toe our hon, bang tia ka hum hum, bang tia ka hon tam payad tae pen, yang payad khaj pa king see hon lai nao san lai, tha pen khaj ai see toe hon kab ai lai, khaj liad ka see toe hon yam liad ma kab puad thong, khaj wieg ka see toe hon kab puad klam, khaj lom ka see mee nam mook lai* ('*king*' is our body, '*king hone*' is temperature rising in our body, it rises more or less, depending on the nature of the disease; for example, in '*khaj pa*' or get fever after went to forest, they will have high fever and chills; in '*khaj ai*' they will have fever and cough; 'in *khaj laid*' or menstrual period fever, they will have fever and abdominal pain; in '*khaj wieg*' or fever because of hard work, they will have fever and muscle pain; in '*khaj lom*' or seasonal change fever, they will have fever and running nose)'.

Nang Dao explained *'man khaj, man hon, tae la tia bor kue kan, bang tia ka mee ai* ('*khaj*' or fever is the body getting higher temperature, the symptoms differ each time, sometimes there is cough, sometimes there is no cough)'

In the next issue, I present Laotian's experiences and meaning of fever-related illness (see Table 6.5).

Table 6.5 Experiences and meanings of fever-related illness among Laotian patients

Details /Cases	***Nang Am***	***Mae Serm***	***Nang Nang***	***Nang Suk***	***Tao Nun***	***Nang Sao***	***Nang Sai***	***Tao Kham***	***Tao Tham***	***Nang Dao***	***Nang Dian***
Fever-related illness meanings	'*jeb khaj man pen thammada kong deknoi therbyai, maeying yam pen sao bor mee look* (falling ill is a normal fact of life for children and teenage woman who has never been pregnant)'	'*hed wieg nak tong pak, sao wieg pai ha moh, puapan kab payad tee pen yoo* (doing hard work, time to take a rest, stop working and going to the doctor, related to my chronic disease)'	'*jeb khaj man pen thammada tam wai tam radoo, thueng yam man si kerd man ka tong kerd, yam jeb kwaun ka hai* (falling ill is a normal fact of life, when fall ill '*Kwaun*' or spirit loss)	'*jeb khaj man pen thammada kong tae la kon, dek yaiyao, sia kwaun, poo yai hed wieg ngan nak* (falling ill is a normal state of life and growing in children, loss of *kwaun* and hard work)'	'*kin bor dai, yam jeb puiy kin bor dai, thong kalam kin, hed wieg bor dai ka bor mee ngern bor mee thong* (difficulty to eat, have to restrict what to eat or *kalam,* cannot work, then cannot get money)'	'*jeb khaj man pen khong thammada, nong pen payad khaj yung poh tueg yung kad* (falling ill is natural in the life, I fall ill because of mosquitoes bite)'	'*yam tee our kin bor sab non bor lab, tai bor dee kue yam our jeb, our ka hed wieg bor dai* (when we cannot eat, cannot sleep, secretions are abnomal, unable to work, it means we fall ill)'	'*khaj wat pen thammada, khaj liad ook man pen ta yan, poh nai moo baan our mee khon tai* (common cold is a normal illness but dengue fever is very feared, because it killed a person in our community)'	'*pen thammada* (it is normal)'	'*liad lom bor dee, loei bor mee haeng, hed hai our pen khaj yam pen mense* (blood circulation is not good which gives me weakness and falling ill is easier, and also have fever during menstruation period)'	'*jeb khaj man pen thammada kong tae la kon, dek yaiyao, mae ying noi noi pen khaj liad* (falling ill is a normal fact of life, growing in children, and fever during menstruation period)'
summary	- *thammada khong dek noi terb yai* (it is normal in children during their growing) - *maeying yam pen sao* (teenage woman who has never been pregnant)' - *hed wieg nak tongpak, sao wieg pai ha moh* (feel not better, need to rest, stop work and going to the doctor)' - '*puapan kab payad tee pen yoo*' (related to chronic disease) - *thongkalum* - *pen ta yan* (it is fearful)										

6.1.5 Laotian meanings of fever-related illness, '*Khaj*' or '*jeb*' or '*puiy*' or falling ill because of fever and any other symptom of ARIs have different meanings such as, for instance, natural event, need relaxation, need healing, etc.

- Natural events*: 'Pen thammada khong dek noi terb yai*' (it is normal in children during their growing).

According to *Nang Am,* for example, "*Yam dai dek noi king hone, tai thong, bor yak khao bor yak nam, man pua pan kab kan yao yai khong dek noi, poh jak tee koey poh ma dek noi jeb yam nang ma khan, khan ma yuan, yuan ma yang, era noi nee ka kue kan kab uia ai* ('When my children get fever, diarrhea and have no appetite, these symptoms are related to their growing or changing of age. My experience is my children getting ill during their transformation in tender period. My youngest daughter has the same experiences as her brother and sister.

According to *Mae Serm*, "*Nai dek nai mae kued wa kue see jeb see khaj paupan kab kan yaudyaoyai* (In children I think that fever or illness is related to their growing)"; *'khaj liad nai maeying yam pen sao bor mee look'* (menstruation fever in teenage woman who has never been pregnant)'.

Nang Dao said "*tae khon our puad thong yam liad ma, mee toe hon nao, our earn khaj liad, hed wieg bor dai, kue see pen liad lom our bor* (In the past, I had abdominal pain, fever, chills and I was not able to work during menstruation periods. We call this *khaj liad*. May be my blood circulation is not functioning very well, I think).

- Need relaxation*: 'Hed wieg nak thong pak*' (doing hard work need relax).

Mae Serm said '*Pooyai jeb kue see paupan kab hed wieg nak, bor dai pak, bang tua see puad hau tho hon, pen wat pen ai* ('Illness in adulthood relates to hard work and lack of relaxation; sometimes, the symptoms are headache, fever, running nose and cough')'.

According to *Nang Nang*, *'Yam our pen khaj pen ai, tho see hon see hum, tha bor lai ka hed wieg dai, tha jeb lai ka thong sao wieg* ('During illness with fever or cough body temperature increases, if the illness is mild, we can continue to work, but if illness is more severe, we have to stop working')'.

Nang Dian explained *'poo yai suan lai jeb yon hed wieg nak, bor dai pak bor dai sao* ('Mostly, adults fall ill because of hard work without relaxing').

- Related to a chronic disease*: 'puapan kab payad tee pen yoo'* (related to chronic disease).

'Mae Serm said "*mae khaj kue see puapan kab prayad tee pen yoo* ('I have fever which may be related to my chronic illness')'.

- Need special practice: *'Thong kalam*' or to restrict both eating food and drinking beverage is expressed in the following way according to *Tao Kham,*

'*kin bor dai, yam jeb puiy kin bor dai, thong kalam kin, hed wieg bor dai ka bor mee ngern bor mee thong* ('Difficulty to eat, have to restrict what to eat or *kalam,* cannot work, then cannot get money')'.

- Other: '*pen ta yan*' or fearfulness (the person is scared). *Mae Serm*, *Tao Kham's* mother, said

'*yung taew baan lai pod lai po, our yan yan lai por baklakham pen lookdod, bor mee eiu ai, our bor koei hen khon jeb yon prayad khaj liad oog tai* ('There are many mosquitoes around home. I feel very fearful because *Tao kham* is the only child we have. And I have never seen a case of dengue haemorrhagic fever with death)'.

According to *Nang Sao 'tae tia nee bor kab mae yan nong pen khaj liad oog ka loei pa ma nee* ('But this time my parents fear that I will get dengue haemorrhagic fever so they took me here. In addition, my parents wanted to buy goods in the Nongkhai market)'.

As it can be seen through the definitions given by *Mae Serm, Nang Am, Nang Dao, and Nang Dian*, falling ill may have many meanings.

In the next issue, I present Laotian beliefs on causation of fever-related illness (See Table 6.6.)

Table 6.6 Laotian lay beliefs on causation of fever-related illness

Details /Cases	***Nang Am***	***Mae Serm***	***Nang Nang***	***Nang Suk***	***Tao Nun***	***Nang Sao***	***Nang Sai***	***Tao Kham***	***Tao Tham***	***Nang Dao***	***Nang Dian***
Fever-related illness Causation	*'puapan kab karnyuadya oyai kong deknoi, hed wieg nak, bor dai pak, maeying pensao yangbor mee look, tid pad* (related to children growing, doing hard work without relaxing, teenage women who has never been pregnant, communicated)'	*'paopan kab payad tee puiy yoo, akat pian, pooyai saunlai puiy yon hed wieg nak, hed bid phi poo ya* (related to disease which is underlying treatment, seasonal change, work hard in adults and did something wrong to ancestors' spirits)'	*'akat plian hed wieg nak, pen kam kao* (seasonal change, doing hard work, bad *khamma*)'	*'deknoi puiy yon plianwai, akat plian, pooyai jeb yon hed wieg ngan nak bor dai pak, pid phi hai phi na* (growing condition in children, seasonal change, hard work in adults without relaxing, did something wrong to field spirits)'	*'bang yang tid pad, bang yang bor tid, wat pan mai tid pad* (some illness are contagious, some are not, the new influenza can be)'	*'yung kad ton nong pai tak nam sang, bang tia ka tid pad ma jak moo, por bok wa kin non nam rue arb nam tee mee non nam khao pai ka jeb* (the mosquitoes bite me when I was going to fetch water from a well, sometimes it comes from my friends (contagion) or from drinking water or taking shower with water where there are larva)'	*'dek noi akart plian ka puiy, yao yai ka puiy, poo yai haeng tao haeng kae ma ka jeb, diew ka jeb nan ka jeb nee, plian akart noi nueng ka jeb* (children fall ill because of seasonal change and growing, adults fall ill because the body deteriorates and seasonal change)'	*'pen thammada, yung kad, tid pad ma jak moo* (it is ~~a~~ normal in life, mosquitoes bites, can be contagious, coming from friends)'	*'tia nee tueg kai mai kai ya jak tee pai ha khong pa, kue see pid phi pa phi kao* (I touch a plant poison when I went to the forest and/or I did something wrong to forest spirits)'	*'pen thammada, pen pain am wai, kue see pen yon liad lom bor dee* (it is natural as in children growing condition, and bad blood circulation)'	*'dek noi kue see puapan kab kan yao yai khong dek noi, poo yai yon hed wieg nak, khajtab liad tab lom* (related to children growing condition, in adults may be hard work without relaxation and also during menstruation period)'
summary	- *akart plian* (season change) - *hed wieg nak bor dai pak* (doing hard work without relaxing) - *pen thammada, pen thammachat* (it is normal in life. It is natural) - *yung kad* (mosquitoes bite) - *kin rue arb nam tee mee non nam* (drink or take shower with mosquitoes larva)										

6.2 Lay perceptions on illness causes

For Laotian, disease causation may be similar or different from the biomedical view or from the views of people around the world. In this part, I focus on contexts which surround Laotian beliefs and experiences in case of fever-related illness, healing procedures and health-seeking behaviours.

6.2.1 ***Laotian beliefs about causation of fever-related illness***. Regarding what key informants said, beliefs about causation of diseases can be summarized in the following way:

6.2.1.1 Natural: Fever-related illness is related to seasonal change, for example, in the case of '*khaj wat*' or common cold which occurs during the end of the rainy season and the beginning of winter (September to October). '*Khaj wat*' can occur at every ages but especially in young children.

Regarding to *Mae Serm* '*Mae see nao nao hon hon yam plian akard, bang tia ka noi bang tia ka lai* ('I feel not good, I have flashes of hot and cold inside my body, when the season changes. Sometimes, I feel a little, sometimes more)'.

Moreover, *Poo Paan* said '*khaj hua lom man kerd yam plian na soo khon, dek noi see pen kan lai, toe hon mee nam mook tid tung talod, bang khon talod nao ka mee* ('*khaj hua lom*' or fever during seasonal change can occur normally at every age. Most children get affected with fever and running nose. Some children have running nose till the end of winter)'.

6.2.1.2 Natural: Fever-related illness is related to growing condition and body natural processes, for example, children transformation ages or '*khaj yuad khaj yao* or *khaj yuad yao yai*' in Laotian and during the menstrual period of reproductive women.

Nang Am thus said '*King hone man pen thammada khong dek noi yam plad plian wai, dek noi baan nee pen soo khon, yam se koh yuen king hone, tai thong, joi, bor kin khao, kin nam, ela nee khaj doo khaj haeng kor uew ai thong pai ha moh* ('*king hone'* or fever in children is natural, it can occur in every children during their growing process. All my children had experiences of fever. But my youngest daughter had fever more frequent and severe than her brother and sister, so I take her to the doctor')'.

Nang Suk explained '*khon tuepa ela yam pan liad nong see jeb thong lai laew ka toe hon, hed wieg hed ngan bor dai, thong shao wieg, kin ya, lung prasut kai nae, bor koi pen eeg* ('Before I get pregnant of my daughter, I had menstrual period fever. During menstrual period, I have fever and so much abdominal pains that I have to stop to work, to take medicine and to relax. After I give birth to my daughter, I never experienced this again')'.

6.2.1.3 Contagion: Fever-related illness can be contagious, for example, '*khaj tid pad*' or contagious fever, the symptoms of which are fever, more cough, more phlegm and more difficulty in breathing than normally during a fever. However, beliefs and experiences about germs do not exist.

Nang Am said '*tha pen haeng rue tidpad yang uen see ai lai, shao lai, yang look khon yai koei pen khaj pod, khaj haeng, ai lai, shao lai, thong pa pai hai nam kia hai ya lai mue* ('If illness is more severe or contagious, children will have more cough, more difficulty to breathe, such when my oldest daughter fell ill because of '*khaj pod*' or pneumonia. She had high fever, more cough, and more difficulty to breathe. I had to take her to the doctor for getting intravenous fluids and medicines for a couple of days')'.

Nang Sao said '*Nong kued wa nong pen payad khaj yung yon nong kin nong chai nam tee mee non nam yung khao pai* ('I think I fell ill because I drunk water or take shower with water where there were mosquitoes larva')'.

6.2.1.4 Supernatural causation: Fever-related illness may be related to supernatural causation as in the cases of '*tanten*', '*khaj kor kaeng'* and '*khaj hak liad tai'*, for example.

According to *Mae Serm 'Sahed khaj bang tua yon pid phii poo phii ya, pid phii baan phii heun, pid phii hai phii na* ('Sometimes, the causes of illnesses are doing something wrong to ancestors' spirits, house's spirit, field's or farm's spirits)'. '*Phii ka mee terng dee kab bor dee, kue phii dee ka soy our, phii bor dee ka hed hai our jeb, tae bang tua phii dee ka hed hai our jeb dai kue kan tha our hed pid rue bor dai hed bun pai hai* ('Spirits have two ways: good spirits and bad spirits, good spirits are helping us while bad spirits are making us ill, but good spirits sometimes create illness when we have wrong behaviours or when we did not perform meritorious deeds for them')'.

Nang Suk said '*Bang tia khaj ka mee kue kan tee pai pid rue hed bor dee kab phii hai phii na, phii poo phii ya* ('Sometimes, fever occurs because we did something wrong to field spirits or ancestors' spirits')'.

Tao Kham explained '*Pen tanten kue see tuek kai mai kai ya rue tha bor san ka pid phii pa phii kao* ('*Tanten*' because I was touching a poisonous plant or, may be, because I did something wrong to forest spirits')'.

Finally, *Nang Bee*, whose husband died of an haemorrhagic fever, said with a very sad face '*fan nong pern puiy lang jak ha pla nong yai kai baan dai song mue, puiy mue diew ka hak pen liad, tai thong pen liad, thon laeng laeng pai hong moh muang, derg ma akarn bor dee, hong moh muang ka song pai pinpua nai Vien, tai yoo hong moh nai Vien khon jaeng, poo tao poo kae bok wa nong yai mee jao tee jao thang, mee phii mee phai*, *pern kue see pai hed pid pern* ('My husband fell ill after coming back from fishing in the big pond nearby the community two days ago. He had fever, bloody vomiting and bloody feces in the morning. Then, we took him to the district hospital during the evening. In the late evening, the doctor at the district hospital sent him to the hospital in Vientiane Metropolis. He died there in the early morning. The elderly in the community said there are many spirits in the big pond. May be my husband did something wrong to them)'.

6.2.1.5 Related to hard work: Fever-related illnessare related to hard work, such in the cases '*khaj puad klam*', '*khaj yon fao wieg*' and '*khaj yon yok khong nak*', etc.

Mae Bang, a health volunteer and head of *Baan Chaitham,* said '*Mae kamlang plaeng baan, look chai khon yai loei thong choi sang choi plaeng, terng yok terng ham, atid laew ma king hone, puad klam tam thon tam toe* ('I am re-building my house. My oldest son is helping in re-building. He had to move up wood, sand and concrete. Last week, he got fever and muscle pains')'.

Nang Dian said '*Bang tia our fao wieg, our ka thong hed wieg nak, thong dam na kam fon ka pen khaj dai* ('Sometimes, we have to finish to work in our rice field under the rain and sun in a hurry. Then, we may fall ill because of fever)'.

The next issue is Laotian perceived degree of severity of fever-related illness (see table 6.7).

Table 6.7 Laotian lay *perceived* degree of severity of fever-related illness

Details /Cases	*Nang Am*	*Mae Serm*	*Nang Nang*	*Nang Suk*	*Tao Nun*	*Nang Sao*	*Nang Sai*	*Tao Kham*	*Tao Tham*	*Nang Dao*	*Nang Dian*
Fever-related illness Perceived degree of severity	'*jeb thammada, jeb lai mue bor sao, jeb nak* (normal illness, takes time for healing or recovery from illness, severe illness)'	'*jeb noi kin ya mue song mue ka sao, bang tia ka bor tong kin ya ka sao, jeb nak lai mue pinpua bor sao lom mon nonsua, tha pinpau bor tan ka tai* (mild illness which requires taking medicines for a couple days, then recovery, sometimes no need for medicines, severe illness is the one which needs treatment; if not, the patient may die)'	'*jeb thammada, jeb lai mue bor sao, jeb nak* (normality, takes time for healing or recovery, severe illness)'	'*jeb thammada, lai mue bor sao, jeb nak* (normality, takes time for healing or recovery, severe illness)'	'*jeb noi rue khaj noi kab jeb lai rue khaj lai* (mild illness or mild fever and severe illness or severe fever)'	'*thammada, jeb lai mue bor sao, kab jeb haeng rue jeb nak* (falling ill is normal illness, illness which takes time for recovery and severe illness)'	'*thammada, jeb lai mue bor sao, kab jeb haeng rue jeb nak* (falling ill is normal illness, illness which takes time for recovery and severe illness)'	'*khaj noi rue jeb noi,, jeb lai mue rue jeb laew pinpua lai mue bor shao kab jeb nak* (mild fever or mild illness, falling ill which takes a long time for recovery and severe illness)'	'*thammada, jeb lai mue bor sao, kab jeb haeng rue jeb nak* (falling ill is normal illness, illness which takes time for recovery and severe illness)'	'*thammada, jeb lai mue bor sao, kab jeb haeng rue jeb nak* (falling ill is normal illness, illness which takes time for recovery and severe illness)'	'*thammada, jeb lai mue bor sao, kab jeb haeng rue jeb nak* (falling ill is normal illness, illness which takes time for recovery and severe illness)'
summary	- *thammada* (normal illness) - *jeb noi kin ya mue song mue ka shao, bang tia bor thong kin ya ka shao* (mild illness which requires taking medicines for a couple of days, then recovery, sometimes no need for medicines) - *puiy nak lai mue bor shao, tha bor pua ka tai* (severe illness which takes time for recovery or healing, if not get right healing, the patient will die)										

6.2.2 Perceived severity of fever-related illness: Laotian patients categorize fever-related illness as either 1) *thammada* (normal illness); 2) *jeb noi kin ya mue song mue ka shao, bang tia bor thong kin ya ka shao* (mild illness which requires taking medicines for a couple of days, then recovery, sometimes no need for medicines); and 3) *puiy nak lai mue bor shao, tha bor pua ka tai* (severe illness which takes time for recovery or healing, if does not get right healing, the patient will die).

According to *Tao Phon* '*thon haeg kued wa pen khaj thammada, song sam mue ma bor shao hanjai yak, kuen ka bor dai, our loei kued wa jeb nak* ('Firstly, I think my wife got a general fever. A couple days later, she has too many difficulties to breathe and swallow. Thus, I think that she is getting a severe illness')'.

Nang Am said '*tha pen haeng rue tidpad yang uen see ai lai, shao lai, yang look khon yai koei pen khaj pod, khaj haeng, ai lai, shao lai, thong pa pai hai nam kia hai ya lai mue* ('If illness is more severe than others or contagious, children will have more cough, more difficulty to breathe, such as my oldest daughter who fell ill because of '*khaj pod*' or pneumonia. She had high fever, more cough, more difficult to breathe. I had to take her to the doctor for getting intravenous fluids and medicines for a couple days')'.

In the next issue, I present the perceived impact of fever-related illness on patients' daily life (see Table 6.8).

Table 6.8 Perceived impact of fever-related illness on patients' daily life

Details /Cases	*Nang Am*	*Mae Serm*	*Nang Nang*	*Nang Suk*	*Tao Nun*	*Nang Sao*	*Nang Sai*	*Tao Kham*	*Tao Tham*	*Nang Dao*	*Nang Dian*
Fever-related illness Perceived disease on disturb daily lifes	'*deknoi yud honghien, tha look puiy lai rue ngan bor reng ka yud ngan yoo baan berng look* (children have to stop going to school, if my children get a severe illness I have to stop to work for taking care of them)'	'*bor dee tong pak, sao wieg pai ha moh, yan si pen yang aun* (falling ill-is not good, I have to stop working and hurry to visit the doctor, because I feared it could become a severe illness)'	'*tha jeb noi ka hed wieg ngan dai, pai wat dai tue sil dai, tha jeb lai kin y alai mue bor sao ka tong pinpua do than moh* (if get a mild illness we can continue working, but if I take medicines for several days I have to stop to work for seeking the doctor)'	'*yam jeb noi hao ka bor tong sao wieg, yam jeb nak ka jampen tong sao, tae yam ela jeb a tong sao berng ngang* (if we fall ill of a mild illness, no need to stop working, if it is a severe illness we need to stop work, especially if my daughter falls ill)'	'*yam jeb ka thong shao wieg ma ha moh* (when we fall ill we have to stop working for visiting the doctor)'	'*deknoi yud honghien, tha look puiy lai rue ngan bor reng ka yud ngan yoo baan berng look* (children have to stop going to school, if my children get ill of a severe illness I have to stop working for taking care of them)'	'*thong shao wieg, yam our jeb ka thong fao pin pua, poh our bor mee pai choi wieg* (I need to stop working for visiting the doctor. I need recovery as soon as possible because I need to go back to work.)	'*thong shao wieg, nong ka thong yud hien* (we need to stop working and I need to stop going to school)'	'*thong shao wieg, thong shao ha khong pa, thong tha hai kai nae rue shao kon koi see kao pa dai* (we need to stop working, stop going to forest. I need to get better or recover then I will go back again to the forest)'	'*suan lai yam jeb ka thong pak,* (more often when we fall ill we have to stop working)'	'*suan lai nong see shao wieg, see man nong jeb rue look jeb ka thong shao berng ngaeng, tae than fan nong puiy bor koi dai shao, por chai pern kaeng haeng kor me ying nor* (usually when falling ill I will stop to work either for myself or when my daughter is ill, but for my hushand he does not need to stop working. May be males are stronger than females)'
summary	- *shao wieg* (stop working) - *our jeb rue look jeb ka thing shao berng ngaeng* (stop working either for myself or when my daughter falls ill) - *bang tia bor chai ka bor thong shao wieg* (sometimes males have no need to stop working) - *dek noi bor pai honghien* (children stop going to school)										

6.2.3 Impact of fever-related illness on patients' daily life: The perceived impact of these symptoms and diseases on daily life can be classified in four categories: 1) *shao wieg* (stop working) or *our jeb rue look jeb ka thing shao berng ngaeng* (stop working when either myself or my daughter falls ill); 2) *bang tia bor chai ka bor thong shao wieg* (sometimes, males have no need to stop working); and 3) *dek noi bor pai honghien* (children stop going to school).

According to *Nang Am* '*dek noi bor yak khao bor yak nam,bor len, suem poo yai ka pen haung, bang tia king look hon haeng ka yan look sak, moh bok wa dek noi sak laew hien nangsue bor pong* ('When children fall ill, they do not want to eat, play and faint. Parents are very anxious, especially when they have very high fever. If they have high fever, they are at risk of seizure. The doctor said that if children have frequently seizures, they will not be clever')'.

Tao Kung, father of *Nang Sao*, said '*Kang won yam dek noi khaj, khia man kuen lai, nam kaen nam ka, yak dee ela bor hak pen liad rue tai pen liad, dek noi khang baan pen khaj, hak pen liad, tai pen liad tai, pee laew ma* ('I am very anxious when my daughter falls ill. She has fever and petechia appeared on her legs and arms. It is lucky that she has neither bloody vomiting nor bloody excretion. A child who lived nearby my home died of this last year')'.

Tao Chuang, a bus driver who takes a relative to the Nongkhai provincial hospital because of fever and sore throat, said '*Tha our jebkhaj, wing wing wien wien, our ka thong yud khab jak, yan tam nan tham nee* ('If I fall ill of fever and vertigo, I will stop driving because I fear an accident')'.

Tao Kham explained '*Yam jeb ka thong yud hien, nong yad ma sam mue laew, yam jeb pai hien ka hien bor hoo, yam nong yud moo ka our samut jod ngan ma hai* ('When I fall ill, I have to stop going to school. Even if I go to school, I don't understand what the teacher says. When I stop going to school, my friend gives me lectures and homework that the teachers ordered to do')'.

In the next issue, I present Laotian perceptions about etiology and communicability of fever and acute respiratory febrile diseases (see Table 6.9).

Table 6.9 Laotian perceptions about etiology and contagiosity of fever-related illness

Details /Cases	*Nang Am*	*Mae Serm*	*Nang Nang*	*Nang Suk*	*Tao Nun*	*Nang Sao*	*Nang Sai*	*Tao Kham*	*Tao Tham*	*Nang Dao*	*Nang Dian*
Fever-related illness Etiology/ Communicability	'*Bor tidpad yang khaj yuad khaj yao, khaj liad, tidpad kan dai yang aikai* (it is not communicable, for example growing fever in children, menstrual period fever. It is a communicable illness, for example '*aikai*')'	'*Khaj yuad khaj yao bor tid pad kan, tae payad watai kue si tidpad kan pao yam kon aun jeb mae ka jeb nam khao* (growing fever is not communicable but common cold is communicable, because when anybody in the family falls ill of a common cold I will get affected)'	'*Payad tee pen yoo bor tidpad ha poo aun, kue si pen wen kham kong mae nam* (my illness is not communicable. I think I fell ill because of my past bad *khamma*)'	'*Khaj wat khaj ai bang tua pooyai ka tidpad jak dek noi honghien, yang uan kue sib or tidpad.* (Sometimes adults get a common cold from school children. I think other illnesses are not communicable)'	'*Payad khaj wat yai kue see tid pad, poh berng khao meek on tai lai, koi loei yan poh koi puapan kab kon tang pratet doo* (I heared from television that influenza could be transmissible. As I have more contacts with foreigners I am afraid)'	'*suan lai jeb yon tid pad moo, tha moo pen wat nong ka tid wat ma* (mostly I catch a disease from my friend, if my friend gets a common cold, I will get it also)'	'*pen wat pen ai pen payad thammada, tha payad hai* (common cold is a normal illness, but communicable diseases are terrible)'	'*khaj yung jeb yon yung kad bor tid pad, khaj wat tid pad* (mosquitoes' bite is the cause of mosquitoes fever. It is not contagious. Common cold is contagious)'	'*payad tanten bor tid pad, mee khon jeb kue kan tae pern ka pai ha khong pa kue kan* ('*tanten'* is not contagious. There is a friend who fell ill because of '*tanten'* but he also went to the forest as myself)'	'*khaj suan lai bor tid kan dok, pen pai pen man, tae watt id pad kan, dek noi tid pooyai, pooyai tid dek noi* (most fevers are not contagious, but common cold is contagious, especially from children to parents and from parents to children)'	'*poo yai suan lai pen wat pen ai bor tid pad kan, tae dek noi pen wat tid pad kan, yang dek noi kang baan jeb ela noi ka jeb kue kan* (common cold in adult is not contagious, but common cold in children is contagious; for example if a children near my home gets a common cold my children will also get it)'
summary	- *bor tid pad yang khaj yued khaj yao, khaj liad, tanten, khaj yung, khaj wat nai poo yai* (illnesses are not contagious, for example, growing condition fever, menstrual period fever, mosquitoes' bite fever, '*tanten*' and common cold in adults) - *tid pad kan dai yang ai kai, khaj wat* (contagious illnesses are, for example,'*ai kai*' and common cold)										

6.2.4 Contagiosity of fever-related illness: Key informants class diseases in contagious and not contagious: 1) *bor tid pad yang khaj yued khaj yao, khaj liad, tanten, khaj yung, khaj wat nai poo yai* (Growing condition fever, menstrual period fever, mosquitoes' bite fever, '*tanten*' and common cold in adults are not contagious)*;* and 2) *tid pad kan dai yang ai kai, khaj wat* ('*Ai kai*' and common cold are contagious').

Thus, *Nang Am* said '*tha pen haeng rue tidpad yang uen see ai lai, shao lai, yang look khon yai koei pen khaj pod, khaj haeng, ai lai, shao lai, thong pa pai hai nam kia hai ya lai mue* ('When illness is more severe or contagious than others, children will have more cough, more difficulty to breathe, such as in the case of my oldest daughter who got '*khaj pod*' or pneumonia. She had high fever, more cough and more difficulty in breathing. I had to take her to the doctor for getting intravenous fluids and medicines for a couple of days)'.

According to *Tao Nun*, '*Payad tanten bor tidpad, poh koi jeb lai mue ka bor khon nai baan jeb nam* ('*Tanten*' disease is not contagious. I think this because I was ill during many days but nobody in my house gets it)'.

Tao Kham said '*Nong jeb yon yung kad, nong kued wa kue see mee payad yoo nai yung tee kad nong tueng jeb* (I fell ill because of mosquitoes' bite. I think that there is a disease in mosquitoes, when it bites me I get a disease)'.

In the next issue, I present Laotian methods of investigation of fever-related illness (See Table 6.10).

Table 6.10 Laotian methods of investigation of fever-related illness

Details /Cases	*Nang Am*	*Mae Serm*	*Nang Nang*	*Nang Suk*	*Tao Nun*	*Nang Sao*	*Nang Sai*	*Tao Kham*	*Tao Tham*	*Nang Dao*	*Nang Dian*
Fever-related illness Investigation	'*jab tamton tamtoh, tae na pak, king si hone kue phai, bang tia chai parot wat* (touching the body especially, the forehead; we feel if the body is hot as fire, sometimes I use temperature instrument)'	'*jab king berng man si hon hon hume hume* (touching the body, we feel the same as warm or hot on our hand)'	'*jab king perng jab tam ton tam hoh, tham phi nong, tham kon hoo jak* (touching the body and asking to relatives or friends about symptoms)'	'*jab berng tam khanka tam ton tam toh tha king hone hone ka hai kin ya* (touching the body, if feel hot, I will give them medicine)'	'*hoo suek hon hon yam jab king berng see hon kue fire* (feel if the body is hot as fire)'	'*jab king berng*, *jab na pak berng* (touching the body, especially the forehead)'	'*jab king, jab kor, ton toe ka hoo* (touching the body)'	'*jab king berng, tam por too mae too* (touching the body and asking to grandparents)'	'*nao nao hon hon, bang tia ka puad puad sab sab, yam our jab king see hon kue fire, laew our ka see hen puen daeng tam ton tam toe* (feeling shivering and hot in the same time, sometimes feeling flash pains before the red rash appears)'	'*jab king berng* (touching the body)'	'*jab king berng*, *jab na pak berng* (touching the body, especially the forehead)'
summary	- *Jab king berng, king see hon kue fire* (touching the body, we feel if it is hot as fire) - *tam poo tao poo kae (*asking to grandparents) - *tae tam ton tam toe, na pak* (touching the whole body, especially the forehead) - *bang toe ka chai parod wat* (sometimes using temperature instrument)										

6.2.5 Laotian methods of investigation of fever-related illness*:* These can be divided into four categories: 1) *Jab king berng, king see hon kue fire* (touching the body, we will feel if it is hot as fire); 2) *tam poo tao poo kae* (asking to grandparents); 3) *tae tam ton tam toe, na pak* (touching the whole body, especially the forehead); and 4) *bang tua ka chai parod wat* (sometimes, using temperature instrument).

Thus, *Nang Am* said '*Tue king khaj rue king hone, our our mue tae na pak, tham thon tham toe see hon kue fai, bang tia nong ka chai palod wat khaj, nong sue ma jak han moh nai Vien, than moh pern son viti wat hai nam, chai wat kee rae see ha nati ka our oog, perng kid daeng daeng nee tha lai kwa nee ka mee khaj* ('Having fever or increase of body temperature. I know that my children have fever or not by touching to their head, forehead, whole body, it would be hot; if they have high fever their body would be hot as fire. Sometimes, I use a temperature instrument to detect fever. I bought it from a doctor in a clinic of Vientiane.)"

According to *Nang Sao* '*por our hoo suek wa toe hon hon nao nao, our jab hau perng, jab kor perng man see hon hon* ('When I feel flashes of hot and cold on my body, I touch my forehead and neck. My hand feels hot')'.

Tao Phon said '*Jab perng jab na pak kor kaen ka wa king hone haeng rue hon koi* ('I touch my wife's body to feel its temperature, especially the forehead, neck, arms and legs')'.

This chapter analyzed the second part of my field data. I first presented information on Laotian patients who are seeking health-care services in Nongkhai provincial hospital because of fever-related illness. I then followed them, for in-depth interviews and participant observation, in three communities located in Lao PDR and near the Lao-Thai border for understanding their beliefs and experiences of health and illness, for example, their perceptions about signs and symptoms, perceived causes, perceived severity, etc. I found that most key informants give more than one definition of health "*kin sab non lab dee, hed wieg dai, mae khaeng hang bor jeb bor khaj, hed wieg saun hai na dai* ('good appetite, sleep well and able to work)."

'*Khaj*' '*jeb*' or '*puiy*' are the three terms that key informants use in relation to fever-related illness. '*Khaj*' '*jeb*' or '*puiy*' are used to define different kinds of symptoms, such as, for example: *khaj*-fever; *khaj ai*-fever with cough; *khaj mee kee mook*-fever with running nose; *khaj liad or khaj tab radoo*-menstrual period fever, *jeb*

yon yung kat- fall ill because mosquetoes bite, *yeb yon akad plian*-fall ill because seasone change, *puiy yon pai pa*-fall ill because went to the forest, *puiy yon hed pid phii poo phii* ya-fall ill because wrong doing to ancestors spirit, etc.

Moreover, a basic symptom of *khaj hanjai*-fever and respiror symptoms is fever or '*khaj*' or '*king hone'*, as previously mentioned. The other symptoms are: *ai*-cough, *mee nam mook* or *mee kee mook*-running nose, *jeb kor*-sore throat, *hanjai yak*-difficulty to breathe, *nao san*-chills, and *puad thong*-abdominal pain, *puad hua*-headache, etc. These signs and symptoms may be variously seen, such as, for instance, as the product of a natural event- illness is related to seasonal change (*khaj wat* or common cold) and to growing condition and body process (*khaj yuad khaj yao* or *khaj yuad yao yai* or fever during children transformation ages); there are considered as contagious *(khaj tid pad*' or contagious fever); they have a supernatural origin ('*tanten*', '*khaj kor kaeng'* and '*khaj hak liad tai')*; they are related to hard work and need for relaxation ('*khaj puad klam*', '*khaj yon fao wieg*' and '*khaj yon yok khong nak*'), etc.

Laotian people classify fever-related illness into three categories: *thammada* (normal illness); *jeb noi kin ya mue song mue ka shao, bang tia bor thong kin ya ka shao* (mild illness which needs that one takes medicine for a couple of days before recovery, sometimes there is no need to take medicine); and *puiy nak lai mue bor shao, tha bor pua ka tai* (severe illness which takes time for recovery or healing, if the patient does not get right healing he will die); *bor tid pad yang khaj yued khaj yao, khaj liad, tanten, khaj yung, khaj wat nai poo yai* (illness may be not contagious, for example, growing condition fever, menstrual period fever, mosquitoes' bite fever, '*tanten*' and common cold in adults)*;* and *tid pad kan dai yang ai kai, khaj wat* (it may be contagious, for example, '*ai kai*' and common cold). Moreover, the main methods of investigation of symptoms are *Jab king berng, king see hon kue fire* (touching the body, we will feel if it is hot as fire); *tam poo tao poo kae (*asking to grandparents); *tae tam ton tam toe, na pak* (touching the whole body, especially the forehead); and *bang toe ka chai parod wat* (sometimes using temperature instrument).

Finally, the perceived impact of fever-relatd illness on daily life may be: *shao wieg* (stop working); *our jeb rue look jeb ka thing shao berng ngaeng* (stop working when either myself or my daughter falls ill); *bang tia bor chai ka bor thong*

shao wieg (sometimes, males have no need to stop working); and *dek noi bor pai honghien* (children stop going to school).

In the next chapter, I present Laotian treatment-seeking behaviours in case of fever-related illness**.**

CHAPTER VII
LAOTIAN PATTERNS OF TREATMENT SEEKING BEHAVIOURS

In the previous chapter, I mentioned the concept of ethno-epidemiology, having adapted the meaning of host and agent in the study of Laotian beliefs and experiences on fever-related illness. In this chapter, I examine the social and cultural contexts which are related to illness and to seeking health-care services in cases of fever-related illness. I found that eleven Laotian informants, who visit Nongkhai provincial hospital because six symptom groups (four for fever and cough; two for fever, headache and red rashes; each one for fever and headache, fever and stiff nech, fever, cough and sore throat, fever, red rashes and flash pain, fever and rhinitis), they have different ways for treatment and use of medical services (see figure 37 and Table 14).

7.1 Self-medication

Ten of eleven Laotian patients bought medicines for primary relief or cure of fever-related illness from the drugstores in Lao PDR for five symptom groups, except a fever and stiff neck Laotian patients who seek treatment from health center in her community. However, I found that among ten informants I could divided to 4 groups: 1) bought medicines from drugstores in Lao PDR (four of ten), 2) they used traditional medicines in Lao PDR (two of ten), 3) bought medicines from drugstores in Thai (one of ten), and take medicines from Thai provincial hospitals (one of ten). Regarding informants said, for example,

Mae Bang, a health volunteer of *Baan Chaitham*, said '*Atid laew ma poh look king hone puad tam toe ton sao, suiy suiy ma mae ka pai sue yaa jak han ya nai talad ma hai kin, kin song sam tia ka sao, paeng nueng mee see med, kin sao song med kin laeng song med, sao eeg mue ka hed ngan dai laew* ('Last week, when my son had fever and muscle pains, I bought for him a fever relief medicine from a drugstore in

the market. There are four pills in one panel. He had taken two pills in the morning and two in the evening. The next day, he recovered and was able to work')'.

To my question, "*Han kai khiang tua pai rue han kai yaa tee mee pesat perng ngang ka mae* ('Any grocery or drugstore with pharmacist attending?",

she replied '*Han kai yaa nai Lao thong mee pesat tee mee bai anuyad tueng see perd han kai dai, bag an pe khong tan moh nai Vien, bang han pen khong pesat nai hong moh muang ka mee* ('In Lao PDR, pharmacists need to have a license to run a drugstore, some belong to doctors in Vientiane while others belong to pharmacists in district hospitals')'.

I saw an empty drug package lying on the ground and then picked it up and look. I asked *Mae Bang* what it was and she said that it was the drug which she mentioned (drug package as Figure 7.1).

Figure 7.1 An empty drug package being used to relief of fever and muscle pain (Photo taken: November 25, 2010)

According to *Nang Am*, '*Yam dek noi king hone haeng, nong sai yaa para yang tee chai neb yae kon, kao diew king hone lod long* ('When my children had high fever, I use kits of paracetamol suppository (Figure 36) applying into children anus just once, then fever rapidly decreases')'.

At my question, '*Neb jang dai, tang kan bor nai dek noi tae la kon* ('How do you applies it? Does it differs to apply for each child?)', she replied

'*Man mee med roi sao ha kab song roi ha sib, look laa sai roi sao ha, look kok kab look kon klang sai song roi ha sib* ('There were two types of tablet, of one hundred and twenty-five and two hundred and fifty, my youngest daughter applied the one hundred and twenty-five tablet while the eldest and the second child used the two hundred and fifty tablet')'.

She continued saying, '*Koei tam tan moh yoo han yaa, pern bok waa hai perng mong nee, nong sue yaa han nee soo tia, por chai yaa nee merd nong ka pai sue paeng mai ma wai chai tia naa* ('I had been asking to the doctor at the drugstore. He told me to look at this blister pack. I always bought drugs in this shop, for stockpiling. I have to keep some drugs in case my children get ill another time".)

Figure 7.2 Paracetamol suppositories for children
(Photo taken: July 25, 2010)

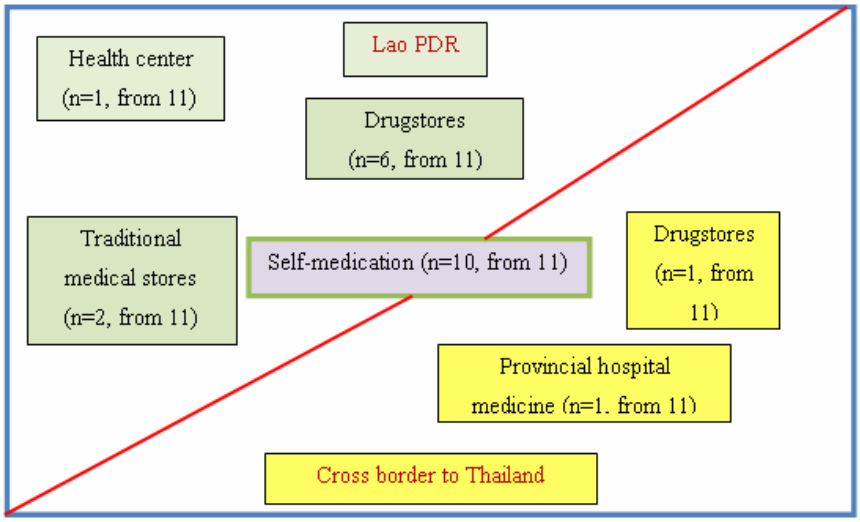

Figure 7.3 Sources of Laotian's self-medication and seek treatment for first relief their fever-related illness.

7.2 Second seeking for treatment in homeland and/or cross the border to Thailand.

All of informants said that they used first self-medication, and, this treatment fails, they seek treatment in any health-care services in homeland and/or cross the border to Thailand. However, I found that among eleven informants I could divided to 4 groups: 1) seek health-care service in provincial hospitals in Thailand (eight of eleven), and one each for, 2) seek health-care service at private clinic in Lao PDR, 3) seek health-care service at private clinic in Thailand, and 4) seek health-care service from in government hospital in Lao PDR. Regarding informants said, for example,

I further asked to *Nang Am*, '*Tha neb yaa yam pen khaj king hone rue jeb puiy yang ern, bor shao hed jang dai* ('After applying suppository to a child with fever, if he or she does not recover or is cured, what should you do?')'

She suggested, '*Sin laew maa look khon klang pen khaj king hone, ai, sao, nong paa pai haa than moh yoo cee nic nai nai Vien,than moh hai nam kia laew ka yaa ma kin song mue bor shao, ka loei kam pai fang poon, tee pai por kab eia nan laa, ton nee kai laew king bor hon bor sao, len dai, kin khao kin nam dai laew* ('Last Buddha full moon, my secondary son had high fever, cough and difficulty to breathe, I took him to the doctor at a clinic in Vientiane. The doctor gave him a saline solution and some drugs to take at home; two days later, as he did not recover, I took him to see a doctor in Thailand. It is when I met you there, he is recovered now, he can play, eat and drink normally without fever, cough and difficulty to breathe')'.

Regarding *Tao Phol*, a fifty-eight years old Laotian man who is the husband of a patient presenting with fever and stiff neck, being admitted in the Nongkhai provincial hospital, said

'*Por mae oog toe hon, kluen yak, baan our hong khaj lin kadang kang kaeng, poh kaa paa pai haa than moh yoo suk sala dai yaa maa kin, mue song mue pen lai kuen loei paa pai hong mon nai Vien* ('My wife got fever, she was swallowing with difficulty, and with a stiff neck. It is what we call '*khaj lin kadang kang kaeng*' or fever with tongue tight and stiff neck. I took her first to the health-care center. The doctor gave her some medicines for taking at home. Then, a couple days later, she was getting worse. Thus, I took her to the hospital in Vientiane')'.

Nang Song (Figure 38), a renal failure patient of forty-three years old who was visiting the doctor at the Nongkhai provincial hospital because of fever and sore throat, said,

'*Eia jeb pen payad tai wai ma pee kwa laew, tae kon pai fok tai yo hong moh Nongkhai Wattana, soo kaa pinpua por wai, tia la lai lan Kibb, meek on bok waa hong moh luang ka pinpua dee kue kan, eia loei yai maa pua yoo nee* ('I fell ill from a renal failure more than one year ago. Before, I seek health-care services at the Nongkhai provincial hospital. I had been having renal dialysis at Nongkhai Wattana hospital (a private hospital in Nongkhai province where Laotian of middle–upper income preferently uses in Thailand and this hospital has a big billboard nearby the Lao-Thai Friendship Bridge, see Figure 39). However, I could not afford such a high cost of health-care services with several millions Gibb at each visit. Someone suggested that government provincial hospital quality is as good as in private hospital, so I sought for health-care services there)'.

She continued saying, '*Yan lai noh, our yan pen yang ern, our mee payad prajam toe, por prn wat pen ai, see jeb noi jeb lai, our ka thong fao maa hong moh tantee* ('I am so scared of falling ill, because I have a severe chronic illness. I am afraid that my illness will become more severe even if I have just fever, cough or any minor illness and, in these cases, I rush immediately to the hospital')'.

Figure 7.4 *Nang Song*, a Lao patient seeking health service at the Nongkhai provincial hospital (Photo taken: July 23, 2010)

Figure 7.5 Billboard of a Thai private hospital nearby the Thai-Lao Friendship Bridge. (Photo Taken: July 23, 2010)

Nang Suk who had been took her daughter for visiting the Nongkhai provincial hospital because of fever and running nose, said,

'*Look kon nee pen kon noi, look kon yai ayoo see pee laew pen porchai kue khan terng song kon prasut yoo nee merd, yam jeb yam khai kaa loei pa maa nee, poh waa prawat tang tang our ka yo nee noh* ('This girl is my youngest daughter, the eldest one is a fouryears old female. They were born in Nongkhai provincial hospital. So, when they fall ill, I take them to Nongkhai provincial hospital because their medical histories are there since their birth')'.

I further asked to *Nang Suk*, '*Yam jeb puiy nong ka paa look look maa haa moh mong nee loei rue dai pai haa moh ern maa kon bor* ('When your children fall ill, do you directly take them to this hospital or to any other place before?')'

She replied, '*Bor chao, suan lai see sue yaa jak han yaa nai moo baan maa hai kin kon, tha bor dee kuen, tueng see paa kham maa, tae tia nee nong see kham maa sue khiang nai talad ka loei paa maa prom kan* ('Not exactly, mostly I first buy medicine from a drugstore in the community (Figure 40). If my children are not better or do not recover from illness, I bring them here. But for this time it was different. I am going to buy some commodity in the market. So, I took them to visit the doctor too)'.

Figure 7.6 Drugstore as commonly seen in Lao PDR
(Photo taken in *Baan Chaitham*: July 26, 2010)

7.3 Third seeking for treatment by crossing the border to Thailand.

Most of Laotian informants are recovered after their second seeking for treatment. Moreover, three of eleven informants continue seek for the third treatment in government hospital in Thailand. They are; 1) fever and cough in two years old girl, 2) fever, red rashes and flash pain Laotian patient, and 3) fever and stiff neck Laotian patient. Regarding informants said, for example,

Tao Phol saying, '*Poh pruek saa look look yak paa mae oog maa hong moh nai Thai, loei toe haa Bao Lak, Bao Lak chai puapan hong moh Nangkhai hai* ('I discussed with my children about moving my wife for treatment in the hospital in Thailand. I called *Bao Lak* (or *khun Wisanu*, an officer of the International Diseases Control Check Point Office, Department of Diseases Control, Ministry of Public Health, located at the Thai-Lao Friendship Bridge, Nongkhai province) to get an advice. *Bao Lak* helped us to contact the Nongkhai provincial hospital')'.

'*Maa hod hong moh Nongkhai ton laeng laeng mue waan, non yoo hong kang nok poon perng akarn, derk maa than moh yai maa hong kang nai nee, look eoi tha bor maa nee bor hoo waa see yang yoo bor* ('We arrived at the Nongkhai provincial hospital at late afternoon yesterday. My wife was lying down at the observation room there. Then, at the late night, the doctors move her to this room as you see now. My dear, if I did not take her to this hospital, I wonder if she would be still alive.)'.

Finally, I could classify patterns of Laotian patients seeking health-care service for relief their fever-related illness into specific seven catergories (detail, see Table 13.1 and diagram 3);

Category A: The group who first seeks treatment for relief of fever-related illness, four different symptoms group (i.e. fever and cough, fever and headache, fever, headache and red rashes, fever, cough and sore throat), through buying medicines in Lao PDR then seeks health-care service in provincial hospitals in Thailand (five from eleven).

Category B: An informant who first seeks treatment for relief of fever and cough through using traditional medicine in Lao PDR then seeks health-care service in provincial hospitals in Thailand (one from eleven).

Category C: An informant who first seeks treatment for relief of fever and cough through buying medicines in Thailand then seeks health-care service in provincial hospitals in Thailand (one ofrom eleven).

Category D: An informant who first seeks treatment for relief of fever and rhinitis through taking Thai provincial hospital's medicine then seeks health-care service in provincial hospitals in Thailand (one from eleven).

Category E: An informant who first seeks treatment for relief of fever and cough through buying medicine from drugstores in Lao PDR, then seeks care at the private clinic in Lao PDR, and finally seeks health-care service in provincial hospitals in Thailand (one from eleven).

Category F: An informant who first seeks treatment for relief of fever and stiff neck through seeks health-care in health center, then in government hospital in Lao PDR, and finally seeks health-care service in provincial hospitals in Thailand (one from eleven).

Category G: An informant who seeks treatment for relief of fever, red rash and flash pain through using traditional medicines in Lao PDR, then seeks care at private clinic in Thailand, and finally seeks health-care service in provincial hospitals in Thailand (one from eleven).

Table 7.1 Laotian informants and their patterns of treatment seeking behaviors

ategory	Symptoms	Pattern of seeking health-care services		
		1st treatment	2nd treatment	3rd treatment
	fever and cough	self-medication, drugstore in Lao	government hospital in Thai	
	fever and headache	self-medication, drugstore in Lao	government hospital in Thai	
	fever headache red rash	self-medication, drugstore in Lao	government hospital in Thai	
	fever headache red rash	self-medication, drugstore in Lao	government hospital in Thai	
	fever cough and sore throat	self-medication, drugstore in Lao	government hospital in Thai	
	fever and cough	self- medication, traditional in Lao	government hospital in Thai	
	fever and cough	self-medication, drugstore in Thai	government hospital in Thai	
	fever and rhinitis	self-medication, Thai hospital drug	government hospital in Thai	
	fever and cough	self-medication, drugstore in Lao	private clinic in Lao	government hospital in Thai
	fever and stiff neck	health center in Lao	government hospital in Lao	government hospital in Thai
	Fever, red rashes and flash pain	self-medication, traditional in Lao	private clinic in Thai	government hospital in Thai

7.4 Contexts related to seeking health-care services.

In addition, I also analyze contexts related to seeking treatment of all eleven Laotian informants. Contexts related to each group as:

- Characteristic of category A, this category consisted of five key informants: averaged twenty-two point four years old; two males and three female, two single and three married. Three of five informants are graduated high school and one each for primary school and junior high school. Two each are owner businesses and students. An informant is farmer. Numbers of member in their family are six point four people per family. Their family's monthly earning approximately two

point six millions Gibb (about ten thousands Baht). Most of them have not relatives in Thailand. Three of five informants had been seek health-care in Thailand.

- For category B to G, each category is consisted one informant, thus chalacteristic of each category as same as demographical data of each informant as: category B is *Nang Dao*, category C is *Nang Sai*, category D is *Mae Serm*, category E is *Nang Am*, category F is *Nang Nang*, and category G is *Tao Tham* (see Diagram 2 page 98).

In addition, I also used in-dept interviews with other key informants such as, neighbouring households in the same communities. In this group, I interviewed twenty-seven households who had experiences of fever-related illness in the past month. I also did interviews with the chief of communities (two, one from each community); health-care volunteers (two, one from each community); and traditional healers (two, one from each community). Thus, I interviewed a total of fourty-five families coming from three different communities. I could classify thirty-four key informants to nine special categories. There are five categories consistent with eleven patient groups: category A (eight from thirty-four), category C (three from thirty-four), category D (six from thiry-four), and category G (four from thirty-four). They did not mention about categories B, E and F. In addition, I found that they point out pattern of seek treatments beyond eleven patients groups (i.e., H, I, J, and K, see Table 13.2, and diagram 3).

Category H: is a key informant who first seeks treatment for relief of fever-related illness through buying medicines in Lao PDR then seeks health-care service in private hospitals in Thailand (one from thirty-four).

Category I: is the group of key informants who first seeks treatment for relief of fever-related illness through buying medicines in Lao PDR then seeks health-care service in government hospitals in Lao PDR (six from thirty-four).

Category J: is the group who first seeks treatment for relief of fever-related illness through seeks health-care in private clinic then government hospitals in Thailand (five from thirty-four).

Category K: is a key informant who first and second seeks treatment for relief of fever-related illness through seeks health-care service in private hospitals in Thailand (one from thirty-four).

Table 7.2 Laotian informants and their patterns of treatment seeking behaviors

category	Pattern of seeking health-care services	
	1st treatment	2nd treatment
H	self-medication, drugstore in Lao	private hospital in Thai
I	self-medication, drugstore in Lao	government hospital in Lao
J	private clinic in Thailand	government hospitals in Lao PDR
K	private hospitals in Thailand	private hospitals in Thailand

A. self-medication, drugstore in Lao→ government hospital in Thai
B. self- medication, traditonal in Lao → government hospital in Thai
C. self-medication, drugstore in Thai → government hospital in Thai
D. self-medication, Thai hospital drug → government hospital in Thai
E. self-medication, drugstore in Lao → private clinic in Lao → government hospital in Thai
F. health center in Lao → government hospital in Lao → government hospital in Thai
G. self-medication, traditonal in Lao → private clinic in Thai → government hospital in Thai
H. self-medication, drugstore in Lao→ private hospital in Thai
I. self-medication, drugstore in Lao→ government hospital in Lao
J. private clinic in Thailand → government hospitals in Lao PDR
K. private hospitals in Thailand → private hospitals in Thailand

Diagram 7.1 Laotian's seeking health care behaviors patterns

Key informants consisted of females (twenty-five from thirty-four) and males (nine from thirty-four). When considering seeking health services behaviors, there were of course more females in the seven categories (A, D, G, H, I, J and K) than males, while in the group buying drugs from drugstores in Thailand for first treatment in case of a fever-related illness then seeks health care in the government in Thailand (category C) there were as more males than females.

Among informants and key informants, there were seven single persons and twenty-seven were married. On this respect, I found that married persons preferred to seek treatment in all categories while single persons tended to cross the border for seeking treatment in the private sectors in Thailand (category H and K).

About education level, most of key informants have completed primary school or grade six or '*prathom hok* or *por hok*' (fifteen from thirty-four), followed by lower secondary or '*matthayom sam* or *mor sam*' (nine from thirty-four), upper secondary or '*matthayom hok* or *mor hok*' (three from thirty-four), bachelor degree or '*prarinya*' (four from thirty-four). When considering seeking health-care services for relief of fever-related illness, I found that: primary graduate informants tented to seek treatment follow category A, C, D, I and J; the lower secondary tented to seek treatment follow category A, G and I; while upper secondary and bachelor's graduate key informants tended to seeking health-care service follow category C, D, J and K which private clinic or private hospital are in choices.

On the question of occupation, most of informants and key informants were farmers (thirteen from thirty-four), followed by private sector employees (six from thirty-four), merchants (three from thirty-four), and tobacco growers (three from thirty-four). Among them, farmers tented to seeking health-care service follow category A, D, I and J, while private sector employee tentd to seek treatment follow category G. Besides, the other group tented to use every type of health-care services.

With respect to monthly income, the average income per household per month was approximately two point two millions Gibbs or about nine thousands Bahts (the smallest amount of earnings was approximately four hundred thousands Gibbs or two thousands Bahts; the maximum income per household per month was ten millions Gibbs (approximately fourty thousands Bahts). When considering that family member of each household average five people, a monthly income of about two thousands Bahts was considered as sufficient for and some households said that they could save money. When considering health-seeking behaviours, I found that people with lower monthly earnings prefer to utilize health-care services tented to seek treatment in private clinic in Thailand and then provicail hospital in Thailand (category D). While higher monthly earnings prefer to utilize private clinic in Lao PDR then cross the border for private clinic r private hospital in Thailand.

On the question of Laotian relatives in Thailand, I found that most key informants had no relatives in Thailand (twenty-one from thirty-four). However, when considering seeking health-care services in Lao PDR and in Thailand, the group who had no relatives in Thailand tended to seek treatment follow to category A, G and J when they fell ill, when compared with those having relatives in Thailand they tented to seek treatment follow category D and I.

This chapter examined Laotian patterns of treatment-seeking behaviors in case of fever-related illness. It can be seen that Laotian first choose self-care treatments and, second, they choose self-medication and seek health-care services, either traditional or Western medicine. In the next chapter, I will summarize and discuss the data on Laotian beliefs, experiences and patterns of treatment-seeking behaviors in case of fever-related illness.

CHAPTER VIII
DISCUSSION AND CONCLUSION

As I have mentioned above, when a malfunction of an organ of the body or a symptom such as, fever, headache, cough, sore throat, etc, occurs, this indicates not only a physical problem but also a social and moral malfunction. According to Davis-Robert (Davis-Roberts 1981; Lipton and Marbach 1984; Lillie-Blanton and Laveist 1996) and others (Davis-Roberts 1981; Lipton and Marbach 1984; Lillie-Blanton and Laveist 1996), when illness occurs, humans raise many questions about it, as such, What is the name of this disease? Is it related to daily life or age condition? What is/are its cause(s)? How to cure it? How to relieve or eradicate it? The answers to these questions may or may not take time depending upon the related contexts of the disease such as, living conditions which differ according to the society (ies) and culture(s). This research aimed to understanding Laotian beliefs, experiences, and patterns of use of health-care services for relief of fever-related illness.

As mentioned in the chapter three related on literature review, the Lao and Thai term '*khaj*' refers to a rise of body temperature. It has the same meaning that "fever" for biomedicine. However, in Lao and Thai the meaning does not indicate an infectious disease contrarily to biomedicine. Fever in biomedicine, for example, is a sign or a symptom of dengue fever (Coreil, Whiteford et al. 1997), malaria (McCombie 1994; McCombie 1996; Kazembe, Appleton et al. 2007), measles (Mull 1997), pneumonia (Cody, Mull et al. 1997), and avian influenza (Buranathai 2003; Drosten, Preiser et al. 2003; Doiecek, Jong et al. 2005), etc. It is thus the sign that body immunity function acts in response to the intrusion of foreign particles (e.g., virus, bacteria, fungus) into the body. The Western medical point of view may or may not differ from the socio-anthropological point of view. In this chapter, I present the Laotian points of view when they have fever-related illness. The results of this study may contrast with or support previous researches as it will be seen.

8.1 What is the local terminology for fever-related illness?

Laotian people have many terms to refer to the increasing of body temperature: When they get fever, they may refer to it as *khaj, king hone*, *toh hone* or *thua king khaj*. All these words refer to the increasing of body temperature. When they touch their body, they feel that skin temperature is higher, especially in the forehead, around the neck, arms and legs. They thus know they have fever. The meaning of *'khaj, king hone, toh hone* or *thua king khaj*' is similar to that of fever as defined by Western medicine, i.e. the temporary increase of body temperature. However, Laotian perceptions of fever, terms used, methods and instruments of measurement, or degree or level of body temperature are different.

Thus, the meaning of '*khaj*' in Lao and Thai is similar to what is called fever in other socio-anthropological researches (see, for example, the term '*homa'* in Zaire or the terms '*khaj*' and '*pen khaj*' among Thai people; see Davis-Roberts (Davis-Roberts 1981).; Brun and Schumacher (Brun and Schumacher 1994). However, Thai people use also '*khaj*' to refer to the "patient" as in the expression '*kon khaj*'. The Laotian equivalent of this last term is '*kon jeb*'. Moreover, '*khaj*' often precedes other words and serves to define a sickness such as '*khaj yung*' or get fever because mosquitoes bite, '*khaj yued khaj yao*' (growing condition fever), '*khaj wat*' (common cold), '*khaj hua lom*' (seasonal change fever), '*khaj liad* or *khaj tab radoo* (menstruation with fever)', etc.

In addition, Laotian use other tems to refer to '*khaj*' or fever, for example, '*king hone*', '*thua king khaj*', '*toh hone*', '*jeb*', '*puiy*', and '*pen puiy*'. However, '*king hone*', '*thua king khaj*', and '*toh hone*' have the same meaning that '*khaj*' or fever which indicates an increase of body temperature. While '*jeb*', '*puiy*', and '*pen puiy*' are a quite different meaning. In contrast with '*khaj'*, these words are not limited to fever but indicate other signs and symptoms, for example, headache, sore throat, and muscle pain which may come from hard working, supernatural spirit, etc. For instance, a Laotian patient is seeking treatment with *Poo Paan* because of special symptoms, such as not speaking, not working and not eating. His family believes that his illness is related to spirits of their ancestors '*khaj yon phii poo phii ya hed*' or '*khaj yon pid phii poo phii ya*'. When Laotian getting any symptoms together with fever symptoms (for example, fever, cough, sore throat, running nose and difficulty to breathe), Laotian people

believe that these symptoms indicate a complication of the illness and that it is more severe than '*khaj*'.

In this issue, I have mentioned various names that Laotian people use to refer to illness of fever-related illness, such as, '*khaj, king hone, toh hone, toh hume hume, thua king khaj, hone hone noa nao*, etc., including their links with sickness and sign of these ailments such as, '*ai'* (cough), '*sao*' (difficult to breathe) and '*khaj han jai yak*' (fever with respiratory symptoms). Of the methods of diagnosis of fever-related illness, most Laotian people touch the patient's body, observe their breath, etc. Only one Laotian mother used a thermometer to detect fever in her children. In the next issue, I discuss on Laotian perceptions about causes, degree of severity and impact of the disease on daily life of fever-related illness.

8.2 What are the local perceptions of causation, degrees of severity, impact of the disease on daily life of fever-related illness?

Laotian perceptions of signs and symptoms were reviewed above. In this issue, I examine local theories on causation of fever-related illness.

8.2.1 What are the local perceptions of causation?

Laotian attribute fever-related illness to many causes as previous studies have shown, such as, soul loss, spirit aggression, sorcery attack, food poisoning, body imbalance, germs or viruses, seasonal change, especially at the end of the raining season and beginning of the cold season ((Brainard and Zaharick 1989). In this study, I had found that *khaj* (fever) or *khaj wat* (fever with respiratory symptoms) are caused by soul loss ('*kwaun hai*' or '*sia kwuan*', seasonal change, hard work, growing condition in children, contagion ('*khaj tidpad*'), wrong doing to ancestors' spirits or supernatural's (or anything beyond science instruments could detect). However, nobody mentioned sorcery attack, food poisoning, and body imbalance.

Soul loss (*kwaun sai* or sai *kwaun*): Laotian people believe that thirty-two *Kwaun* (or "soul") if any one of them wanders, is startled, or driven out of the body by many causes. Neighboring peoples (i.e. Thai, Vietnamese, etc.) share the same belief in souls and soul loss (Brainard and Zaharick 1989; Ratanakul 1996).

Climate change: According to some researches, fever-related illness occurring at the end of the rainy season and the beginning of the cold season are called '*khaj hua lom'*. This is similar to the conception of Zairian people provided the fact that for them fever comes from the wind which penetrates into the body through skin hair and pores, causing chills, feelings of cold and fever (Davis-Roberts 1981) (see also (Mull 1997)).

I would like to suggest, however, that, for adults, falling ill during the change of season may have other meanings, **being related to hard work**. Actually, during the beginning of the cold season around October – November in which Laotian people have to plant rice in a hurry in order to get a harvest around January – March and the celebration of the New year (i.e., during the Songkran festival in April every year). Thus, diseases occurring at these periods may be related to seasonal change and hard work.

Natural physical change: This cause was barely mentioned in previous researches with Laotian people. In this research, I have found that fever-related illness is related to growth and change of age in young children, especially in children with less than 10 years. Natural physical change in females**:** Fever can also occur during fertility states, as it has been mentioned in previous researches on Laotian and other peoples (Brun and Schumacher 1994; Graham 1997; Kamat 2006; Hildenwall, Rutebemberwa et al. 2007). However, definition and treatment differ for what Laotian call '*khaj liad*' or '*khaj tab liad*' or '*khaj tab radoo*' in which they have '*king hone* or fever' or '*puad tong noi* or lower abdominal pain' during menstruation period. This illness can affect every female.

Intrusion into the body of a foreign matter (*khaj tid pad*): Fever-related illness can be contagious. This cause was first mentioned in the researches conducted by Brainard and Zaharick (Brainard and Zaharick 1989) and Ratanakul (Ratanakul 1996). My field data present some differences with their research findings.

Finally, many Laotian believe that they may fall of fever-related illness because ***humiliation or punishment by supernatural's or ancestors' spirits***. This issue was previously mentioned by Brainard and Zaharick (Brainard and Zaharick 1989) and Ratanakul (Ratanakul 1996). In this study, I found the same.

8.2.2 'What are Laotian perceptions of degrees of severity of illness of fever-related illness?

In the literature reviewed, I found no data on this subject in Laotian. This study showed, however, that Laotian people ranged fever and symptoms of fever-related illness in three categories: little, medium, and severe. Some of them, however, said that there are only two degrees in severity of an illness: normal and severe. I believe that their perception of severity of fever-related illness affect Laotian decision to seeking treatments when they fall ill. Which I will be present in detail in the contexts relating to or affecting health-care services domestically and across the border to Thailand (see the answer to the question 5.)

8.2.3 Laotian classification of fever-related illness:

Until now, there are not many researches related to names and system of classification of fever-related illness, especially among Laotian people. This study permits to compile fifteen terms related to fever or to any illness with fever as principal symptom for example, *khaj*, *khaj wat*, *khaj lom or khaj hua lom*, *khaj liad or khaj tab liad* or *khaj tab radoo* or *khaj mae ying*, *khaj puad hua* 6) *khaj puad mia klam nia*, *khaj puad tong*, etc. As it can be seen, illnesses have no particular name; their name consists generally of the term for fever combined with the names of other symptoms. Moreover, names of illnesses give no indication of the underlying cause as in biomedicine (i.e., bacteria, virus, fungi).

8.2.4 Impact of fever-related illness on daily life.

I found that these diseases affected Laotian people both physically and mentally, including impacting on their daily life. The perceived impact of fever-related illness on daily life can be classified in three categories: 1) *shao wieg* (stop working) or *our jeb rue look jeb ka thing shao berng ngaeng* (stop working when either myself or my daughter falls ill); 2) *bang tia bor chai ka bor thong shao wieg* (sometimes, males have no need to stop working); and 3) *dek noi bor pai honghien* (children stop going to school).

8.3 What are the treatment-seeking behaviours in case of fever-related illness?

Laotian people choose first treatment or home remedies, such as applying herbs, going to see a traditional healer, buying fever relief medicine to take at home, etc. Nsungwa-Sabiiti and collaborators (Nsungwa-Sabiiti, Ka¨llander et al. 2004) in Uganda suggested that one-third of patients with infectious respiratory diseases would first opt to use home remedies. But the research by Robert-Davis (Davis-Roberts 1981) showed that people from Zaire and Uganda liked to combine home remedies with Western medicine. In addition, Hardon suggested that people in Phillippines had a stock of medicines for their next illness which came from a local (informal) source of drugs. They are also beliefs that more expensive drugs are also more powerful. Therapy choice in severe and chronic illness cases is more complex (Hardon 1991). In this study, I have found the same. All key-informants first choose self-care treatments by using herbs, having elderly blowing on the head, Buddhist praying, and also modern medicine. They are also having a stock of medicines for next illness especially for children illness. Laotian people have traditional cultures which maintain family members close to each other, so providing that more than three generations are living together. Children are raised by senior people and are kind, respectful and well behaved. Therefore, to have grandparents blowing on children head to reduce fever is a way of treatment for fever-related illness, which is difficult to see in modern society.

Laotion have choices of various treatments seeking health-care. Their thirteen seeking treatment patterns were showed in Diagram 3. It can be seen that Laotian first chooses self-care treatments and, then seek health-care services, either traditional or Western medicine. “What Laotian people do when they perceive that the illness is getting more severe or worse?’ The perception of the severity of the disease would lead them to select health-care services or not? How and where? I found that sometimes illness severity did not affect seeking-treatment behaviours. Actually, Laotian perceptions of disease severity do not depend necessarily upon signs or symptoms of illness which are being more severe. Sometimes, however, people hear that there have been patients in the community with the same symptom and that they died. Thus, they change their treatment-seeking behaviors.

8.4 What are the Laotian perceptions of risk and models of occurrence of fever-related illness?

On this aspect, there have been some socio-anthropology researches, for example, that of Hussain and collaborators (1997) who studied Pakistani perceptions on pneumonia in children (Hussain, Lobo et al. 1997); that of Hildenwall and collaborators on high fever and dyspnoea in Uganda people (Hildenwall, Rutebemberwa et al. 2007); and that of Hardon who studied perceptions on fever in the Philippines (Hardon 1991) and, finally, the study by Brun and Schumacher on fever and infectious respiratory diseases among Thai people in the North of Thailand (Brun and Schumacher 1994). None of them indicate a conception of infection or introduction of particles as causes of illness. At first, '*Tidpad* or *payat tidpad*' can be considered as equivalent to the term 'communicable disease' in English. It must be said, however, that the underlying conception of '*tidpad* or *payat tidpad*' is different from that of Western medicine. For example, Laotian people believe that they get '*khaj yung*-mosquitoes bite fever' or '*khaj liad ook*-dengue fever', which they consider as communicable diseases, by drinking or taking bath in water with mosquitos larvae. According to Western medicine, dengue fever occurs because of the mosquitos' bites and the introduction of the dengue virus into the patient's body.

In this study, I have shown that Laotian people have perceptions on risk and transmissibility of disease, such as they may get illness from the environment or from other causes like mosquito larvae, plant and grass poisons, etc. But they did not mention germs as causes of illness. However, no key informant clearly indicated the causes of fever-related illness, except *Tao Nan* who said that he could get influenza from foreign tourists.

As said above, Laotian people perceive a risk of infection from others and degrees of severity of diseases. But they did not mentioned about germs as cause of the disease. On this issue, this research is in accordance and supports the previous ones. Furthermore, participant observation has not permitted to see disease prevention behaviours in daily life and during illness (such as covering mouth and nose when sneezing or hand washing).

8.5 What are the contexts related to or which influence the choices of health-care services across the Lao-Thai Border?

I understand by contexts the perceptions on meaning and severity of the illness, demographical data, monthly family income and their perceptions on health and illness. From my field data, I found that steps and procedures to choose health-care services to relief fever-related illness are not in accordance with and do not support the results of previous socio-anthropological researches, such as that of Brainard and collaborators (Brun and Schumacher 1994), of Davis-Roberts (Davis-Roberts 1981) and of others (Westermeyer 1988; Tomecko 2009). According to these studies, when people is falling ill, they first seek treatment at home or home remedies, such as, herbs or traditional and modern medicines, sometimes together with spiritual or faith rituals. When primary treatment fails, they and their family will seek other traditional alternatives, such as, the recourse to a traditional healer. And, finally, when secondary treatment fails and the patient does not recover, they will choose modern or Western medicine. In this study, it appears that when Laotian patients perceive that symptoms of fever-related illness did not relieve or when they are not cured, their later choice is Western medicine, such as, going to a private clinic or a hospital in their country, including crossing the border to Thailand without seek other traditional alternatives.

See, for instance, the case of *Tao Tham* whose family income is zero point eight million Gibbs a month which is not sufficient to cover the family expenses. When in need he borrows money from parents or relatives. He has no relative in Thailand but he had been using health-care services there because he trusts the quality of the health-care system in Thailand. According to Thomas' study, if patients and their families have respect for any health-care services, they would seek treatment when needed or when fall ill (Thomas 1992). *Tao Nun* knows that service fees in Nongkhai provincial hospital may be more expensive than in his homeland. But he also knows that in case he is unable to afford health-care expenses, the hospital in Thailand would eventually offer welfare. My field data sound different from the results of other researches on this aspect. For example, one research suggested that only people with medium or high income are crossing the border for seeking health-care services (Dunn and Dyck 2000).

In some cases, the perceived degree of illness severity may affect treatment-seeking behaviors and selection of health-care services. Environmental context also affects the selection of health-care services. For example, some people fall ill when patients presenting with the same symptoms die in the community. Therefore, they seek other therapeutic alternatives. See, for example, the case of *Tao Kham*, whose monthly income is just one million Gibbs (four thousand Thai Bahts), which is not sufficient for the family expenses. His family prefers to cross the border for seeking health-care services in Thailand, even if first they could pass in the Laotian state hospital. But they did not visit the Laotian state hospital. Because, *Tao Kham* parents, they are trust Thailand health-care services. They believe that it could be better for their single child and *Tao Kham* is becoming their hope of future life.

As presented above, this study showed that Laotians perceive, define, believe, experience, including treatment-seeking behaviors, variously fever-related illness. This variety of perceptions, experiences and behaviors depend on environmental contexts is both in accordance with and contrast with the results of previous socio-anthropological studies as it will be shown in the concluding bullet.

8.6 Conclusion

For Laotian people, '*khaj*' or fever is only a symptom as seen in the following terms '*king hone*, *toh hone*, *toh hone hone hume hume*, *thua king khaj*, *hone hone nao nao*. The terms '*king*, *toh*, or *thua king*' focuse on '*king*' or body is getting warm or hot. In this study, I found that Laotian are more concerned about to be healthy or '*yoo dee mee haeng*'. '*Yoo dee mee haeng*' is focused on the whole body, including spirits and souls. '*Yoo dee mee haeng*' is a state in which one can sleep, eat and drink, and conduct one's daily life normally. Healthy persons are able to work. So, they can keep their daily life and belongings and, also, their '*yoo dee mee haeng*' or health. When they fall ill, they will try to recover as soon as possible.

Laotian people use '*jab king*' or 'touching at body parts' for diagnosing when they fall ill because of fever-related illness. Thus, Laotian people diagnose a symptom after touching body parts: '*king hone*' or ''*toh hone*' or 'body is getting hot'. In this sense, the meaning of '*king hone*' is not very different from that of 'fever' as

defined by Western medicine. However, Laotian view of fever-related illness is different from the Western medical view, with regard to the terminology, method of investigation, measure equipment and perceived degree of severity of illness. Moreover, Laotian people have other terms for 'fever' such as, '*jeb*' or '*puiy*', for example. However, these two terms are used to call symptoms other than '*khaj*' or 'fever', such as, headache, sore throat, muscle pain, difficulty to breathe, etc. Sometimes, they may or may not use the term '*khaj*' such in the term '*tanten*-fever with red rash and flash pain' and '*sang*-fever with malnutrition in children'. However, the term '*khaj*' is not restricted to the meaning of 'fever'; it can also indicate an illness without 'fever' for example, '*khaj puad klam*' or tiredness after hard work.

Regarding the causation of fever-related illness, Laotian believe that fever-related illness, occur because of '*sia kwaun* or *kwuan sia*' or soul loss. Other perceived causes of fever-related illness are seasonal change, especially at the end of the raining season and the beginning of winter, hard work, growing condition in children, normal condition in a no-pregnant woman, or even intrusion of foreign particles into the body, what they call '*tidpad*' but underlying conception of '*tidpad* or *payat tidpad*' is different from that of Western medicine. Another possible cause of illness is wrong deed to the ancestors' spirits and nature spirits. Otherwise, Laotian did not mention sorcery attack, food poisoning, or body imbalance as possible causes of fever-related illness as it was mentioned in previous ethnographies.

In this study, I have compiled a total of thirteen Laotian terms related to types of fever-related illness with fever or *khaj* as core symptom such as, *khaj*-fever, *khaj ai*-fever with cough, *khaj mee kee mook*- fever with running nose, *khaj kor kaeng*-fever with stiff neck, *khaj yung*-mosquitoes fever, *khaj liad oog*-dengue fever, etc. Most of these terms refer to symptoms of fever-related illness. Only one indicates the cause of the disease: '*khaj yung* or mosquitoes fever'. Moreover, in biomedicine, '*khaj yung*', '*khaj liad ook* or fever with blood vomit and blood feces' and '*khaj pa* or forest fever' have the same vector (mosquitoes, but different in mosquitoes species). Laotian people believe that they can get these diseases from different places or causes. '*Khaj yung*', they are believed that they can get this disease from taking water or taking shower with water where there are mosquitoes. '*Khaj liad ook* or fever with blood vomit and blood feces' they believe they can get this disease because of

wrongdoing to the pond spirit. And '*khaj pa* or forest fever', they believe that they fall ill because they get something from the forest or made some wrongdoing to the forest spirit.

I assumed that Laotian people are more concerned about illness symptoms than about illness causation because I found that the terms used for diseases do not indicate the cause of the disease. They perceived the risk of contagion from other people. Moreover, the perceived degree of severity is an indication of the contagion of the disease. For Laotian people, diseases can be communicable and not communicable. They probably learnt that contagion can occur from nature, environment, animals, and human contacts in family, classroom, community, including from tourists for diseases such as cold, cough, bird flu, influenza, etc. However, they don't perceived these diseases as contagious, but that they are incurring naturally. In addition, they perceive three degrees of severity of fever-related illness, i.e. normal (sometimes the patient recovers without healing), takes time for healing (needs both home remedies and seeking health-care services), and severe (needs to seek health-care services immediately, if not, the disease may worsen and the patient may die). In this study, I found that Laotian people have different means of healing, such as, taking fever relief medicines, cooling body temperature by tepid sponge with wet cloth and 'blowing' on the head with Buddhist praying by an elderly in the family or community; sometimes, also, taking traditional herbs and/or Western medicines. I suggested that the method for healing fever-related illness by 'elderly's blowing' is because, traditionally, three generations are living together, taking care and helping each other. Children are raised by their seniors so as to encourage kindness, helpfulness, and respect among them. So, having the elder to blow on the head is a cooperative means of illness treatment, which is hard to find in the modern society and in the Western style. Beside this, I did not found any disease preventive behaviors in the daily life and also during fever-related illness (such as, nature of the food eaten in case of illness, prescribed foods for children according to their age or for pregnant women, rituals for children, rituals for cover the body of the person, prescribed behaviours in the forest in order not to insult forest spirits, etc.) However, I found they are paying respect to the Lord Buddha, the ancestors, Gods and spirits to

be healthy and lucky during Buddhist festivals (i.e., *Buddist Lent*, *Magha Puja* day, *Seasonal festival*).

Because Laotians believe that fever-related illness can affect themselves and their families, physically, mentally and in their daily life, they have to seek health-care services to cure or relieve their illness. In this study, I have found that in case of failure of home treatment, patients prefer to seek the best health-care services for themselves or for family members. Especially, when the patient is the single child of the family and/or when some persons of the community presenting with the same illness symptoms have died. They even chose to cross the border for seeking health-care services in Thailand because they are more confident about their quality and efficiency. Moreover, demographical and economical factors, such as, monthly income, level of education, distance to the health-care services, cost of health-care services, having or having not relative in Thailand or Thai relatives, etc. little affect their choice.

8.7 Problems and Limitations

8.7.1 *Language problem and limitation*.

Laotian language is somewhat similar to the language of the Northeast province of Thailand where I grew up during primary school and where, twenty years ago, I worked in the hospital after having my first degree in nursing. However, many words have different meanings, and it takes time to communicate and understand. For example, the Thai term '*sue kruang*' where '*kruang*' means machinery to help working such as, machines, electric appliances, etc. But in the Laotian language, it means a 'commodity to consume at home' such as food seasoning, soap, shampoo, toothpaste, etc. And some terms for calling diseases or causes such as '*payat*' for disease (or '*rok*' in Thai), '*tidpad*' for contagion (or '*tidtor*' or '*tidchiarok*' in Thai), '*non nam*' for mosquito larvae (or '*look nam* or *look nam yung'* in Thai), for example.

8.7.2 **Transport limitation**.

The three communities are located far from each other, and travelling in Lao PDR is a little inconvenient due to the vehicle used and roads are not smooth,

especially during the raining season, so a lot of time was taken to reach each community.

8.7.3 As the political systems

In the two countries are different, meeting people requires being careful. Local people assistance or guidance and sometimes traveling together were thus necessary. Moreover, to work in a community requires the acceptation of the local authority.

8.8 Implications

8.8.1 To conduct a qualitative research among people in a given area requires a previous good knowledge and understanding of local traditional, cultural and language issues.

8.8.2 Traveling into an area with one's family or with children as tourists can help to facilitate the access to community members. However, it is necessary to be careful of pets, people and infectious diseases or outbreak of diseases such as dengue, mosquito bites, etc.

8.8.3 Applying the ethno-epidemiology perspective for the study of local perceptions on health and illness may help the work of health-care and non health-care workers. Ethno-epidemiology may lead to right healing or right treatment and can contribute to the prevention of diseases, especially severe contagious diseases.

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Web site

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APPENDICES

APPENDIX A

Primary information questionnaire

Research "An ethno-epidemiology study of lay beliefs and experiences of fever-related illness among Laotian patients living near the Lao-Thai border"

This research aims to understand beliefs and experiences on illness of fever-related illness of local Laotians living in areas near the Lao-Thai border, illness treatment behaviors and health-seeking behaviors, both in their homeland and across the border to Thailand. Answers to question are not right or wrong. Names of participants will be kept confidential. To answer or not answer will not interfere with the possibility of using health-care services whether in private or government services in Thailand, and also will not affect the border crossing into Thailand.

Participant No…….. Date of interview ……../……../……..

Part 1: General Information

1. Age ……. years
2. Sex: ( ) male ( ) female
3. Language used: ( ) Thai ( ) Laotian ( ) others (specify) …….
4. Marital status: ( ) single ( ) married ( ) widow
   ( ) divorced/separated
5. Education: ( ) unschooled ( ) primary school
   ( ) junior secondary school ( ) high secondary school
   ( ) College/university ( ) other (specify) ……..
6. Occupation: ( ) farmer/rice farmer ( ) monthly/daily employee
   ( ) housewife ( ) merchant
   ( ) government officer ( ) no career
   ( ) other (specify) ……
7. Number of family members ……..
8. Monthly family income ……..

9. Sufficiency of income ( ) sufficient ( ) insufficient/in debt
   ( ) insufficient/no debt ( ) sufficient to save
10. Come from which community (name the community) ……
    Distance from Vientiane to your home …… (Kilometer)
    Distance from your home to Nongkhai provincial hospital……(kilometer)
11. Period of time you live or work near Lao-Thai border …… year(s)
12. Having relatives and friends in Thailand
    ( ) No ( ) yes a. specify relationship (brother, sister, etc.) …….
    b. specify his/her/their nationality ……
13. What is (are) reason (s) make you travel to Thailand this time ……..
14. How many time did you take for this travel …….. (Second/hour)

APPENDIX B

Guideline for in-dept interview and participant observation for case study participants

Research "An ethno-epidemiology study of lay beliefs and experiences of fever-related illness among Laotian patients living near the Lao-Thai border"

This research aims to understand beliefs and experiences of illness with fever-related illness of local Laotians living in areas near the Lao-Thai border, illness treatment behaviors and health-seeking behaviors, both in their homeland and across the border to Thailand. Answer to every question is not right or wrong. Names of participants will be kept confidential. To answer or not answer does not interfere with the use of health-care services whether in private or government services in Thailand, and also does not affect border crossing to Thailand.

Participant No……..….. Date of interview ……../……./……..

Part 1: Beliefs, experiences and perceptions of illness and treatment

Question guideline number one to nine, open-end questions for key-informant at OPD of Nongkhai provincial hospital, Thailand.

1. Which symptoms lead you to visit the hospital?
2. Since how long these symptoms have occurred?
3. Did you fall ill with ~~to~~ fever, cough, sore throat and difficulty to breathe during the last three months?
4. Which symptom appears first?
5. In your experience, what could be the cause of this illness?
6. Have you been seeking any treatment before visiting here?
7. What was the result of the treatments?
8. Which reason (s) lead you to seek for treatment in this hospital?
9. How often did you come for treatment in this and other hospital in Thailand?

Part 2: Beliefs, experiences and perceptions of illness and treatment

Question guideline number ten to twenty-four, are open-end questions for key-informant in their community

10. In the past month (this can extend to three to six months before), beside you, is there anybody in your family with fever and cough, sore throat, running nose, chest pain, difficulty to breathe?

11. What is his/her relationship to you (son, daughter, etc.)?

12. How old is (are) he /she (they)?

13. Each year, how often is (are) your family member(s) falling ill because of fever with cough, sore throat, running nose, chest pain, difficult to breathing, and in which month?

14. How is illness affecting your daily life and your family?

15. How do you call, classify or sort this illness, such as severity?

16. What do you think about the risks and danger of this illness?

17. From your experience, where this disease cmes from?

18. When this illness has occured, how did you take care: by yourself; by your family; by what way; do you use traditional herbs and/or modern medicine?

19. Have you applied medicines, herbs, foods, or any things to prevent this illness, and what else?

20. Where have you got these medicines? if bought from somewhere, who suggested you to?

21. Did have you been using traditional medicine; if yes, where: in your community or other communities, or crossing the Lao-Thai border; how far the distance is?

22. Did you use Western treatment, if so, when have you decided to do so? Is it in your community or somewhere else; or crossing the Lao-Thai border; how far is it from your home?

23. In which condition(s) will you decide to cross the border for treatment in Thailand?

24. Which reason(s) make you choose health-care services or these medical provisions?

Part 3: **Participant observation**

1. Daily life activities of the key-informants, for example, having meals, working, animals raising at home, etc.

2. Behaviors related to diseases prevention in daily life and while being ill with acute febrile respiratory diseases (such as covering mouth and nose when sneeze, hand washing, etc.)

3. Using herbs to prevent diseases (such as putting onions in cooking, drinking herbal drinks, bathing herbal-boiled water, etc.)

4. Observing the behaviors when taking care of illness (food should be intake or not while being ill, self care with traditional herbs and/or modern medicine together with various health service, etc.)

5. Otherwise, the researcher is to observe physical environment such as house building, landscape, waste disposal, herbs plantation around home area, etc.)

APPENDIX C
CONSENT FORM IN LAOTIAN

ເອກະສານຊີ້ແຈງຜູ້ເຂົ້າຮ່ວມຄົ້ນຄວ້າ
ກໍລະນີສຶກສາແລະສະມາຊິກໃນຄອບຄົວ, ກໍລະນີສຶກສາ ແລະ ກຸ່ມຜູ້ໃຫ້ຂໍ້ມູນສຳຄັນ

ໃນເອກະສານນີ້ ອາດມີຂໍ້ຄວາມທີ່ທ່ານອ່ານແລ້ວ ຖ້າຍັງບໍ່ເຂົ້າໃຈ ຂໍໃຫ້ສອບຖາມໃຫ້ຊ່ວຍອະທິບາຍ ຈົນກວ່າຈະເຂົ້າໃຈດີ. ທ່ານຈະໄດ້ຮັບເອກະສານນີ້ 1 ສະບັບ ທ່ານສາມາດປຶກສາກັບຍາດຕິພີ່ນ້ອງ ຫຼື ໝູ່ສະໜິດ, ແພດປະຈຳຕົວຂອງທ່ານ ຫຼື ຜູ້ອື່ນໆທີ່ທ່ານຕ້ອງການປຶກສາ ເພື່ອໃນການຕັດສິນໃຈ ເຂົ້າຮ່ວມການຄົ້ນຄວ້າ.

ຊື່ໂຄງການ: ຄວາມເຊື່ອ ແລະ ປະສົບການ ການເຈັບປ່ວຍດ້ວຍໂລກຕິດເຊື້ອລະບົບທາງເດີນຫາຍໃຈ ໃນຜູ້ປ່ວຍຊາວລາວ ທີ່ພັກອາໃສຢູ່ໃນ້ຊາຍແດນລາວ-ໄທ ໂດຍໃຊ້ວິທີ ລະບາດວິທະຍາຕິດພັນ.

ຊື່ນັກຄົ້ນຄວ້າ: ນາງ ພາທຸຣັດ ຄົງເມືອງໄທສຸວັນ

ບ່ອນປະຈຳການ ກຸ່ມງານພັດທະນາວິຊາການ ສະນັກໂລກຕິດຕໍ່ເຂດໃໝ່ ຫ້ອງ 5503, ອາຄານ 5, ຊັ້ນ 5, ກົມຄວບຄຸມໂລກ, ກະຊວງສາທາລະນະສຸກ ຕຳບົນລາດຂວັນ, ຈັງຫວັດນົນທະບຸຣີ.

ໝາຍ ເລກໂທລະສັບທີ່ຕິດຕໍ່ໄດ້ ທັງໃນ ແລະ ນອກເວລາລາດສະການ: 085-188-2644

ໂຄງການຄົ້ນຄວ້ານີ້ສ້າງຂຶ້ນເພື່ອ:

ສຶກສາ ແລະ ທຳຄວາມເຂົ້າໃຈ ຄວາມເຊື່ອ ແລະ ປະສົບການກ່ຽວກັບການເຈັບປ່ວຍ ດ້ວຍອາການໄອ້ ແລະ ໂຣກລະບົບທາງເດີນຫາຍໃຈ ທີ່ມີອາການໄອ້ຮຸນແຮງ ຫຼື ໂຣກຕິດເຊື້ອລະບົບ ທາງເດີນຫາຍໃຈ ລວມທັງຮູບແບບ ຂອງການໃຊ້ບໍລິການທາງດ້ານການແພດໃນປະເທດຕົນເອງ ແລະ ຂ້າມຊາຍແດນມາໃຊ້ບໍລິການ ການແພດໃນປະເທດໄທ.

ປະໂຫຍດທີ່ຄາດວ່າຈະໄດ້ຮັບ ຄື: ການສຶກສາຄົ້ນຄວ້າຄັ້ງນີ້ ແມ່ນເປັນປະໂຫຍດໃນການສ້າງຄວາມຮູ້ ແລະ ຄວາມເຂົ້າໃຈກ່ຽວກັບຄວາມເຊື່ອ ປະສົບການຄວາມເຈັບປ່ວຍ ດ້ວຍອາການໄອ້ ແລະ ໂຣກຕິດເຊື້ອທາງ ເດີນຫາຍໃຈຮຸນແຮງ ຂອງຄົນລາວ ທີ່ດຳລົງຊີວິດຢູ່ ໃນ້ຊາຍແດນລາວ-ໄທ ລວມທັງການເລືອກໃຊ້ ວິທີການ ດູແລຮັກສາ ເມື່ອເຈັບເປັນ ທັງຢູ່ພາຍໃນ ແລະ ຂ້າມຊາຍແດນໄປຝັ່ງໄທ.

ປະໂຫຍດທີ່ມີຜູ້ເຂົ້າຮ່ວມການຄົ້ນຄວ້າເປັນລາຍບຸກຄົນ ບໍ່ປາກົດເດັ່ນຊັດ ແຕ່ປະໂຫຍດໂດຍລວມ ຄືພົບການຄົ້ນຄວ້າ ອາດນຳໄປສູ່ ການຕຽມຄວາມພ້ອມ ແລະ ການຈັດການ ການບໍລິການອ້ານຊາຍແດນຂອງ ລັດຖະບານໄທ ໃຫ້ສອດຄ່ອງກັບການໃຊ້ການບໍລິການສຸຂະພາບທີ່ຜ່ານມາ ແລະ ໃນກໍລະນີທີ່ມີການລະບາດ ຂອງໂລກຕິດ ເຊື້ອອື່ນໆ ທີ່ມີໄອ້ເປັນອາການສະແດງສຳຄັນ ຫາກມີຂໍ້ມູນເພີ່ມເຕີມໃດທີ່ເປັນປະໂຫຍດ ແລະ/ຫຼື ໂທດທີ່ກ່ຽວຂ້ອງກັບການຄົ້ນຄວ້ານີ້ ຜູ້ຄົ້ນຄວ້າຈະແຈ້ງໃຫ້ຮັບຊາບໂດຍໄວໂດຍບໍ່ປິດບັງຫຍັງ.

ທ່ານໃດທີ່ໄດ້ຮັບເຊີນໃຫ້ ເຂົ້າຮ່ວມການຄົ້ນຄວ້ານີ້ ເພາະ ທ່ານ ເປັນຜູ້ທີ່ມີປະສົບການ ການເຈັບເປັນ ດ້ວຍ ໄອ້, ໄອເຈັບຄໍ, ຫັນໃຈຝີດ ເລີ່ມນີ້ເປັນຕົ້ນ ລວມທັງຜູ້ທີ່ຮູ້ຈັກ ແລະ ໃກ້ຊິດກັບຜູ້ປ່ວຍ ແລະ ເປັນຜູ້ມີປະສົບການ ໃນການດູແລ ຮັກສາການເຈັບເປັນ ດ້ວຍອາການເລີ່ມນີ້ ເຊິ່ງທ່ານສາມາດໃຫ້ຂໍ້ມູນສຳຄັນທີ່ຈະເປັນປະ ໂຫຍດ ຢ່າງຫຼວງຫຼາຍຕໍ່ການຄົ້ນຄວ້າ.

ຜູ້ທີ່ຈະເຂົ້າຮ່ວມການຄົ້ນຄວ້ານີ້ ແບ່ງເປັນ ກໍລະນີສຶກສາ 10-20 ຄົນ, ສາມາຊິກໃນຄອບຄົວປະມານ 10-20 ຄົນ ແລະ ບຸກຄົນອື່ນໆໃນຊຸມຊົນຂອງທ່ານ ເຊັ່ນ: ແພດຝັ່ນບ້ານ ປະມານ 6-10 ຄົນ ຕໍ່ຊຸມຊົນ (ລວມ 40-60 ຄົນ) ໄລຍະເວລາເຂົ້າການຄົ້ນຄວ້າ ແມ່ນປະມານ 7-8 ເດືອນ. ການສຶກສາຄົ້ນຄວ້າຄັ້ງນີ້ແມ່ນບໍ່ມີຄ່າຕອບແທນ ແລະ ບໍ່ມີຄ່າໃຊ້ຈ່າຍ ທີ່ຜູ້ເຂົ້າຮ່ວມຄົ້ນຄວ້າຈະຕ້ອງຮັບຜິດຊອບເອງ.

ຖ້າຫາກທ່ານຕັດສິນໃຈ ເຂົ້າຮ່ວມການຄົ້ນຄວ້ານີ້ແລ້ວ ຈະມີຂັ້ນຕອນຂັ້ນຕອນປະຕິບັດດັ່ງຕໍ່ໄປນີ້: ການ ສອບຖາມຂໍ້ມູນ ແລະ ສັງສັງເກດການ ໃນຊຸມຊົນຂອງທ່ານ ປະມານ 1-2 ຄັ້ງ ຫຼື ຫຼາຍກວ່ານັ້ນ, ຂຶ້ນກັບຄວາມ

ຄົບຖ້ວນຂອງຂໍ້ມູນ ເຊິ່ງ ການສອບຖາມແຕ່ລະຄັ້ງ ໃຊ້ເວລາ ໃຊ້ເວລາປະມານ 1-2 ຊົ່ວໂມງ (ໂດຍບໍ່ເກີນ 90 ນາທີ) ໂດຍຈະສອບຖາມ ຢູ່ທີ່ບ້ານ ຫຼື ສະຖານທີ່ ທີ່ທ່ານສະດວກໃຫ້ຂໍ້ມູນ ຂໍ້ມທີ່ຈະສອບຖາມ ກ່ຽວຄວາມເຊື່ອ ແລະ ປະສົບການກ່ຽວກັບ ການດູແລຮັກສາ ການເຈັບເປັນ ດ້ວຍອາການ ໄຂ້, ໄອ, ເຈັບຄໍ, ຫັນໃຈຝືດ ເປັນຕົ້ນ ດ້ວຍວິທີປະຕິບັດຕ່າງໆ ການໃຫ້ຢາ, ດ້ວຍຢາພື້ນເມືອງ ຫຼື ຢາສະໝຸນໄພ ແລະ ຢາສະໄໝໃໝ່ ລວມທັງ ການນຳໃຊ້ ບໍລິການທາງການແພດ ຢູ່ພາຍໃນປະເທດ ແລະ ຂ້າມຊາຍແດນ ມາໃຊ້ບໍລິການຢູ່ຝັ່ງໄທ. ການສອບຖາມຈະ ໃຊ້ໂຄງຮ່າງຄຳຖາມ, ມີການຈົດບັນທຶກຂໍ້ມູນ ຫຼື ອາດມີການບັນທຶກສຽງ ຖ້າທານອານຸຍາດ.

ຄວາມສ່ຽງທີ່ອາດເກີດຂື້ນ ເມື່ອເຂົ້າຮ່ວມການວິໃຈ ຄື ທ່ານ ອາດຈະຮູ້ສຶກອຶອັດ, ບໍ່ສະບາຍໃຈ, ເສຍເວລາ, ຂຽດ ຫຼື ຮູ້ສຶກອາຍກັບບາງຄຳຖາມ ແຕ່ທ່ານມີສິດ ທີ່ຈະບໍ່ຕອບຄຳຖາມເລົ່ານັ້ນໄດ້ ແລະ ທ່ານມີສິດ ຂໍຖອນຕົວ ອອກຈາກ ໂຄງການຄົ້ນຄວ້າເວລາໃດກໍ່ໄດ້ ໂດຍບໍ່ຈຳເປັນຕ້ອງແຈ້ງລ່ວງໜ້າ ແລະ ການເຂົ້າຮ່ວມ ຫຼື ບໍ່ເຂົ້າຮ່ວມ ຫຼື ການ ຖອນຕົວອອກຈາກໂຄງການ ແມ່ນບໍ່ມີຜົນໃດໆ ຕໍ່ການເດີນທາງຂ້າມໄປ-ມາລະຫວ່າງປະເທດ ລາວ-ໄທ ລວມທັງການເຂົ້າມາຮັບການຮັກສາ ຢູ່ໃນສະຖານທີ່ບໍລິການ ລວມທັງພາກລັດ ແລະ ເອກະຊົນ ຂອງປະເທດໄທ ລວມທັງ ຕໍ່ຕົວແທນ ແລະ ສະມາຊິກຄອບຄົວຂອງທ່ານ ເຊິ່ງເປັນກະທົບຈາກການເຂົ້າຮ່ວມການຄົ້ນຄວ້າຄັ້ງນີ້ ແຕ່ຫາກມີຜົນກະທົບທີ່ເກີດ ຈາກການເຂົ້າຮ່ວມ ການຄົ້ນຄວ້າຫຼື ຫາກທ່ານມີຂໍ້ຂ້ອງໃຈ ທີ່ຕ້ອງການສອບຖາມ ກ່ຽວກັບການຄົ້ນຄວ້າ ທ່ານສາມາດຕິດຕໍ່ ນາງ ພາທຸຣັດ ຄົງເມືອງ ໄທສຸວັນ ໝາຍເລກໂທລະສັບ 085-188-2644 ໄດ້ຕະຫຼອດເວລາ.

ສ່ວນຂໍ້ມູນສ່ວນຕົວ ຂອງຜູ້ເຂົ້າຮ່ວມການຄົ້ນຄວ້າ ຈະໄດ້ເກັບຮັກສາໄວ້ເປັນຢ່າງດີ ໂດຍຈະບໍ່ໄດ້ເປີດເຜີຍຕໍ່ ສາທາລະນະ ແຕ່ພວກເຮົາຈະລາຍງານຜົນຂອງການຄົ້ນຄວ້າ ເປັນຂໍ້ມູນລວມ. ທ່ານສາມາດກວດສອບຂໍ້ມູນສ່ວນຕົວ ເປັນລາຍບຸກຄົນ ຫຼື ເປັນກຸ່ມໄດ້ ເຊັ່ນ ສະຖາບັນ ຫຼື ອົງການຂອງລັດທີ່ມີໜ້າທີ່ກວດສອບ, ຄະນະກຳມະການ ຈະລິຍະທຳເປັນຕົ້ນ. ຜູ້ຄົ້ນຄວ້າ ຈະທຳລາຍຂໍ້ມູນ ທີ່ໄດ້ບັນທຶກໄວ້ ໂດຍການລຶບອອກຈາກແຟ້ມຂໍ້ມູນ ຫຼື ເຜົາທຳລາຍ ບັນທຶກທີ່ເປັນລາຍລັກອັກສອນທັງ ໝົດຫຼັງຈາກສິ້ນສຸດໂຄງການສຶກສາຄົ້ນຄວ້ານີ້.

ໂຄງການສຶກສາຄົ້ນຄວ້ານີ້ ແມ່ນໄດ້ຮັບການຮັບຮອງຈາກ ຄະນະກຳມະການ ຈະລິຍະທຳ ການສຶກສາ ຄົ້ນຄວ້າໃນຄົນ ຂອງມະຫາວິທະຍາໄລ ມະຫິດົນ ເຊິ່ງມີສຳນັງານຢູ່ທີ່ ສຳນັກງານ ອະທິການ ມະຫາວິທະຍາໄລມະຫິດົນ ຖະໜົນພຸດທະມົນທົນ ສາຍ 4, ຕຳບົນສາລະຍາ, ອຳເພີພຸດຖະມົນທົນ, ຈັງຫວັດນະຄອນປະຖົມ 73170 ໝາຍເລກໂທລະສັບ 028496223-5 ໂທລະສານ 028496223 ຫາກທ່ານໄດ້ການປະຕິບັດ ບໍ່ຕົງຕາມທີ່ໄດ້ ລະບຸໄວ້ຂ້າງເທິງນັ້ນ ທ່ານສາມາດຕິດຕໍ່ກັບປະທານຄະນະ ກຳມະການ ຫຼື ຜູ້ແທນ ໄດ້ຕາມສະຖານທີ່ ແລະ ໝາຍເລກໂທລະສັບຂ້າງເທິງນັ້ນ.

ຂ້າພະເຈົ້າໄດ້ອ່ານລາຍລະອຽດ ໃນເອກະສານນີ້ຄົບຖ້ວນແລ້ວ

ລົງຊື່ .... ຜູ້ເຂົ້າຮ່ວມຄົ້ນຄວ້າ/ຜູ້ແທນທີ່ຖືກຕ້ອງ

ວັນທີ ....

ໃນກໍລະນີຜູ້ເຂົ້າຮ່ວມການຄົ້ນຄວ້າ ບໍ່ສາມາດອ່ານໜັງສືໄດ້ ຜູ້ທີ່ອ່ານຂໍ້ຄວາມທັງໝົດແທນ ຜູ້ເຂົ້າຮ່ວມການ ຄົ້ນຄວ້າຄື .... ຈຶ່ງໄດ້ລົງລາຍເຊັນ ແລະ ຈຶ່ງໄວ້ເປັນພະຍານ

ລົງລາຍຊື່ ..../ພະຍານ

(...)

ວັນທີ ....

APPENDIX D
CONSENT FORM IN THAI (PAGE 1)

เอกสารชี้แจงผู้เข้าร่วมการวิจัย(สำหรับกลุ่มกรณีศึกษา)

(Participant Information Sheet)

ในเอกสารนี้อาจมีข้อความที่ท่านอ่านแล้วยังไม่เข้าใจ โปรดสอบถามหัวหน้าโครงการวิจัย หรือผู้แทนให้ช่วยอธิบายจนกว่าจะเข้าใจดี ท่านจะได้รับเอกสารนี้ 1 ฉบับ นำกลับไปอ่านที่บ้านเพื่อปรึกษาหารือกับญาติพี่น้อง เพื่อนสนิทของท่านหรือผู้อื่นที่ท่านต้องการปรึกษา เพื่อช่วยในการตัดสินใจเข้าร่วมการวิจัย

ชื่อโครงการ: ความเชื่อและประสบการณ์การเจ็บป่วยด้วยโรคติดเชื้อระบบทางเดินลมหายใจในผู้ป่วยชาวลาวที่อาศัยอยู่ใกล้ชายแดนลาว-ไทยโดยใช้วิธีระบาดวิทยาชาติพันธุ์

ชื่อผู้วิจัย: นางพาหุรัตน์ คงเมือง ทัยสุวรรณ์

สถานที่วิจัย สถานที่ทำงาน และหมายเลขโทรศัพท์ที่ติดต่อได้ทั้งในและนอกเวลาราชการ

กลุ่มงานพัฒนาวิชาการ สำนักงานโรคติดต่ออุบัติใหม่ ห้อง 5503 อาคาร 5 ชั้น 5 กรมควบคุมโรค
กระทรวงสาธารณสุข ตำบลตลาดขวัญ อำเภอเมือง จังหวัดนนทบุรี
โทรศัพท์: +662 590 3167, +6685 188 2644

โครงการวิจัยนี้ทำขึ้นเพื่อ ศึกษาและทำความเข้าใจ ความเชื่อ ความคิดเห็นและประสบการณ์การเจ็บป่วยด้วยไข้ ไอ เจ็บคอ และหายใจลำบาก รวมทั้งการดูแลรักษา การเลือกใช้บริการทางการแพทย์ในประเทศ สปป.ลาว และในประเทศไทยของประชาชนชาวลาวที่อาศัยใกล้ชายแดนลาว-ไทย ซึ่งจะมีประโยชน์ที่คาดว่าจะได้รับคือ ทำให้สร้างความรู้ ความเข้าใจ และนำไปสู่การเตรียมความพร้อมและการจัดบริการสุขภาพข้ามพรมแดนของรัฐไทยให้เกิดประโยชน์สำหรับประชาชนของทั้งสองประเทศทั้งในสถานการณ์ปกติ และในกรณีที่มีการระบาดของโรคติดเชื้ออื่นๆ ที่มีไข้เป็นอาการแสดงสำคัญ

ท่านได้รับเชิญให้เข้าร่วมการวิจัยนี้เพราะ ท่านเป็นชาวลาว และเป็นผู้ที่มีประสบการณ์การเจ็บป่วยด้วยไข้ ไอ เจ็บคอ หายใจลำบากที่มารับการรักษาที่โรงพยาบาลหนองคาย ในช่วงเวลา 1-3 เดือนที่ผ่านมา

จะมีผู้เข้าร่วมการวิจัยนี้ทั้งสิ้นประมาณ 10-20 คน ระยะเวลาที่จะทำวิจัยทั้งสิ้น 7 เดือน

หากท่านตัดสินใจเข้าร่วมการวิจัยแล้ว จะมีขั้นตอนการวิจัยดังต่อไปนี้คือ

ผู้วิจัยจะขอสัมภาษณ์ท่าน และสังเกตการณ์ภายในชุมชนของท่าน โดยจะขอนัดวัน เวลา และสถานที่ที่ท่านสะดวกเพื่อทำการสัมภาษณ์ ซึ่งการสัมภาษณ์จะแบ่งออกเป็น 2 ครั้งคือ

ครั้งที่ 1 ผู้วิจัยจะขอสัมภาษณ์ท่านที่โรงพยาบาลหนองคาย ประกอบด้วยคำถาม จำนวน 8 ข้อ โดยใช้เวลาในการสัมภาษณ์ประมาณ 15-30 นาที

ครั้งที่ 2 ผู้วิจัยจะขอสัมภาษณ์ท่านที่ชุมชนของท่าน ประกอบด้วยคำถาม จำนวน 15 ข้อ โดยใช้เวลาในการสัมภาษณ์ประมาณ 1-1.30 ชั่วโมง

การสังเกตการณ์แบบมีส่วนร่วม ผู้วิจัยจะขอสังเกตท่านแบบมีส่วนร่วม และร่วมทำกิจกรรมต่างๆ ประมาณ 1-2 ครั้งหรือมากกว่าขึ้นอยู่กับความครบถ้วนของข้อมูล เช่น การดำเนินชีวิตประจำวัน พฤติกรรมการป้องกันโรคในการดำเนินชีวิต การสังเกตสิ่งแวดล้อม การปลูกสมุนไพร การประกอบพิธีกรรมตามความเชื่อ

ในระหว่างการสัมภาษณ์ ผู้วิจัยขออนุญาตบันทึกเสียง และถ่ายภาพบุคคลหรือสถานที่ในกรณีที่ท่านอนุญาต การถ่ายภาพบุคคลจะถ่ายภาพด้านหลังหรือไม่ให้เห็นใบหน้า การถ่ายภาพสถานที่จะไม่ถ่ายภาพที่สามารถบ่งชี้เลขที่ของที่อยู่อาศัย ข้อมูลที่ได้จากการสัมภาษณ์ ผู้วิจัยจะดำเนินการทำลายข้อมูลจากเทปบันทึกข้อมูล ตลอดจนข้อมูลอื่นๆ ที่เกี่ยวข้องกับท่านภายหลังเสร็จสิ้นการวิจัย

CONSENT FORM IN THAI (PAGE 2)

ความเสี่ยงที่อาจจะเกิดขึ้นเมื่อเข้าร่วมการวิจัย ท่านอาจรู้สึกอึดอัด หรืออาจรู้สึกไม่สบายใจอยู่บ้างกับบางคำถาม ท่านมีสิทธิ์ที่จะไม่ตอบคำถามเหล่านั้นได้ รวมถึงท่านมีสิทธิ์ถอนตัวออกจากโครงการนี้เมื่อใดก็ได้ โดยไม่ต้องแจ้งให้ทราบล่วงหน้า และการไม่เข้าร่วมวิจัยหรือถอนตัวออกจากโครงการวิจัยนี้ จะไม่มีผลกระทบใดๆ ต่อท่านแต่ประการอย่างใด

หากท่านมีข้อข้องใจที่จะสอบถามเกี่ยวข้องกับการวิจัยหรือการสัมภาษณ์ ท่านสามารถติดต่อไปยังนางพาหุรัตน์ คงเมือง ทัยสุวรรณ์ หมายเลขโทรศัพท์ +662 590 3167, +6685 188 2644 ได้ตลอดเวลา

ข้อมูลส่วนตัวของท่านจะถูกเก็บรักษาไว้ ไม่เปิดเผยต่อสาธารณะเป็นรายบุคคล แต่จะรายงานผลการวิจัยเป็นข้อมูลส่วนรวม ข้อมูลของผู้เข้าร่วมการวิจัยเป็นรายบุคคลอาจมีคณะบุคคลบางกลุ่มเข้ามาตรวจสอบได้ เช่น สถาบัน หรือคณะกรรมการจริยธรรมการวิจัยในคน สาขาสังคมศาสตร์ เป็นต้น

การเข้าร่วมวิจัยนี้ท่านจะไม่ได้รับค่าตอบแทนและไม่เสียค่าใช้จ่ายใดๆ

หากมีข้อมูลเพิ่มเติมทั้งด้านประโยชน์และโทษที่เกี่ยวข้องกับการวิจัยนี้ ผู้วิจัยจะแจ้งให้ทราบโดยรวดเร็วไม่ปิดบัง

ท่านมีสิทธิ์ถอนตัวออกจากโครงการวิจัยเมื่อใดก็ได้ โดยไม่ต้องแจ้งให้ทราบล่วงหน้า และการไม่เข้าร่วมการวิจัยหรือถอนตัวออกจากโครงการวิจัยนี้ จะไม่มีผลกระทบใดๆ ต่อท่านแต่อย่างใด

โครงการวิจัยนี้ได้รับการพิจารณารับรองจากคณะกรรมการจริยธรรมการวิจัยในคน สาขาสังคมศาสตร์ ซึ่งมีสำนักงานอยู่ที่คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล ถนนพุทธมณฑล สาย 4 ตำบลศาลายา อำเภอพุทธมณฑล จังหวัดนครปฐม 73170 หมายเลขโทรศัพท์ 0 2441 9180 โทรสาร 0 2441 9181 หากท่านได้รับการปฏิบัติไม่ตรงตามที่ระบุไว้ ท่านสามารถติดต่อกับประธานคณะกรรมการฯ หรือผู้แทน ได้ตามสถานที่และหมายเลขโทรศัพท์ข้างต้น

ข้าพเจ้าได้อ่านรายละเอียดในเอกสารนี้ครบถ้วนแล้ว

ลงชื่อ.....ผู้เข้าร่วมวิจัย/ผู้แทนโดยชอบธรรม

(.....)

วันที่.....

ในกรณีที่ข้าพเจ้าไม่สามารถอ่าหนังสือได้ผู้ที่อ่านข้อความทั้งหมดแทนข้าพเจ้าคือ.....
จึงได้ลงลายมือชื่อไว้เป็นพยาน

ลงชื่อ.....พยาน

(.....)

วันที่.....

APPENDIX E

EACH KEY INFORMANT'S DETAILS

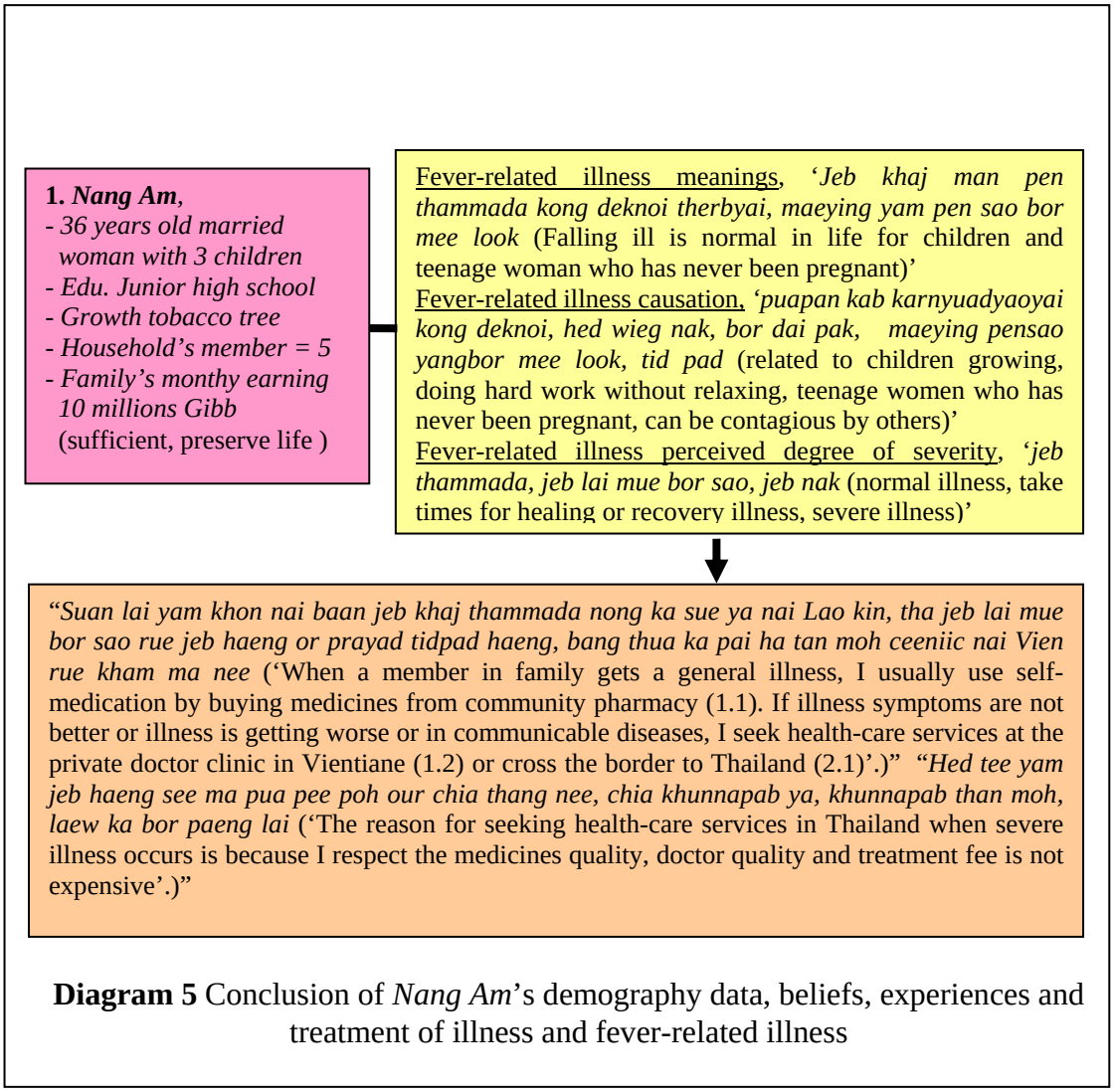

Diagram 5 Conclusion of *Nang Am*'s demography data, beliefs, experiences and treatment of illness and fever-related illness

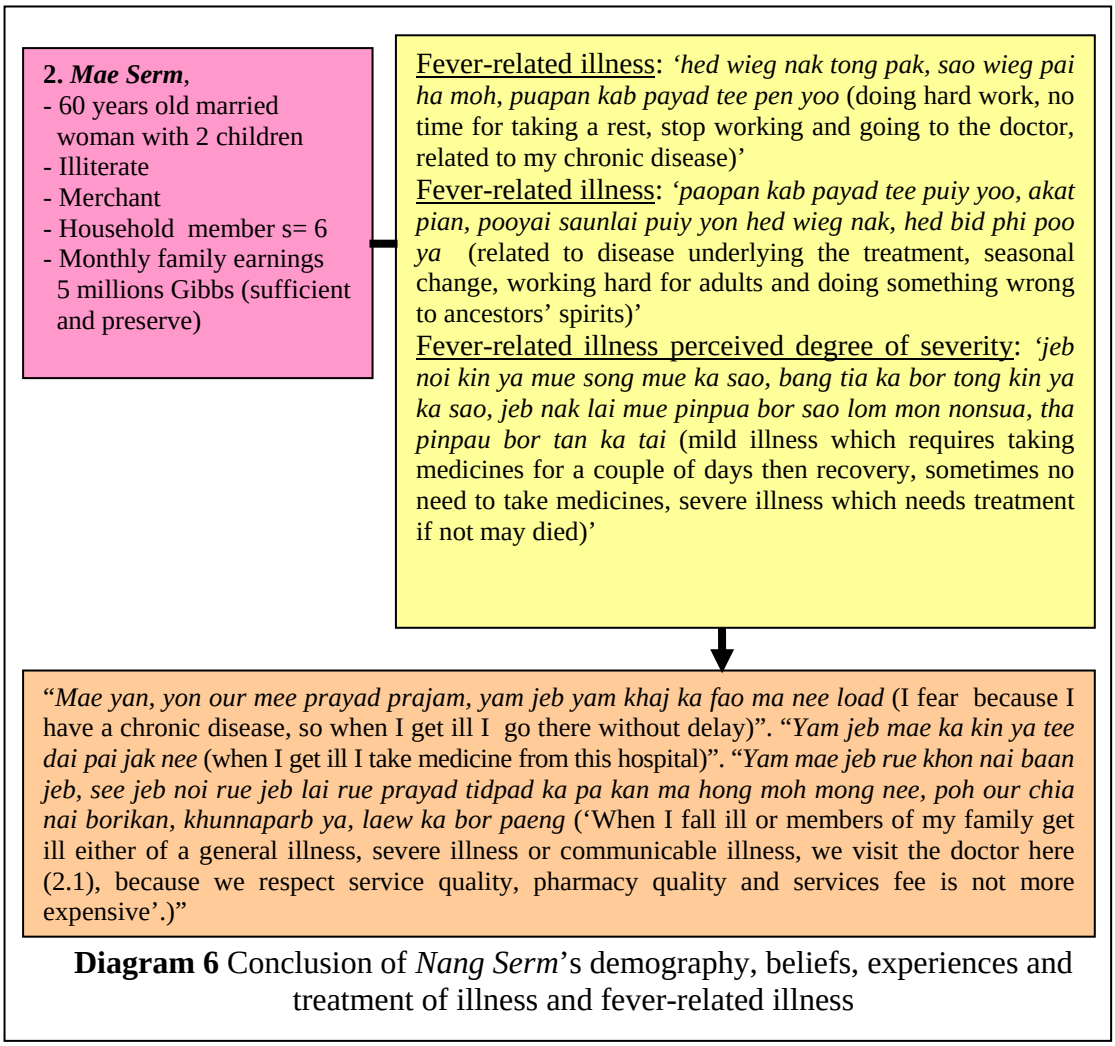

Diagram 6 Conclusion of *Nang Serm*'s demography, beliefs, experiences and treatment of illness and fever-related illness

3. *Mae Nang*,
- 54 years old married woman with 2 children
- Edu. Primary school
- Growth tobacco trees
- Household members = 9
- Monthly family earnings 4 millions Gibb (sufficient and preserve)

Fever-related illness: *'jeb khaj man pen thammada tam wai tam radoo, thueng yam man si kerd man ka tong kerd, yam jeb kwaun ka hai* (falling ill is a normal state of life, season)'
Fever-related illness causation: *'akat plian hed wieg nak, pen kam kao* (seasonal change, doing hard work, last bad *khamma*)'
Fever-related illness perceived degree of severity: *'jeb thammada, jeb lai mue bor sao, jeb nak* (normality, takes time for healing or recovery, severe illness)'

"*Mae jeb jed-pad mue, pai ha than moh yoo suksala bor dee kuen, sue ya jak han ya ma kin ka bor dee kuen, song mue khon pai Nongkhai pai ha than moh nai Vien, look look kab yad pee nong pueksa kan hai yai pai hong moh Nongkhai, tha bor yai kue see bor lia, than moh yoo nee dee lai, hab thon dee, ya ka dee, kiang mue kiang sai ka dee, tia na kue see ma nee eek* (I got ill about seven-eight days ago and I went to the doctor at community health center (1.2) but I was not better. Then I bought medicines for drugstore (1.1) I also felt the same. Then I visited the doctor in Vientiane (1.3), my children, my husband confer with my relatives, then they approved moving me to Nongkhai provincial hospital (2.1). If I didn't moved to Nongkhai provincial hospital I think that I would be dead already. The doctors, pharmacies, instruments and services in Nongkhai provincial hospital are very nice and for next illness I will again seek health-care there)".

Diagram 7 Conclusion of *Nang Nang*'s demography, beliefs, experiences and treatment of illness and fever-related illness

4. *Nang-Suk*,
- 33 years old married woman with 2 children (4 and 2 years old)
- Edu. High school
- Owner cosmetic shop
- Household members = 8
- Monthly family earnings: 4 millions Gibb (sufficient and preserve life)

Fever-related illness meanings: *'jeb khaj man pen thammada kong tae la kon, dek yaiyao, sia kwaun, poo yai hed wieg ngan nak* (falling ill is a normal state of life, growing in children, loss of *kwaun* and hard work)'
Fever-related illness causation: '*deknoi puiy yon plianwai, akat plian, pooyai jeb yon hed wieg ngan nak bor dai pak, pid phi hai phi na* (growing condition in children, seasonal change, hard work in adults without relaxing, did something wrong to fieldspirits)'
Fever-related illness perceived degree of severity: *'jeb thammada, lai mue bor sao, jeb nak* (normality, takes time for healing or recovery, severe illness)'

"*Suan lai yam jeb yam khaj nong sue ya jak han ya, rue bor san ka pai ha ceenic than moh nai Nongkhai, tha jeb lai mue bor sao ka pai ha than moh hong moh luang yai, nong kued wat ha pen prayad tidpad ka kue si pai mong diaw kan, poh nong chia khunnaparb borikan kab khunnaparn kiang mue* (when I or any family's members are ill, I buy medicines (2.3) or visit private clinic in Nongkhai (2.2). If the illness is more severe I visit the government Nongkhai hospital. I think that in communicable illnesses I will also be seeking health-care services at the same place because I trust the quality of services and instruments)".

Diagram 8 Conclusion of *Nang Suk*'s demography, beliefs, experiences and treatment of illness and fever-related illness

5. *Tao-Nun*,
- 33 years old married man with a 4 years old child
- Edu. High school
- Owner taxi cab business
- Household member s= 11
- Monthly family earnings 5 millions Gibb (sufficient and preserve life)

Fever-related illness meanings: '*kin bor dai, yam jeb puiy kin bor dai, thong kalam kin, hed wieg bor dai ka bor mee ngern bor mee thong* (difficult to eat, have to restrict what to eat or *kalam*, can not work)'
Fever-related illness causation: '*bang yang tid pad, bang yang bor tid, wat pan mai tid pad* (some illness can be contagious, some are not, the newly influenza can be)'
Fever-related illness perceived degree of severity: '*jeb noi rue khaj noi kab jeb lai rue khaj lai* (mild illness or mild fever and severe illness or severe fever)'

"*Koi koei ma ha than moh yoo clinic yon puad thong lai, than moh bok wa pen rok kapoh, pua yoo song sam dian ka sao, thia nee jeb yon khaj, ai, jeb khor sam mue ma law, koi yan khaj wad pan mai tee og khao soo mue,koi yan poh wa koi puapan kab nuk thongtiuw soo mue, yam jeb yam khaj koi ka me pua yoo pee la, koi chia wa hong moh yoo nee kue see dee khwa* (I have been visiting the doctor at private clinic last year (2.2). I had a stomach ache; the doctor said that I had a peptic ulcer. I felt better after visiting the doctor about a couple months later. This time I visit the doctor here (2.1) because I had fever, cough and sore throat three days ago. I am afaid of a newly influenza which was mentioned on the television. I fear that because I contact foreigners everyday. When my family and I get ill, I prefer to visit the doctor here. I trust the doctors and health-care services here in Thailand)".

Diagram 9 Conclusion of *Tao Nun*'s demography, beliefs, experiences and treatment of illness and fever-related illness

6. *Nang-Sao*,
- 17 years old single woman
- Studying 1st year of Lao National University
- Student
- Household's member = 4
- Monthly family's earnings: 2 millions Gibbs (sufficient) and preserve)

Fever-related illness meanings: '*jeb khaj man pen khong thammada, nong pen payad khaj yung poh tueg yung kad* (falling ill is natural in life, I fell ill because of mosquitoes bites)'
Fever-related illness causation: '*yung kad ton nong pai tak nam sang, bang tia ka tid pad ma jak moo, por bok wa kin non nam rue arb nam tee mee non nam khao pai ka jeb* (the mosquitoes bite me when I was going to fetch water from well, sometimes I take the illness from my friends, sometimes drink or take shower with water which there are larva)'
Fever-related illness perceived degree of severity: '*thammada, jeb lai mue bor sao, kab jeb haeng rue jeb nak* (falling ill is normal illness, illness which takes time for recovery and severe illness)'

"*Nong ma hong moh tia nee yon bor kab mae pa ma, nong toh hon puad hau, mee puan daeng daeng kuan nam kaenka, ma song mue laew, mae pai sue ya jak hanya yoo nai baan ma hai kin bor sao, soo tia yam jeb khaj mae ka sue ya hanya nai baan hai kin, tha jeb haeng kuan ka pa pai ha than moh nai muang rue nai Vien, tae tia nee bor kab mae yan nong pen khaj liad oog ka loei pa ma nee, pern see pai sue kriang nai talad, ka loei pa nong ma nam* (I visit this hospital because my parents are willing to. I had fever, headache and red rash on legs and arms since two days. My mother bought some medicines (1.1) from a pharmacy in my community for me, but I was not better after taking them. Everytime I don't recovery from illness, my parents take me to the district hospital or hospital in Vientiane (1.3). But this time my parents feared that I got dengue haemorrhagic fever so they take me here (2.1). In addition, my parents want to buy goods in the Nongkhai market too)".

Diagram 10 Conclusion of *Nang Sao's* demography, beliefs, experiences and treatment of illness and fever-related illness

7. *Nang-Sai*,
- 51 years old married woman with 2 children
- Edu. Primary school
- Merchant
- Household members= 7
- Monthly familyearnings 7.5 millions Gibb

(sufficient and preserve life)

Fever-related illness meanings: '*yam tee our kin bor sab non bor lab, tai bor dee kue yam our jeb, our ka hed wieg bor dai* (when we can not eat, can not sleep, secretion abnormal, unable to work, it is we fall ill)'
Fever-related illness causation: '*dek noi akart plian ka puiy, yao yai ka puiy, poo yai haeng tao haeng kae ma ka jeb, diew ka jeb nan ka jeb nee, plian akart noi nueng ka jeb* (children fall ill because seasonal change and growing process, adult fall ill because deterioration of body and seasonal change)'
Fever-related illness perceived degree of severity: '*thammada, jeb lai mue bor sao, kab jeb haeng rue jeb nak* (falling ~~to~~ ill are normal illness, illness which takes time for recovery and severe illness)'

"*na jeb yon khaj ai ma sam mue laew, tia nee ma ha moh mae sue kiang num, suan lai yam jeb noi ka kin ya tee sue pai jak muang Thai, tha jeb lai ka kham ma nee, na chia wa borikarn kab than moh yoo nee dee* ('I fell ill with fever and cough symptoms three days ago. After visiting the doctor, I will go to the market (2.1). Mostly, either I or my family fall ill of mild illness, we take medicine bought from Thailand (2.3). In severe illnesses we cross the border to Thailand for visiting the doctor. We are favorable to quality service and doctors. ')".

Diagram 11 Conclusion of *Nang Sai's* demography, beliefs, experiences and treatment of illness and fever-related illness

8. *Tao Kham*,
- 16 years old single man
- Student high school
- Household members= 5
- Monthly family earnings 1 millions Gibb

(unsufficient and in debt)

Fever-related illness meanings: '*khaj wat pen thammada, khaj liad ook man pen ta yan, poh nai moo baan our mee khon tai* (common cold is a normal illness but dengue fever is so fearfull, because there is a death patient in our community)'
Fever-related illness causation: '*pen thammada, yung kad, tid pad ma jak moo* (it is a normal of life, mosquitoes bites, disease came from a friend)'
Fever-related illness perceived degree of severity: '*khaj noi rue jeb noi,, jeb lai mue rue jeb laew pinpua lai mue bor shao kab jeb nak* (mild fever or mild illness, falling ill which takes long time for recovery and severe illness)'

"*Nong bor koei ma ha moh nai hong moh Nongkhai rue hong moh uen nai Thai ma khon, tia nee nong pen khaj, puad hau, puad mia klam, mee puen ma song mue laew, mae sue ya jak han ya nai moobaan ma hai kin bor sao, nong bor koi jeb, tia nee mee prayad khaj liad oog mee khon tai nai baan, bor kub mae yan nong pen ka loei pa ma nee, poh moh laew ka see pai talad tor* ('I never visited Nongkhai hospital nor hospitals in Thailand before. This time I fell ill and had fever, headache, muscles pains and red rash symptoms for two days. I took medicines which my mother bought from community pharmacy (1.1). I was not better. My parents fear about dengue haemorrhagic fever which appears in our community with death case now. Thus they took me here (2.1). After meeting the doctor we will go to the market for buying goods'.)"

Diagram 12 Conclusion of *Tao Kham's* demography, beliefs, experiences and treatment of illness and fever-related illness

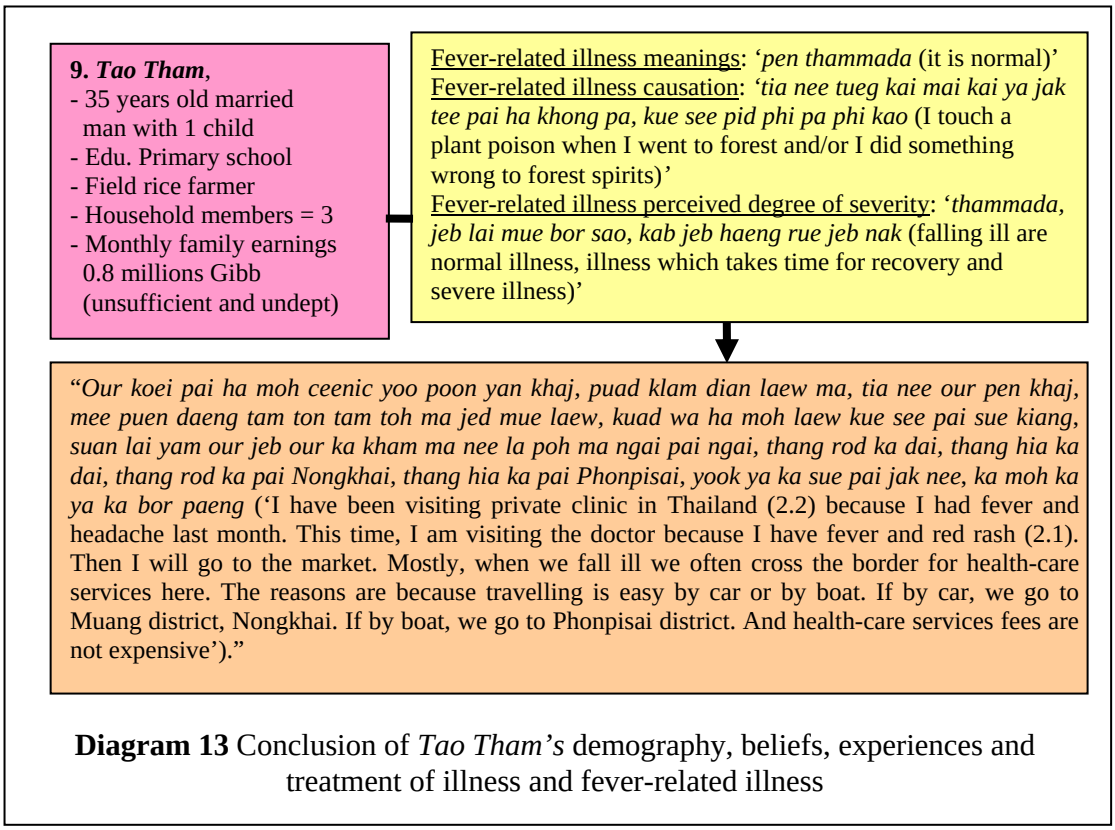

Diagram 13 Conclusion of *Tao Tham's* demography, beliefs, experiences and treatment of illness and fever-related illness

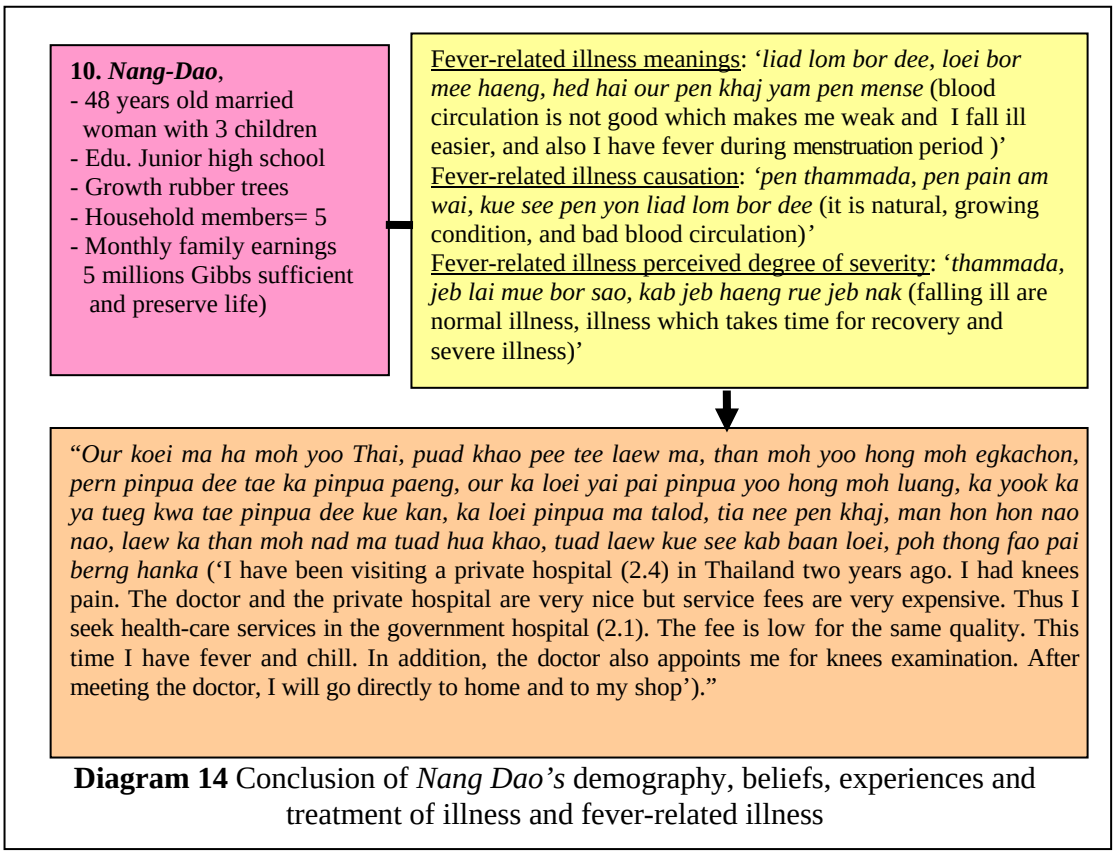

Diagram 14 Conclusion of *Nang Dao's* demography, beliefs, experiences and treatment of illness and fever-related illness

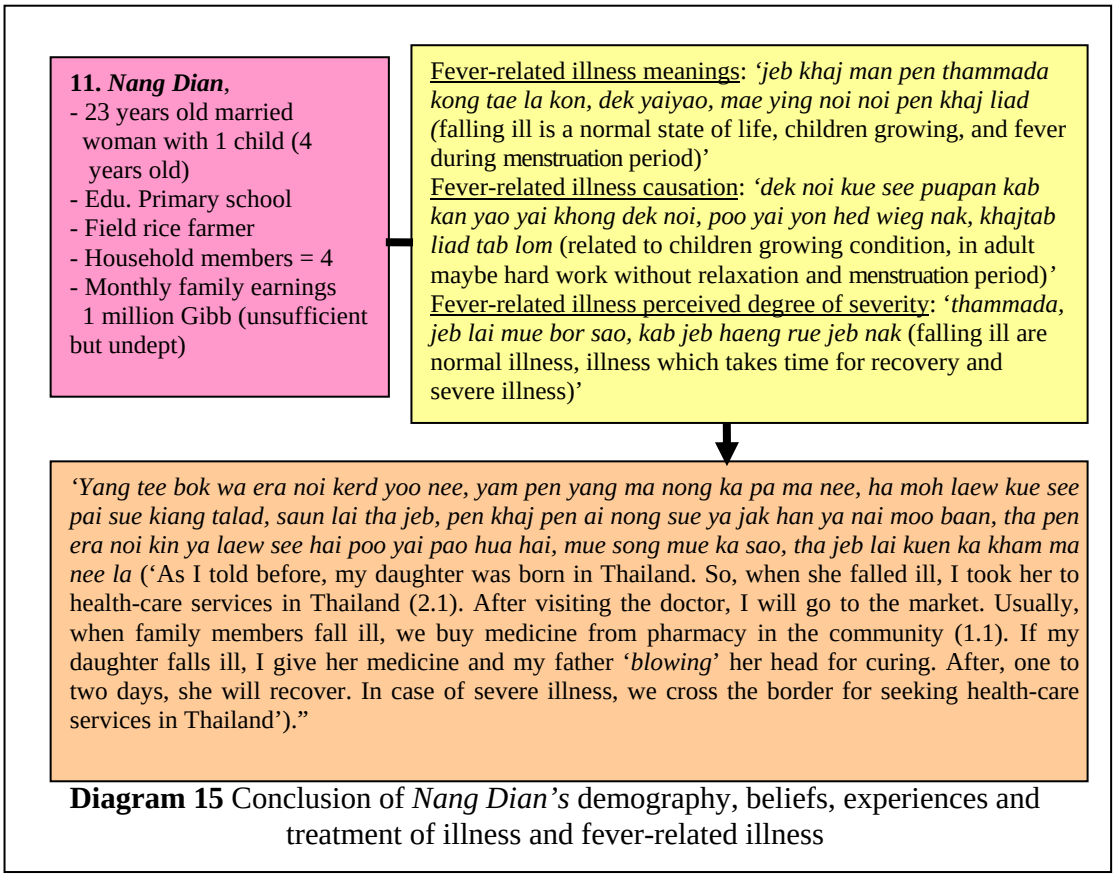

Diagram 15 Conclusion of *Nang Dian's* demography, beliefs, experiences and treatment of illness and fever-related illness

APPENDIX F
DOCUMENT PROOF OF
THE COMMITTEE FOR RESEARCH ETHICS
(SOCIAL SCIENCES)

COA.No.2010/022.2907

Documentary Proof of The Committee for Research Ethics (Social Sciences)

Title of Project: An Ethno-epidemiological Study of Lay Beliefs and Experiences of Fever and Acute Febrile Respiratory Diseases among Laotian Patients Living near the Lao-Thai Border
(Thesis for Ph.D.)

Principal Investigator: Mrs. Pahurat Kongmuang Taisuwan

Name of Institution: Faculty of Social Sciences and Humanities, Mahidol University

Approval includes:
1) MU-SSIRB Submission form version received date 22 July 2010
2) Participant Information sheet for Case Study version date 22 July 2010
3) Participant Information sheet for Relative's Case Study version date 22 July 2010
4) Participant Information sheet for Key Informant version date 22 July 2010
5) Participant Information sheet for Parent and Child version date 22 July 2010
6) Informed Consent form version date 27 May 2010
7) Informed Consent form for Parent and Child version date 22 July 2010
8) Assent form version date 22 July 2010
9) In-depth Interview Guideline version received date 27 May 2010
10) Observation Form version received date 27 May 2010

The Committee for Research Ethics (Social Sciences) is in full compliance with International Guidelines of Human Research Protection such as Declaration of Helsinki, The Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

Date of Approval: 29 July 2010
Date of Expiration: 28 July 2011

Signature of Chairman: .....
(Emeritus Professor Santhat Sermsri)

Signature of Head of the Institute: .....
(Assoc. Prof. Dr.Wariya Chinwanno)
Dean of Faculty of Social Sciences and Humanities

Office of The Committee for Research Ethics (Social Sciences), Faculty of Social Sciences and Humanities,
Mahidol University, Phuttamonthon 4 Rd., Salaya, Phuttamonthon District, Nakhon Pathom 73170. Tel.(662) 441 9080 Fax.(662) 441 9081

APPENDIX G
VOCABULARY
LAO-THAI-ENGLISH

Laotian	Thai	English
สะบายดี-sa bai dee	สวัสดี-sawasdee	Hello
ขอบใจ๋-khob jai	ขอบคุณ-khob khun	Thank you
ในเวียง-nai wiang	ในเวียงจันทน์-nai Vientiane	In Vientiane Metropolitan
อาสาสาธา-asa satha	อาสาสมัครสาธารณสุข-asa samak satharanasuk	Community health-care volunteer
รองนายบ้าน-rong nai baan	รองผู้ใหญ่บ้าน-rong poo yai baan	Vice head/shief of community
นายบ้าน-nai baan	ผู้ใหญ่บ้าน- poo yai baan	Head/shief of community
หมากไม้-mak mai	ผลไม้-bola mai	Fruits
หมอยา-moh ya	หมอสมุนไพร-moh samun phai	Herbal traditional healer
ผู้เฒ่าผู้แก่-poo tao poo kae	ผู้ชรา-poo chara	Older
เป็นเจ็บเป็นไข่-penjeb pen khaj	เจ็บป่วย-jeb puiy	Ill
พยาธิ-pa yat	โรค-rok	Diseases
พยาธิหันใจ-pa yat han yai	โรคระบบทางเดินลมหายใจ-rok rabob tang dern lom hai jai	Respiratory tract diseases
พยาธิติดแปด-pa yat tid pa	โรคติดต่อ-rok tid toh	Communicable diseases
ไข่-khaj	ไข้-khaj	Fever
โรงหมอเมือง-rong moh muang	โรงพยาบาลประจำอำเภอ-rong payabal prachum ambur	District hospital
ถือพา-tau pa	ตั้งครรภ์-tang khun	Pregnancy
ประสูติ-pra sut	คลอดบุตร-khod butr	Deliverly
โฮงเฮียน-hong hean	โรงเรียน-rong rean	School
เฮ็ดเวียกเฮ็ดงาน-hed wiag hed ngan	ทำการทำงาน-hed wiak hed ngan	Working
ปิ่นปัว-pin pua	รักษา-raksa	Curing or treatment

BIOGRAPHY

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