

From the DEPARTMENT OF PUBLIC HEALTH SCIENCES  
Karolinska Institutet, Stockholm, Sweden

# **VULNERABILITY IN ILLNESS:**

## **HOUSEHOLD HEALTHCARE- SEEKING PROCESSES DURING MATERNAL AND CHILD ILLNESS IN RURAL LAO PDR**

Helle M. Alvesson



**Karolinska  
Institutet**

Stockholm 2013



All previously published papers were reproduced with permission from the publisher.

Published by Karolinska Institutet.

Printed by Larserics Digital Print. Layout by Cécile Everett.

© Helle M. Alvesson, 2013  
ISBN 978-91-7549-327-5



## ABSTRACT

**Background:** Despite considerable progress, maternal and child mortality persists and continues to affect many low-income countries, to the extent that the Millennium Development Goals (MDG) 4 and 5 will not be reached. This calls for a broader range of information that will enhance the understanding of the different dimensions of healthcare-seeking. This must be grounded in people's social reality, not least among remote, rural populations.

**Aim:** The overall aim is to contribute new knowledge on household healthcare-seeking processes, and coping strategies during maternal and child illness, in the context of Lao PDR.

**Methods:** The data originates from two main studies. The first one took place in Xekong and Savannakhet provinces (Articles I-III) and explored how healthcare-seeking takes place and the rationales behind those processes during child illness, pregnancy and childbirth. In each of six rural communities, focus group discussions (FGDs) and in-depth semi-structured interviews were conducted with mothers and fathers to children under five; pregnant women and grandmothers; and a variety of healthcare providers. The second study took place in the provinces of Phongsaly, Vientiane and Attapeu and aimed to describe households' experiences of shocks when facing drought, pest infestation, divorce and disease (article IV). In 11 communities, FGDs and in-depth semi-structured interviews were conducted. Interviews with households that had experienced serious maternal and child illness were analyzed for sources of vulnerability, coping strategies and shock consequences. Transcripts of the data collected were analyzed and guided by interpretive description.

**Results:** Several households had experienced serious health shocks. High costs (medical and non-medical), limited possibilities to rapidly mobilize cash and long distances to health facilities were barriers for seeking healthcare (IV). Only in communities with poor access to healthcare facilities had the death of children - after only consulting traditional healers - occurred (I). In healthcare-seeking processes, delays were observed at household level due to either difficulty in assessing the severity of illness symptoms or to disagreements between spouses and between parents and grandparents (I). During important situations such as the first trimester of pregnancy and childbirth, grandmothers were considered important sources of advice for young women. Their status was in part based on the impressive changes they had themselves experienced in childbirth practices (III). The risks of dying outside the community had influenced women to seek local healthcare providers (I), as had their lack of knowledge about the expectations and social norms of health facilities (II).

**Conclusions:** Sources of vulnerability are many, including the inability to mobilize cash to pay for healthcare despite severe illness; and the spending of savings and selling assets, which nevertheless would not always result in the recovery of the family member. Understanding if, how and when healthcare-seeking is initiated, stopped or continued is important in reaching out to groups in areas that are poorly served or not yet using healthcare services. This is one of many challenges in achieving MDG 4 and 5.

**Key words:** vulnerability, MDG 4 and 5, delay, rural remote, healthcare-seeking, health shock, access, Lao PDR

## LIST OF PUBLICATIONS

- I. Alvesson M H, Lindelow M, Khanthaphat B, Laflamme L.  
*Shaping healthcare-seeking processes during fatal illness in resource-poor settings. A study in Lao PDR*  
BMC Health Services Research 2012, 12:477  
<http://www.biomedcentral.com/1472-6963/12/477>
- II. Alvesson M H, Lindelow M, Khanthaphat B, Laflamme L.  
*Coping with uncertainty during healthcare-seeking in Lao PDR*  
BMC International Health and Human Rights 2013,13:28  
<http://www.biomedcentral.com/1472-698X/13/28>
- III. Alvesson M H, Lindelow M, Khanthaphat B, Laflamme L.  
*Communitarian perspectives in understanding resource-poor, unreached groups: lessons learned from grandmothers in maternal and child health in Lao PDR*  
Submitted manuscript
- IV. Alvesson M H, Laflamme L, Khanthaphat B, Lindelow M.  
*Maternal and child ill-health as a household shock – case descriptions from a vulnerability perspective in Lao PDR*  
Submitted manuscript

# CONTENTS

<b>1</b>	<b>Background .....</b>	<b>5</b>
1.1	The global burden of maternal and child mortality .....	5
1.2	Millennium Development Goals 4 and 5 .....	6
1.3	Understanding access to care: a framework .....	7
1.4	Theoretical foundations .....	9
1.5	Introduction to Lao PDR .....	9
	1.5.1 <i>The health system</i> .....	10
	1.5.2 <i>Progress on MDG 4 and 5</i> .....	12
<b>2</b>	<b>Aim and research questions .....</b>	<b>13</b>
<b>3</b>	<b>Methods.....</b>	<b>14</b>
3.1	Overview of study design .....	14
3.2	Operational definitions .....	16
3.3	Study setting.....	17
3.4	Samples .....	18
3.5	Data collections.....	19
3.6	Data analysis .....	21
3.7	Ethical considerations.....	22
<b>4</b>	<b>Results .....</b>	<b>24</b>
4.1	Shaping responses to fatal illness.....	24
4.2	Uncertainty in healthcare-seeking.....	25
4.3	Grandmothers' influences on health practices.....	27
4.4	Maternal and child illness as a health shock.....	28
<b>5</b>	<b>Discussion .....</b>	<b>30</b>
5.1	Main results in light of the Access framework .....	30
5.2	The woman-child dyad, the family and gender issues .....	32
5.3	Social interactions between patients and providers .....	34
5.4	The logistics and pragmatics in illness.....	35
5.5	Methodological considerations .....	36
	5.5.1 <i>Reflexivity</i> .....	38
5.6	Implications for research, policy and practice .....	39
	5.6.1 <i>Reasons why mothers and children die in remote areas</i> .....	39
	5.6.2 <i>Uncertainty in healthcare-seeking processes</i> .....	39
	5.6.3 <i>Inter-generational perspectives</i> .....	40
	5.6.4 <i>Health shocks in a vulnerability perspective</i> .....	40
<b>6</b>	<b>Conclusions.....</b>	<b>41</b>
<b>7</b>	<b>Acknowledgements.....</b>	<b>42</b>
<b>8</b>	<b>References.....</b>	<b>44</b>

## LIST OF ABBREVIATIONS

ID	Interpretive Description
IDI	In-depth-interview
FGD	Focus Group Discussion
Lao PDR	Lao People's Democratic Republic
LVS	Lao Vulnerability Study
MDG	Millennium Development Goals
VA	Village Authority
WHWP	What Health Workers and Patients Want study



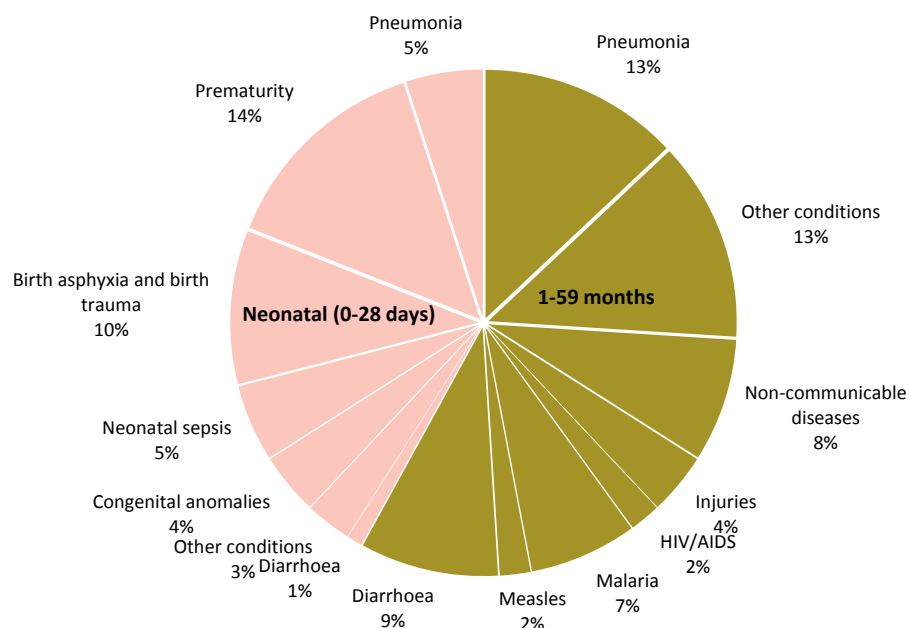
# 1 BACKGROUND

## 1.1 THE GLOBAL BURDEN OF MATERNAL AND CHILD MORTALITY

Maternal and child mortality is still high despite considerable progress in the past decades. Maternal conditions are the second leading cause of death among women aged 15-44 years old in low-income countries after HIV and AIDS (WHO 2009). The largest threat of maternal death occurs during labor, birth and the 24 hours after birth (Ronsmans and Graham 2006). Post-partum hemorrhage is the leading cause of pregnancy-related death after sepsis, hypertensive disorder, anemia and obstructed labor (Khan, et al. 2006). The other major complications are infections after childbirth, high blood pressure during pregnancy and unsafe abortion (WHO 2012c). Maternal conditions also lead to severe disability among women every year.

Maternal health is an important determinant of child survival (Cousens, et al. 2011). More children die when their mothers die, in particular if the mother dies during the first 28 days after delivery (Ronsmans, et al. 2010). The first 28 days of life are precarious and about 43 percent of children younger than five die in this neonatal period (WHO 2012a) (see Figure 1).

**Figure 1 Causes of deaths among children under 5 years, 2011**



Source: (WHO 2012a)

The four main causes of death of children under five were in 2011 pneumonia, prematurity, birth asphyxia and birth trauma and diarrheal diseases (WHO 2012a).

In spite of these staggering numbers, the world has seen progress. In 1990 about 12 million children under five died compared to 6.9 million in 2011 (UNICEF 2012). In 1990 543 000 maternal deaths were reported compared to an estimated 287 000 maternal deaths in 2010 (WHO 2012d).

## **1.2 MILLENNIUM DEVELOPMENT GOALS 4 AND 5**

The Millennium Development Goals (MDG) offer a historical opportunity to devote more attention to the global health issues of poverty and disease. It has been 13 years since the countries of the world committed to the MDGs. The MDGs targets and indicators span a twenty-five year period from 1990 to 2015. With two years left before the targets set for 2015 should be evaluated there is concern about some of the targets that will not be met (United Nations 2012). The eight MDGs address poverty in light of income poverty, hunger and disease; they aim to promote gender equality, universal education, work and sustainable development (United Nations 2000). During the global assessments on progress in 2010 it was concluded that MDG 4 (to reduce child mortality) and MDG 5 (to improve maternal health) are in need of efforts to accelerate progress (United Nations 2010). The child mortality rate in low-income countries fell from 99 deaths per 1,000 live births in 1990 to 72 in 2008 (United Nations 2010). To reach the target of a two-thirds reduction the mortality rate should be as low as 33 deaths per 1,000 births in 2015. It was furthermore concluded that the rate of improvement was uneven among and within countries (United Nations 2010). Progress in reducing maternal death has been much slower and even if the absolute numbers have decreased the number of deaths per 100,000 live births has declined marginally. In 1990 the maternal mortality was 480 deaths per 100,000 live births and in 2005 it had decreased to 450 (United Nations 2010). It is now obvious that the target of 120 deaths per 100,000 live births by 2015 will not be reached.

Those poor results have intensified debate on how further improvements can be achieved. There is strong emphasis on policy, practice and research efforts to improve the type and range of evidence-based interventions that can reduce these mortalities (Bhutta, et al. 2008; Bhutta, et al. 2010; Darmstadt, et al. 2005). Scaling up evidence-based interventions that work for maternal and child undernutrition and survival, e.g. promotion of breastfeeding, hand washing and zinc supplementation, from situational, specific settings to multiple low-income countries is emphasized (Bhutta, et al. 2008). There are other discussions oriented towards equity in child and maternal health, which has prompted the question of whether “more of the same is enough?” to improve the survival rates of poor children and women (Obrist, et al. 2007; Victora, et al. 2003). More knowledge on poverty and equity issues, to understand how to reach out, is needed as well as implementation of the approaches that are already available (Barros, et al. 2012; Victora, et al. 2003).

The social aspects of pregnancy loss, maternal and child illness and death are areas that have also been identified as essential to improve knowledge on improved survival of children and women (D'Ambruoso, et al. 2010; Storeng, et al. 2008; Van der Sijpt 2010). “Joining up thinking” was a call for improving knowledge on loss in childbearing in resource-poor settings (de Kok, et al. 2010). This was stimulated also

by the fact that research papers were relatively few on stillbirths, infertility, maternal death as compared to the number of publications on HIV or family planning (de Kok, et al. 2010). Discussions on how knowledge can be improved have also included the very access to mortality statistics as well as the kind of factors that are included in the analysis (Waiswa, et al. 2012).

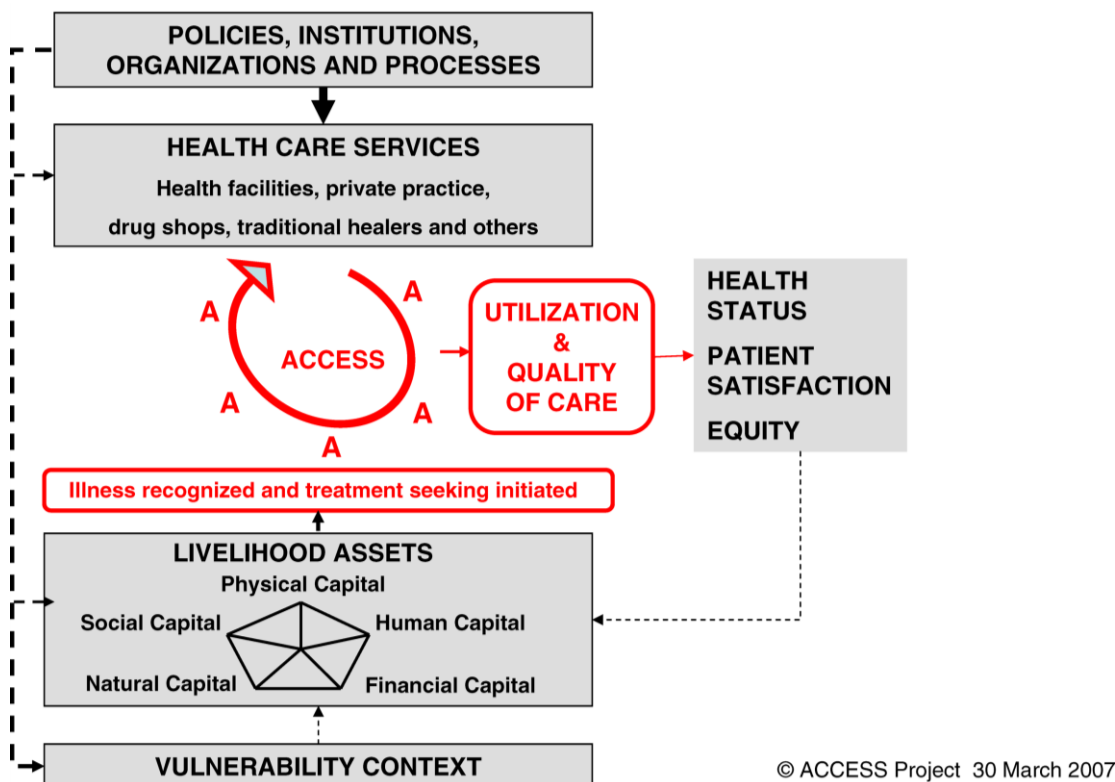
Finally, the discussions on facility- and/or community-based service delivery mechanisms have become more prominent (Barros, et al. 2012; Gilmore and McAuliffe 2013). Community-based or community-led interventions have shown success in improving maternal and child health (Prost, et al. 2013). Community-based interventions on maternal and child health were found to reach out in more egalitarian ways than those made available from health facilities (Barros, et al. 2012).

The need to collect a broader range of information that allows for an understanding of different dimensions of health-seeking and healthcare provision has also been emphasized in a recent methodological reader on health policy and systems research (WHO 2012b). The document claims that although essential, health service research is not enough to improve the knowledge on health improvement (WHO 2012b). Understanding the social and political reality of the targeted populations is key to capturing the needs and dealing with the complexities in access to health services (Awiti Ujiji 2011; Pharris-Ciurej 2011; Waiswa 2010). How people experience and understand different types of interventions or policies is considered important information as is the data on whether a policy or intervention is (cost)-effective (WHO 2012b). It is therefore essential to improve knowledge on people's healthcare-seeking practices in their social reality. This is particularly true for the poor and marginalized populations who the interventions deployed to deal with the MDG 4 and 5 have largely failed to reach (Thomsen, et al. 2013).

### **1.3 UNDERSTANDING ACCESS TO CARE: A FRAMEWORK**

To improve access to healthcare for poor people, it has been suggested that innovative and community-based approaches are needed as they have the potential to better align healthcare services with the needs, expectations and resources of the targeted population (Obrist, et al. 2007). A framework for analysis and action of access to healthcare in resource-poor countries has been proposed by Obrist and colleagues (Obrist, et al. 2007) and it is used in this thesis to contextualize the knowledge sought – and gained – on healthcare-seeking processes. The Health Access Livelihood Framework links three approaches to the study of healthcare access: health-seeking, health services and livelihoods (Obrist, et al. 2007) (Figure 2).

**Figure 2 The Access Framework**



© ACCESS Project 30 March 2007

Source: (Obrist, et al. 2007)

The framework is anchored in people’s recognition of illness and the subsequent initiation of seeking treatment. Once the decision to seek care is made, the five dimensions of access: availability, accessibility, affordability, adequacy and acceptability are important. The extent to which access is successful depends in turn on a) the healthcare services and the policies and institutions that govern them; and b) the livelihood assets that people have or can mobilize. The framework also includes the vulnerability context in which people live which influences their exposure to shocks such as floods, drought, policy changes, unemployment or disease.

The dynamic aspects of the framework are furthermore that, once people have improved access to care and healthcare is utilized, then in order to have impact on the health status of people, the care has to be of quality. Health status, equity or patient satisfaction can in turn feed back into the livelihood assets such as improved human capital (knowledge, perceptions and education).

In terms of the link between access to care and the vulnerability context, it should be clarified that vulnerability has two dimensions (Chambers 1989). The term vulnerability has been coined to describe situations where households face risks and their ability to cope with various types of shocks when they materialize, including but not limited to health-related ones (Holzman and Jorgensen 2001; Kozel, et al. 2008; Schroeder and Arnason 2009; Schroeder and Gefenas 2009). From among the numerous health-related shocks, adverse events with negative consequences (Chambers 1989), maternal and child mortality and morbidity is one that deserves closer attention.

## 1.4 THEORETICAL FOUNDATIONS

The object of study in this thesis is situated in the interface between anthropology and public health. Two premises and assumptions on which the analyses were based on are briefly outlined below. The first relates to the researcher lens through which social phenomenon such as healthcare-seeking are investigated. The second premise indicates more specifically how healthcare is understood as a product of interactions among social groups of users and providers.

*Cultural relativism:* Within the field of medical anthropology the basic premise is cultural relativism, which represents the idea that there can be different realities upon which people understand and explain the world (Hahn R.A and Inhorn M. C 2009; WHO 2012b). Such different perspectives on reality are not a priori ordered in a hierarchical manner (Good 1990). The data transcripts in this thesis are produced under the premise that people's wisdom and experiences are rational within their own context. It does not imply however that the cultural meaning attached to illness episodes or other misfortunes are coherent and homogenous among all members. But it means that the researcher approaches the illness narratives and experiences of illness from the perspective of patients and of health providers with a similar worthiness and integrity (Hahn R.A and Inhorn M. C 2009). What also follows from the premise of cultural relativism is that communities are not assumed to be "empty vessels" without relevant knowledge in health or other domains.

*Social and cultural interaction in healthcare:* A second basic premise is that healthcare and public health interventions entail a process of social and cultural interaction (Hahn R.A and Inhorn M. C 2009). The development of the notion of medical pluralism, which emphasizes the co-existence of different healing traditions within the same society, fostered the idea that health systems, including their users, providers and the transactions of pharmaceuticals and diagnosis, can be analyzed as social systems that have meanings attached to them (Van der Geest and Whyte 1988; Whyte, et al. 2002). The main idea is thus that different healing traditions, including a public health system, encompass values and rules of behavior. This is similar to the ways in which it is possible to analyze how users of healthcare are approaching illness and healing with meanings that only to some extent are shared with other community members. As such, healthcare provision and healthcare utilization are social and relational practices that are embedded in a social context (Kleinman 1989).

These two premises will be reflected throughout the thesis in the ways in which user and provider experiences are presented and analyzed.

## 1.5 INTRODUCTION TO LAO PDR

The country where the studies are conducted is Lao PDR (or Laos). Laos is one of the poorest East Asian countries. It is landlocked, mainly rural and is linguistically and ethnically diverse. The population was estimated at 6.5 million in 2012 with a high proportion of young people (Government of Lao PDR and the United Nations 2013). At the national level 71 percent of the Lao population was engaged in agriculture in

2007 (World Bank 2010b). The national poverty rate has declined steadily and Laos is on track to achieve the poverty target of halving the proportion of people whose income is less than one dollar a day (Government of Lao PDR and the United Nations 2013). However, there are large topographic, demographic and socioeconomic diversities. Poverty is concentrated in remote rural areas in the northern and southern parts, in the uplands and among ethnic minorities (Messerli P, et al. 2008). The poverty rate in rural areas is almost twice as high as in urban areas (Government of Lao PDR and the United Nations 2013). Administratively there are 16 provinces plus the capital city of Vientiane, which includes a total of 145 districts in the country.

There are 49 ethnic groups officially recognized by the Government of Laos (Lao National Front for Construction 2005), which, in turn, from an anthropological perspective, can be divided into around 230 ethno-linguistic groups (Lao Women's Union and GRID 2005). The groups belong to one of four main linguistic families: Lao-Tai (68 percent of total); Mon-Khmer (22 percent); Hmong-Iu Mien (7 percent); and Chine-Tibet (3 percent) (Government of Lao PDR and the United Nations 2013; Lao National Front for Construction 2005). The ethnic Lao-Tai generally practice Buddhism while the majority of the non-Lao ethnic groups adhere to traditional religious practices - even though there are variations in the local expressions and many of the religious practices show some degree of syncretism (Baird and Shoemaker 2008). The ethnic groups are also diversified in terms of livelihood and this ranges from hunting and gathering, different forms of swidden cultivation in the upland areas, to wet-rice farming in the lowlands. The Lao-Tai groups live traditionally in lowland areas, which are easier to access than the traditional habitat of minority groups residing in the upland or mountainous areas.

The family is important as a nuclear family, extended family and as members of kinship networks in neighboring Thailand but is also relevant in Laos (Lundberg and Thrakul 2013). The Buddhist Lao-Tai-groups practice a matrilocal or bilocal residence pattern after marriage (Lao Women's Union and GRID 2005). Some of the sub-groups of the Lao-Tai have matrilinearity tendencies and practice inheritance from mother to daughter (Chazée 2002). The other three main linguistic families consisting of 41 ethnic groups have in general a patrilineal kinship system (even though the lineage is not applied in some groups) and most groups use a patrilocal residence pattern (Chazée 2002). However, this is a simplification with some groups having a three-year matrilocal residence after marriage after which the newly married couple moves to the compound of the husband.

### **1.5.1 The health system**

The public health system is organized in four levels: central, provincial, district and village. The transition from a state-dominated health system into an increasingly mixed market accelerated in the early 1990s when private clinics and pharmacies were rapidly established in urban areas (Syhakhang, et al. 2004b; Syhakhang 2002). Mobile drug vendors from Lao PDR or from neighboring countries have been reported since the 1960s while spiritual practitioners (diviners among animistic groups and fortune-tellers among Buddhist groups) and herbal practitioners have been considered an integral part

of the way of life of the different ethnic groups since the beginning of these communities (Tambiah 1970). Private pharmacies and clinics represent the most recent types of providers (Syhakhang 2002). Little is known about the scope or quality of informal providers but studies on licensed and unlicensed pharmacies indicate that there is considerable room for improvement in not only staff knowledge but also drug quality (Sihavong, et al. 2011; Stenson, et al. 2001; Syhakhang, et al. 2004a). The National Health Strategy emphasizes a better distribution of the health infrastructure, better performance of health workers and facilities in order to increase utilization rates (Ministry of Health 2009).

The concepts of public/private health institutions and biomedical/traditional medicines are often used when describing a health system (Leach, et al. 2008). These distinctions are useful analytically but should be conceptualized on a continuum which allows for overlaps. This is especially true in Laos where both biomedical and herbal medicines are recognized as important ways of decreasing the burden of disease and traditional medicine is an integrated part of the Lao National Drug Policy (Syhakhang 2002).

Lao PDR has experienced rapid economic progress during the past decades but the speed of social progress has not kept pace (Government of Lao PDR and the United Nations 2013). Healthcare-seeking is complex in Lao PDR due in part to the mountainous and highland areas that are difficult to access and in light of the cultural and religious diversity.

Utilization rates of preventive and curative maternal and child interventions are relatively low and unevenly distributed (Ministry of Health and Lao Statistics Bureau 2012). The utilization rates of maternal and reproductive health service indicators indicate a positive trend but at a low level (Ministry of Health and Lao Statistics Bureau 2012; National Statistics Center 2005). In 2010-2011 in the urban areas almost 80 percent of women were assisted by skilled health personnel during their live birth in the preceding two years, in comparison with 33 percent of women living in rural areas with road and 12 percent of women in rural areas without road (Ministry of Health and Lao Statistics Bureau 2012). In rural areas women are assisted by relatives, friends or others e.g. 46 percent in areas with road and 64 percent without road (Ministry of Health and Lao Statistics Bureau 2012). TBAs assist in about 16 percent of rural deliveries and about 4 percent of deliveries in rural areas are done without assistance from anybody (Ministry of Health and Lao Statistics Bureau 2012). In terms of antenatal care, around 80 percent of pregnant women do not have any antenatal care with a skilled attendant in rural areas without road (Ministry of Health and Lao Statistics Bureau 2012).

Immunization during the first year of life is one of the key interventions to reduce child mortality. Of children aged 12-23 months, 34 percent had received all the recommended vaccinations before they turned one year old (Ministry of Health and Lao Statistics Bureau 2012). This is a 14 percent increase since the last measurement in 2006 but the coverage is still at a low level. There are large differences observed in coverage rate between provinces. The lowest coverage was found in the Northern province of Phongsaly and the central province of Savannakhet (Ministry of Health and Lao Statistics Bureau 2012). The nutritional status of children is precarious. Almost

half of children (44 percent) are moderately stunted (too short for their age) and 19 percent are severely stunted (Ministry of Health and Lao Statistics Bureau 2012).

### **1.5.2 Progress on MDG 4 and 5**

The Government has developed a “2010 Framework” to accelerate progress towards the MDGs and within six priority areas, maternal and child health is one (Government of Lao PDR 2010). More specifically the renewed efforts should: improve maternal and child health by strengthening community involvement; reduce financial barriers for the poor; improve the quality of services; improve the nutrition of women and children and reduce mother-to-child transmission of HIV.

There is good progress on MDG 4. The under-five mortality has been reduced from 170 (per 1,000 live births) in 1993 to 79 in 2011 (Ministry of Health and Lao Statistics Bureau 2012). The target for 2015 on MDG 4 is 70. Despite this improvement Laos ranks amongst the countries in the region with the highest mortality rates (Government of Lao PDR and the United Nations 2013). One of the trends that has been noted is that the better-off and urban families are progressing faster than the poor population. Achieving further reductions in child mortality is therefore seen to require reaching the poorer populations and the population living in remote areas (Government of Lao PDR and the United Nations 2013).

The progress on maternal mortality is not on track (Government of Lao PDR and the United Nations 2013). For every 1,000 children born alive, four women die during pregnancy, delivery or within two months of childbirth. The maternal mortality has decreased from 796 (per 100,000 live births) in 1995 to 357 in 2009 (Government of Lao PDR and the United Nations 2013). The target for 2015 is 260.



## 2 AIM AND RESEARCH QUESTIONS

The thesis aims to enhance the knowledge on those processes in the household that influence healthcare-seeking practices and of coping strategies during maternal and child illness.

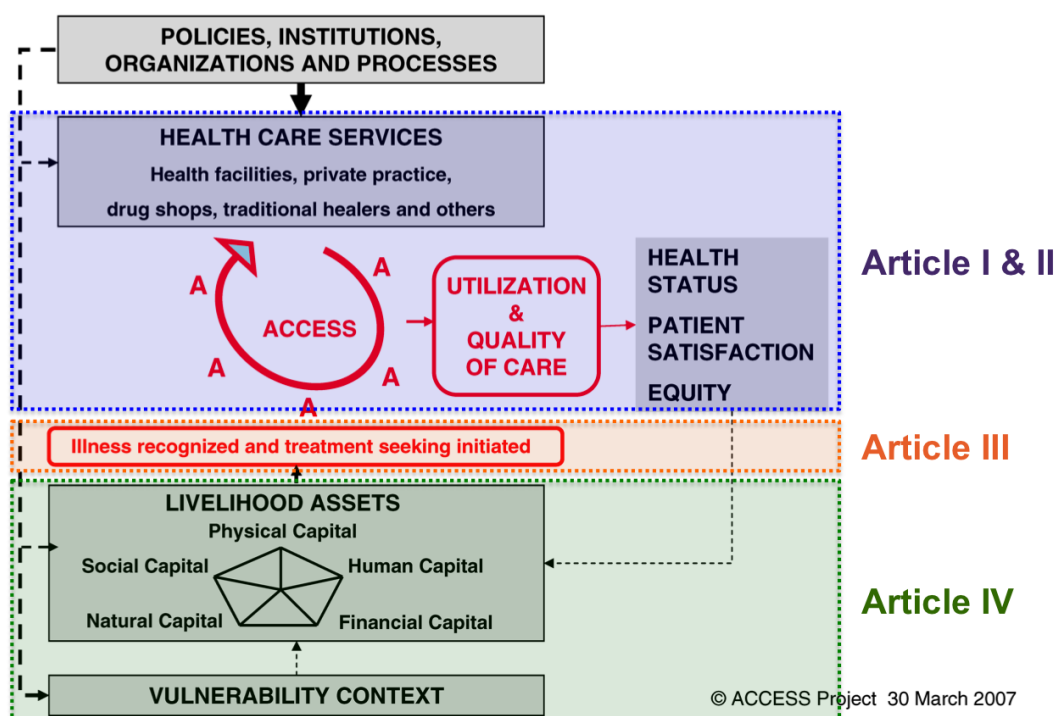
The following research questions are addressed:

- What are the processes that shape household healthcare-seeking during fatal illness episodes or reproductive health emergencies? (Article I)
- How do people relate to the healthcare options available to them when maternal and child health is threatened and when care can be provided by a variety of medical alternatives?  
What are the uncertainties that come into play during healthcare-seeking? (Article II)
- What are the influences of grandmothers in improving the pregnancy and childbirth practices of young women? (Article III)
- What are the sources of vulnerability for households suffering a maternal and child health shock?  
How do households cope with maternal and health shocks? (Article IV)

### 3 METHODS

A reproduction of the Health Access Livelihood framework (Obrist, et al. 2007) is presented below (Figure 3) in which the areas of contributions of this thesis are marked in color. These marked areas indicate the main focus of each of the four articles while still acknowledging the importance of linking access to care to vulnerability contexts.

**Figure 3 Thesis areas of investigation in relation to the Health Access Livelihood framework**



The four articles forming the thesis are based on two studies conducted in Lao PDR, both conceptualized within activities of The World Bank. Decisions on design and data collection methods were made with the aim to improve knowledge on utilization of health and social protection services and to achieve this in collaboration with the Government of Lao. The “*What health workers and patients want study*” provides the data analysed in Articles I, II and III and the “*Lao vulnerability study*” is the data source for Article IV. In the thesis parts of this material are revisited.

#### 3.1 OVERVIEW OF STUDY DESIGN

An overview of the specific research questions and data sources as they are presented in Articles I-IV is presented in Table 1. The area of study in Article I relates to including a broad scope of factors for understanding healthcare-seeking behavior which, it is suggested, inform the extent of caregivers’ access to and utilization of health services. The area of study in Article II, relates to caregivers’ uncertainties when seeking healthcare and directs the attention to the pluralism of health providers and how decisions to seek care with one or more of them is influenced by the five dimensions of access. In Article III, the focus is within the household and how grandmothers

influence young women during pregnancy and childbirth. This area of study is presented in order to help us understand in more detail how illness is recognized and treatment is initiated. The area of study in Article IV is an examination of maternal and child ill-health as health shocks, and moves the focus to the livelihood aspects and vulnerability contexts in order to understand how access to healthcare can be analyzed.

**Table 1. Summary of research questions and data sources**

<b>Area of study</b>	<b>Research question</b>	<b>Article</b>	<b>Original study Data sources</b>
<b>Broadening the scope for understanding healthcare-seeking behaviors</b>	What are the processes that shape household healthcare-seeking during fatal illness episodes or reproductive health emergencies?	I	<i>“What health workers and patients want” study</i>  In-depth semi-structured interviews with caregivers
<b>Uncertainties in healthcare-seeking behavior</b>	How does healthcare-seeking during maternal and child illness develop in the context of multiple treatment alternatives?  What are the uncertainties that come into play in this process?	II	<i>“What health workers and patients want” study</i>  Semi-structured interviews and/or FGD with community health workers, traditional birth attendants, drug vendors, traditional healers, nurses, medical doctors. FGDs with parents to young children. In-depth semi-structured interviews with caregivers
<b>The role of grandmothers in maternal and child health</b>	What are grandmothers’ influences in improving pregnancy and childbirth practices of women in poor unreached rural areas?	III	<i>“What health workers and patients want” study</i>  FGDs with grandmothers, pregnant women and mothers to children under five
<b>Maternal and child ill-health in a health shock perspective</b>	What are the sources of vulnerability for households suffering maternal and child health shocks?  How do households cope with a maternal and child health shock?	IV	<i>“Lao vulnerability study”</i>  FGDs with men and women In-depth semi-structured interviews with household members experiencing a health shock

## 3.2 OPERATIONAL DEFINITIONS

Before presenting the material and data collection methods in more detail, the operational definitions of key concepts are presented below.

**Vulnerability:** to face a significant probability of incurring an identifiable harm while substantially lacking ability and/or means to protect oneself (Kozel, et al. 2008).

**Risk:** the potential fluctuations in the circumstances of a household which affect its income and/or welfare. In particular, risk refers to *states of the world* that an individual or household faces, coupled with the likelihood that each of these states will occur (Holzman and Jorgensen 2001; Kozel, et al. 2008).

**Shock:** the occurrence of different states of the world. This is an adverse event with negative and unwanted consequences e.g. earthquake, flooding, harvest failure, unemployment, disease, injury, or death of a household member (Holzman and Jorgensen 2001; Kozel, et al. 2008).

**Health shock:** an adverse event with unwanted consequences related to illness, injury and death.

**Preventive strategy:** to address the underlying sources of risk by decreasing the probability that adverse states of the world will occur e.g. immunization programs to prevent health shocks; public policy on food safety (Kozel, et al. 2008).

**Mitigation strategy:** to alter the outcome experienced by a household in a given state of the world. This is also used prior to a shock e.g. joining a savings group, keeping money at home for emergency; diversifying crops or using crops that are less sensitive to drought and health insurance (Kozel, et al. 2008).

**Coping strategy:** to relieve the impact of a shock once it has occurred. The most common coping strategies are reducing consumption, selling assets, seeking help from friends and family, borrowing, working longer hours, and relying on support from government programs (Kozel, et al. 2008).

**Household:** a domestic group living in the same house and usually eating together. The household is the primary unit in everyday production and consumption and also exercises control over family property (Keesing 1981).

**Process:** a series of actions and events bringing about a result.

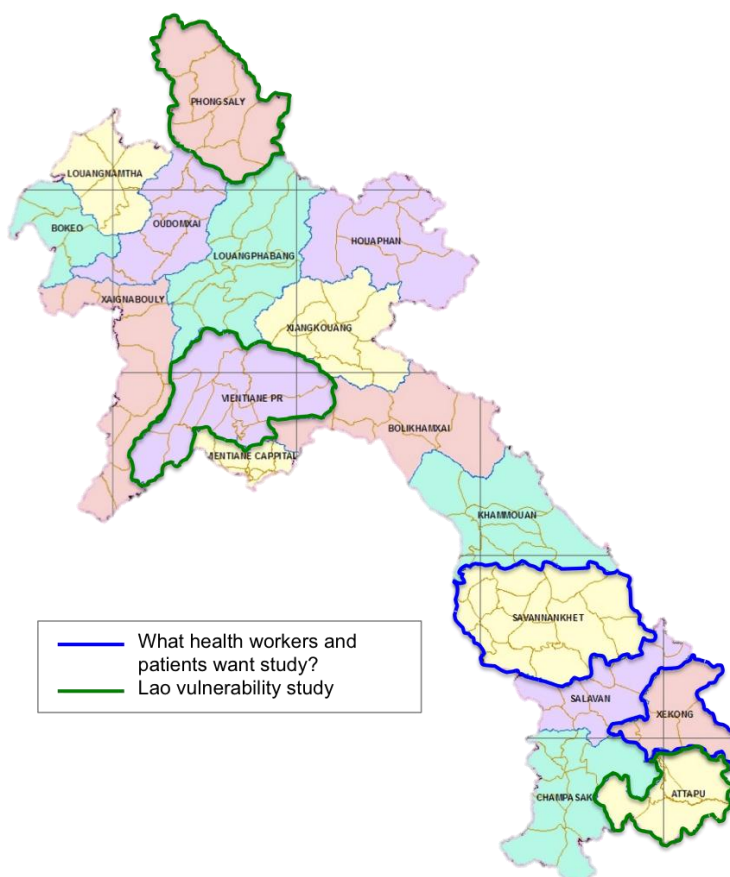
**Uncertainty:** a dynamic state, in which an individual experiences a feeling of being unable to calculate the probability of different outcomes. It prompts a discomforting sensation that may be affected by cognitive, emotive, or behavioral reactions, or by the passage of time and changes in the perception of circumstances (Penrod 2001). Uncertainty is a characteristic of the experience of illness and the process of dealing with it (Whyte 1997).

**Healthcare-seeking:** to seek care (advice, drugs, consultation) during illness from persons who provide care including community health workers, traditional and/or trained birth attendants, drug vendors, pharmacists, nurses and medical doctors at health facilities and/or in their homes (Obrist, et al. 2007).

### 3.3 STUDY SETTING

The “*What health workers and patients want study*” (HWPW study) was conducted in rural communities in one district, in each of the two provinces of Xekong and Savannakhet (see map). Those provinces were targeted by the Health Service Improvement Project implemented by the Ministry of Health (World Bank 2005). They are located in the southern and central part of the country and both are predominantly rural (Messerli P, et al. 2008). The two districts have a population of 26,000 and 29,000 respectively and the population is ethnically diverse with minority groups such as Talieng, Lave, Alak, Makong and Oy in addition to the Buddhist majority group of Lao ethnic. There is only one district hospital in each district and we have therefore chosen not to name the districts.

#### Map of Lao PDR



The “*Lao vulnerability study*” (LVS) was implemented in three provinces: Vientiane, Phongsaly and Attapeu. Vientiane Province is the peri-urban and rural areas surrounding the capital. The province does not include Vientiane Capital City. Attapeu Province is located in the south-eastern corner of the country and borders Cambodia

and Vietnam. Phongsaly Province borders China and Vietnam in the North. Those three provinces are also predominantly rural. The study was implemented in three districts in Attapeu Province (Sanamxay, Sanxay and Samakhixay); in four districts in Phongsaly (Phongsaly, Samphanh, Nhot Ou, and Khoua); and in two districts in Vientiane Province (Hadxaifong and Xaythany).

### 3.4 SAMPLES

**Table 2 Study samples**

Type of participants	FGD (number)	Interviews
<b><i>What health workers and patients want study</i></b>		
Village Health Volunteer	6(43)	-
Traditional Birth Attendant		
Drug vendor	-	7
Traditional healer	-	11
Nurse	8(29)	-
Medical doctor		6
Mother to child under five	6(46)	-
Father to child under five	6(36)	-
Pregnant	6(25)	-
Grandmother	6(38)	-
Caregiver		30
Village Authority		6
<b><i>Lao vulnerability study</i></b>		
Men and women in 11 communities	22(M87/W86)	-
Households experienced a shock	-	77
<i>Of which:</i>		
Households experienced a maternal and child health shock		18
Village Authority		11
<b>Total</b>	<b>60(390)</b>	<b>148</b>

In the HWPW-study (Articles I, II and III) the two districts were selected on the grounds that they had a functioning district hospital and some provision of private treatment from drug vendors or private doctors and nurses. Within each district, three rural communities were purposely selected to represent two communities with “good access” (less than two hours walk) to a health center and one with “poor access” (more than four hours walk). Ethnic diversity was also a sampling criterion and apart from Lao ethnics there were participants from the minority groups of Talieng, Alak, Oy, Lave and Makong (Lao National Front for Construction 2005). The nearest health centers to each of these six communities were selected and represented an equal mix of health centers with high and low outreach programs (measured in high and low immunization rates).

The additional selection of health providers and community members was based on a systematic purposive sampling strategy (Green and Thorogood 2009). The sample consisted of the following health providers in each community: the Village Health Volunteer (VHV), Traditional Birth Attendant (TBA), one traditional healer and one drug vendor (Article II). In addition the sample also included: currently pregnant women (14 to about 30 years old) (Article III); grandmothers (40 to about 60 years old) and living with a grandchild under five years of age (Article III); and households that had experienced a fatal or severe illness episode within the last 24 months in children under five or in mothers (Articles I and II). These participants were identified through interviews with the Village Authorities (VA) which is the community level of administrative governance, and through two gender-separate FGDs with mothers and fathers (20-35 years old) with children under five who lived in different clusters in the communities. Clusters are most often based on kinship (lineage) and/or on the time period during which a group of households has been settled in the community. A household is a domestic group that is the primary unit in everyday production and consumption. The composition varies within and between communities. The nuclear family is the core of the household and close relatives may cohabit (Chazée 2002). In poor villages married children may stay in their parent's house until they are able to build their own house in the same cluster of the community.

In the LVS (Article IV) the sample was selected within a household survey implemented in 30 randomly selected communities (Wagstaff and Lindelow 2013). Of these 30 communities, eleven were purposely selected to represent diversity in geographic location, livelihood, ethnic groupings and access to formal health and social protection programs. In addition to Lao-Tai groups of Lao, Phutai, Tai Lue and Tai Yang, there were participants from the Mon-Khmer group (Khmou, Talieng, Oy) and the Chine-Tibet group (Lolo and Lolopho). In each community, an interview with the VA was one of the preparatory tasks to identify households. In each community, seven households were purposely selected to represent the typical adverse events, referred to in this study as shocks (Holzman and Jorgensen 2001), which had been experienced in the community during the previous 12 months.

### **3.5 DATA COLLECTIONS**

The team composition in both original studies was multi-disciplinary and included the disciplines of health economy, anthropology, medicine and members with experience of implementation of rural development programs and social marketing research in Laos. This mix strengthened the study design, and resulted in a comprehensive pilot testing process before both studies were fielded. Skills in the Lao languages were essential for the data collection process and all three moderators were fluent in Lao and at least one more ethnic language. However, interpreters were used in about five remote communities in particular in interviews and FGDs with women.

Data were gathered through in-depth semi-structured interviews, Focus Group Discussions (FGDs) and occasional observations. The data were mainly collected in Lao language by Lao moderators and interviewers with experience in research in rural

and poor settings. In both studies, two moderators, each with one note taker, were working together in each community. One moderator and one note taker participated in both studies. In a few rural remote villages, the interviews with ethnic minority women were conducted in the local language with the help of local interpreters that were identified in the field. Interviews and FGDs were recorded and supplemented with handwritten notes by the moderator and note takers. Condensed transcripts (which excluded transcription of non-substantial clarifications between moderator and participants) were produced in English by the moderators and note takers. One of the moderators is also co-author of the four articles (BK).

The interviews were characterized by pre-determined topics and questions even though the sequence was flexible depending on the interviewee; the questions were to a high extent open-ended; specific probes were applied; the interviews were relatively lengthy (between one and two hours); they were pre-arranged during the same day or the day before the interview; and were conducted at the house of the interviewee or for health providers at their work place. Topic guides were prepared for the specific types of FGDs and interviews in each of the two studies.

For the LVS, topic guides were produced for the FGDs with community members and these covered six topics: community history; event calendar and identification of households influenced by shocks; community risk sharing mechanisms and other coping strategies; perceived access to and use of programs and organizations; notions of prevention and mitigation strategies and community concerns. The topic guide for the household was organized in five parts covering: introduction to the household; experienced shocks; actions taken and perceived impact of experienced shocks; risk-sharing and prevention and gender differences.

In the HWPW-study topic guides were also developed for the different participants (medical doctors, nurses, village health worker/traditional birth attendant, drug vendor, traditional healer, mothers and fathers with children under five, pregnant women, grandmothers and households that had experienced a fatal or severe illness episode). The following topics were included for community members and caregivers: mapping of health providers; quality of services; pregnancy and birth related preferences; services during pregnancy and delivery; healthcare-seeking behavior during illness in the household/community. The guides used in data collection with health providers included their reasons for becoming the respective health provider, services provided, preferences in location, type of clients and client expectations.

**Interviews:** In the HWPW-study, the in-depth semi-structured interviews with households who had lost a child or wife and in the LVS with households suffering a health shock (Article IV) were implemented with a weight on an open-ended illness narrative approach (Article I) (Kleinman 1989). Allowing the caregivers to speak at length or in detail on the aspects of the illness episode they were comfortable with in addition to probing on specifics according to a question and topic guide, characterized these interviews. The semi-structured interviews conducted with health providers (Article II) contained a mix of close-ended and open-ended questions. This format was chosen to adjust to the time constraints of health providers, to collect as much information as possible during only one interview and to collect comparable data



among the two interviewer teams. The mix of participants in the study was based on assumptions that there could be different understandings of the conditions creating maternal and child ill-health.

**Focus Group Discussions:** FGDs were used in both studies for several purposes. FGDs are generally effective in producing considerable amounts of information within a short time frame. In both studies they were used in the beginning of the fieldwork in each community to identify sampled participants from their respective cluster in the community e.g. pregnant women, households that had experienced health shocks. Secondly, the FGDs provided information about community norms on safety nets (Article IV) and health provider preferences (Article II). By acknowledging the knowledge of FGD participants the FGD became a vehicle for sharing and revisiting some of their stories and views on illness in the community. The FGDs were particularly effective in capturing grandmothers' experiences on pregnancy and childbirth over time. In contrast, the FGDs with currently pregnant women faced some of the typical difficulties of a FGD which involves sharing information on sensitive topics (Thorne 2008), something which risks during pregnancy was considered as.

**Observations in connection with the interviews and during the pilots:** Observations of the surrounding in the communities or the occasional questions or purchase of drugs during ongoing interviews with health providers, offered limited, but important complementary information about the everyday interactions between patients and local health providers (community health workers and drug vendors). Even though these observations were limited in scope, they provided access to information of a more naturalistic type than the interview transcripts and their accounts of the world (Ellen 1984; Green and Thorogood 2009). The pilot testing in rural areas also provided opportunities to get some impressions about the kind of interactions taking place between patients and providers for the team members who did not participate during the subsequent field work.

### 3.6 DATA ANALYSIS

*Interpretive description* was used to guide the analysis given its non-prescriptive, yet, systematic approach. The method provided space for the descriptive data themselves, which fitted the data transcripts at hand well (Thorne 2008). The transcripts were discussed between two of the authors (HMA and BK) and with the other moderators and note takers in each study initially after the transcripts were produced. Thereafter, clarifications on specific sections of the transcripts, on alternative interpretations of statements from participants were given in writing and during conversations on a needs basis.

The interpretation of the transcripts in both studies was conducted through thematic coding which stayed close to the statements of the participants by one of the research team members (HMA). All produced data was of a relatively explorative nature due to the limited available studies on the research topics and because a strong theorized relationship about concepts related to vulnerability in illness in the Lao context was not developed at the beginning of the study. For this reason the sorting and organization of

the data was achieved through using inclusive codes. The broad-based codes were in the next phase compared within the same interview after which it was attempted to create contrasts within the various transcripts e.g. between fatal illness episodes in communities with low and good access to healthcare (Article I) or between destitute and better off households suffering a health shock (Article IV). Through multiple readings of the transcripts it was later possible to apply different conceptual frameworks on the transcripts (three delay framework in Article I; ideas on uncertainty and medical pluralism in Article II; generational perspectives on healthcare utilization in Article III; and vulnerability and risk management framework in Article IV).

The data consisting of the interview and FGDs texts were manually coded in Articles I, II and III while we used the qualitative software program Nvivo10 in Article IV. The software program made it easier to keep a comprehensive amount of data easily accessible for comparison during the analysis process.

The FGD material has been used to understand participants' perceptions on different aspects of healthcare-seeking. Participants' individual stories on child illness, visits to the hospital or other providers and stories on childbirth prompted other group members to recall their experiences (Green and Thorogood 2009). Even though the focus of a FGD is not an individual experience, they feed into the discussions of the group. The extent to which the group shared views on a particular topic was followed up in subsequent discussions. Throughout the thesis quotes from FGDs and interviews are presented. They were selected to exemplify two notions: i) views and experiences that were agreed on to a high extent; and ii) to illustrate diversity in experiences or views on specific health-seeking practices. Details in all cases and quotes have been changed to protect the privacy of participants.

### **3.7 ETHICAL CONSIDERATIONS**

The HWPW-study was carried out after receiving approval from the National Ethics Committee for Health Research, Ministry of Health in Laos (N:017/NECHR dated 13/2/2009). Official and in-person information was provided to local authorities at the provincial, district and community level before data collections were initiated in each location. Prior to each interview or participation in a FGD each participant was asked for verbal consent and were informed that participation was voluntary, that they were free to withdraw at any time and that their identity would maintain confidential. Only in the FGDs with pregnant women did a few of the identified women decline to participate. Interviews and FGDs with health personnel employed by the Ministry of Health were conducted in conjunction with the health facilities, mainly outside under a tree to assure privacy. The FGDs were composed of staff at the same level in the organization (e.g. no head nurse in FGDs with nurses) to increase the participation of younger or newly hired staff without concerns for reprimands after the session.

The LVS was planned and implemented following standard procedures of the collaboration between the World Bank and the Government of Lao PDR, which did not include a permit issued by an ethical committee within Rural Development and Poverty Reduction. Within the World Bank the study proposal was approved through a

standard internal approval process. In Lao PDR, the study proposal was discussed and agreed with its counterpart, the National Committee for Rural Development and Poverty Reduction. During this process the objectives, methods and implementation procedures were agreed. Ethical conduct with regard to verbal consent was discussed as were other general rules of conduct regarding information to the provincial and district authorities during the field work, the fieldwork team composition assuring language skills and experience in remote rural areas. During the data collection, interviewees and participants in FGDs were informed that their participation was voluntary, that they could stop the interview or not answer questions in the FGDs as they deemed appropriate, and that the data would maintain confidentiality.

## 4 RESULTS

### 4.1 SHAPING RESPONSES TO FATAL ILLNESS

When applying the “three-delays” framework (Thaddeus 1994) on 26 fatal illness episodes, frequent constraints in deciding, reaching and receiving healthcare were identified (Article I). The identified factors that contributed to delays 1, 2 and 3 indicate the broad and diverse types of constraints in healthcare-seeking that were reported by caregivers (Table 3).

**Table 3 Factors contributing to delays**

Type of delay	Contributing factors	Number of deaths
<b>Delay 1 in making a decision to seek care</b>	<ul style="list-style-type: none"> <li>• Lack of agreement in the household about seeking care and which provider to consult</li> <li>• Concerns related to high medical costs</li> <li>• Difficulties in defining when an illness transitioned into a severe illness in need of immediate care</li> <li>• Discomfort of poor, illiterate parents of not knowing the expectations and social norms on patient and caregiver behavior at public health facilities</li> </ul>	20
<b>Delay 2 in reaching the health facility</b>	<ul style="list-style-type: none"> <li>• Difficulties in carrying the sick child or mother to the provider</li> <li>• Fear of leaving the community while sick and fear of dying outside the community</li> </ul>	14
<b>Delay 3 in receiving care at a health facility upon arrival</b>	<ul style="list-style-type: none"> <li>• Upon arrival to health facility: lack of health worker on site, lack of capacity and equipment to treat severe illness</li> <li>• Lack of recommendation from the health facility to seek better services at a referral hospital</li> </ul>	14

The factors included both immediate and broader social and cultural characteristics of seeking healthcare in addition to households’ assessment of the medical needs of the sick family member. Among the immediate factors were well-known constraints related to the accessibility of services including problems of affordability due to out-of-pocket fees. Lack of a common language between caregiver/patient and health workers at health centers or hospitals was a limitation that affected the acceptability of the services.

Two broader issues were identified as part of the delays in deciding to seek care. First, complexities in decision-making processes within the household as the illness episode

progressed, were revealed as causing delays. Out of the 20 cases of death during which delays in making a decision to seek care was identified (Table 3) about half mentioned lack of agreement as to what action to take among decision makers. Lack of agreement was reported between spouses but also across generations between the parents and grandparents of the sick child. Mothers described how they in pragmatic ways coped with different preferences in the household:

*When my parents prefer to do a traditional treatment I will not intervene. To avoid quarreling I agree with them first. If the treatment does not work they accept and let me go to consult with a doctor [ID 3].*

Another young mother exemplifies her economic dependency on relatives when seeking care for her child:

*Everything depends on the decisions made by my parents because they are responsible for all expenses. I never disagree with my mother. During the illness of my son they agreed with me to take my child to the hospital; my husband's parents however did not [ID 2].*

Second, a lack of alignment between user and provider expectations on behavior was identified. Poor households reported that they did not feel as welcome at health centers and hospitals as they did when seeking care with traditional healers or drug vendors. As a result they were reluctant to ask the doctor or nurse any questions during consultation or admission, for clarifications on treatment schemes, the reasons for the current status of the patient or even to seek care in health facilities in the first place.

The immediate but also the broader issues expanded the type of factors included when applying the “three-delays” framework. It is suggested that these identified issues add to the knowledge of why these children and mothers did not survive.

## **4.2 UNCERTAINTY IN HEALTHCARE-SEEKING**

Among the many different types of healthcare providers identified in the communities, there was a strong preference of consulting local providers as a first response to illness e.g. community workers (VHVs and TBAs), traditional healers (herbal and spiritual) and drug vendors (Article II). There was some overlap between providers e.g. nurses providing services after hours in the community or VHVs expanding the number of drugs and services in addition to the essential drugs they were trained to provide. Local providers were considered the most stable by community members (men and women), in the sense that they had experience of being available when there was a need and were permanently based in the communities. In comparison, health providers from the health centers and drug vendors were known to be a far less constant factor: non-residential nurses were not on duty during the week-end, or after a while they were relocated to other facilities and the replacement staff was not necessarily perceived as similarly qualified as the nurse who had left or there were at times vacancies with no staff at the health center.

It was in particular when the child had not recovered after seeking local providers that uncertainty became an issue. We identified four interrelated situations in which ambiguity about the next steps influenced the healthcare-seeking behaviors:

- when selecting the right provider mainly outside the community;
- when spending savings on treatments;
- when trying to find the real cause of the illness;
- when assessing the likelihood of recovery of the child.

In seeking providers outside the community, there were concerns about getting treatment and being understood, in particular for non-Lao speaking groups. This concern was confirmed by providers as exemplified by two nurses at a rural health center:

*Nurse 1: Non-Lao speaking patients are very nervous when they are at the hospital. It may be because they are afraid to talk to the doctor and they may be afraid that nurses and doctors will get angry if they don't understand what the doctor says.*

*Nurse 2: I am from an ethnic minority and I can speak my minority language. I think it is quite important that nurses have the same background as the patient because the patients will talk to you in more detail about their symptoms; moreover, we understand each other in terms of culture and customs. [Female nurses in rural remote community]*

Fathers to children under five clarified in a FGD that one of their most difficult tasks during a child's illness was to "find the right provider". Seeking multiple providers in and out of the community was perceived as a way to maximize the chances of the child recovering. Uncertainty about choosing the right provider influenced how long they would allow the child or mother to stay in hospital and how long caretakers would let their child continue taking the same medicines without improvement.

Matching the provider's perceived diagnostic skills with the progress of the child was continuously considered, e.g. when treatments with biomedicine were not resulting in the child's recovery, frequently the spiritual causes were sought instead of or in addition to medicine.

Hospital fees were expected to be high, which resulted in caregivers avoiding seeking care in the first place, or leaving prematurely. The lack of predictability in the total cost of treatments created concerns. Related to caregivers' attempt to seek providers that could identify the cause of illness, the caregivers had initially high hopes and expectations of recovery, which was not always achieved. Some of the drug vendors addressed the uncertainties of seeking care at a hospital by explaining that drugs can take time to fully work, and that there can be multiple ways of treating a patient effectively.

### 4.3 GRANDMOTHERS' INFLUENCES ON HEALTH PRACTICES

Pregnant and non-pregnant women described grandmothers to be important sources of advice during the first trimester of pregnancy, if complications arose during the pregnancy, and during childbirth (Article III). Additional sources of support were VHVs and TBAs, who lived in the communities and were well known by women. Shyness of pregnant women towards non-residential health staff working in unfamiliar locations, such as the district hospital, was a significant issue for pregnant women, which was a constraint for seeking antenatal care, in particular with male nurses. Attendance and attitudes to antenatal care differed between the communities, with the four communities with good access to a health center reporting more benefits from seeking the services than the two communities with weak access.

Maternal and paternal grandmothers revealed multiple child loss during their own reproductive life. Partly as a response to these experiences, the location of childbirth had been moved from the forest to the home or to birth huts in the family compound for some of the ethnic minority grandmothers. One grandmother shares her experience:

*“I delivered three of my children in the forest and the rest of them [six children] I delivered at home. I delivered in the forest because I was shy of my parents-in-law and siblings. But for the rest of my children I delivered at home because it was in the night, I had no time to go to the forest, and also because two of my babies died 2-3 hours after delivery as there was nobody to help and it was difficult for me to deliver. Therefore, for the rest of my deliveries, my husband did not allow me to go to the forest, but I was allowed to deliver in the kitchen.” [45-year-old grandmother, 3 children, 4 grandchildren, Alak ethnic group]*

Over the lifetime of grandmothers from the Lao ethnic groups, more people had become involved in the home deliveries such as traditional or trained birth attendants. Forest deliveries were not reported among the young women participating in the FGDs. Home deliveries were talked about as the standard location if no complications had occurred during pregnancy or delivery. One woman gives a typical image of the context:

*“The good point of giving birth at home is that we stay close to our parents, close to our relatives; TBA and VHV are always with us and they are very helpful. These people made me feel safe to deliver at home rather than with professional midwife.” [Mother unknown age with four children, Lave ethnic group]*

When comparing their own experiences with the conditions of currently pregnant women, grandmothers in all six communities agreed that young women had more opportunities in choosing where to deliver and how to take care of the newborn. In the two communities with more than four hours walk to the health center, young women and grandmothers alike, emphasized the major constraints for pregnant women to actually reach a health center. The FGDs indicated that several reproductive health practices are in the interface of tradition and change.

#### 4.4 MATERNAL AND CHILD ILLNESS AS A HEALTH SHOCK

The logistic and economic challenges and their relationship with vulnerability are aspects of illness that can accumulate over time (Article IV). The impact of health shocks on household welfare depends not only on their frequency but also on the ability of households and communities to manage mitigation or coping behaviors. The identified maternal and child health shocks had impacts on household conditions through multiple channels such as income losses, medical expenses and non-medical expenses. Three cases illustrate how vulnerability derived from coping strategies, health system issues and mobilization of household resources, and how vulnerability was maintained or exacerbated over time.

In contrast to most non-health shocks, the health shocks necessitated immediate access to cash in order to pay for treatment or transportation to treatment. Mobilizing resources to pay for medical costs triggered multiple coping strategies. Based on the sequence in which they were typically used, spending available cash was the first strategy. The amount differed from less than one US dollar to several hundred dollars.

Secondly, selling off assets, such as livestock, was another frequent way to raise money to pay for medical treatment, which could result in selling at lower than market prices. Taking a loan was a third short term coping strategy to raise money. Access to credit was generally constrained especially for households with limited assets, which in turn made care at hospitals difficult. Relatives and friends offered loans without interest while a few households in most of the communities were known as moneylenders charging interest. Loans from moneylenders were frequent in Vientiane Province and the interest rates were often as high as 10-20 percent per month, which made them very unattractive due to risk of defaulting, which delayed or restricted households from seeking care. Again the amount varied substantially from US\$10 to several hundred dollars.

Formal safety nets were almost non-existent for households suffering a MCH-shock. The notion that households support each other was profound in the communities, however. Support from relatives during a time of crisis was clearly the norm and we did not encounter households that had not sought help from relatives when in need. We did however encounter households that mentioned that relatives had stopped asking them for help due to the household's loss of livelihood. Compared to non-MCH shocks, these shocks were often fatal and/or resulted in longer-term illness.

The three case descriptions illustrated that the MCH-shocks that involved the wife in the family had severe implications for the livelihood of the family in addition to the health status of the woman. One of the cases describes the loss of health and income about two years after the initial complications after an (illegal) abortion. The woman is a mother of six. She and her husband had decided not to have more children:

*Three months later [after the initial abortion] she went back to the hospital and the doctor told that her womb still was infected and she should take pills for another 6 months, come back for a monthly check up and not work*



*in the rice field, or carry wood. She got the pills from the same pharmacy [as the abortion pills] in the nearby town at a price of 100,000 kip (US\$12.8) per month. She was, at the time of the interview, hoping to save 3 million kip (US\$383) for a health check later during the year due to chronic pains and inability to work as before. Apart from spending savings, they lost income due to her disability and her husband had hired laborers for the plantation season (250,000 kip) (US\$32) and their relatives helped harvesting the rice. They only had time to help late in the season, which resulted in a loss of an estimated 200 kg of rice. In the past she had collected wild forest products and sesame (at least worth 500 000 kip per year) (US\$64) but she was not able to do this anymore.*

The lack of recovery and thus continued lack of income resulted in successive deterioration of the livelihood and had already delayed further healthcare-seeking for the wife.

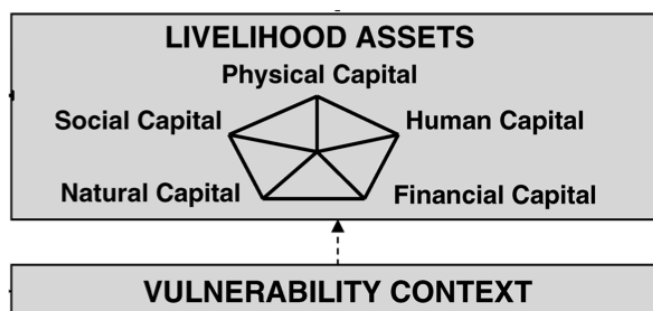
## 5 DISCUSSION

The results of the studies reveal that those processes in the household that influence healthcare-seeking practices are related, as could be expected, to caregivers' own assessments of symptoms and causes of a disease but that those assessments are intertwined with both social and economic considerations in the household, interactions with friends and family members and with health-service providers. Below, after describing how those main findings can be better understood in light of the Access Framework (Obrist, et al. 2007), three cross-cutting processes of healthcare-seeking practices are discussed.

### 5.1 MAIN RESULTS IN LIGHT OF THE ACCESS FRAMEWORK

The policy and institutional processes of influencing health provider services were not assessed in this thesis except for the impact of high user fees on healthcare-seeking practices.

In this research, the vulnerability context (bottom part of the model) was characterized by frequent and severe health shocks and showed that people could not control exposure to health risks (Article IV). Indeed, in the Lao Vulnerability Multi-shock study it was found that illness, injury and death were one of the most frequently encountered shocks in comparison to flooding, drought and livestock pests (Wagstaff and Lindelow 2013). In light of the high user fees involved in healthcare and the long geographical distances to health facilities, medical and non-medical costs were identified as barriers to seeking healthcare with an emphasis on eventual loss of financial capital (Article IV). Natural capital such as livestock was an important source of mobilizing cash, however.

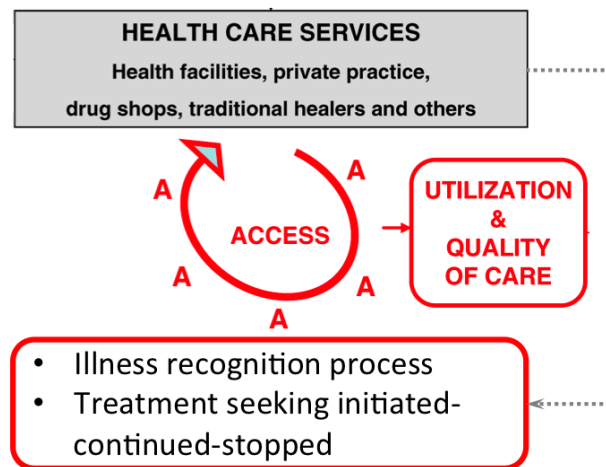


Human capital, as represented in competencies, knowledge and perceptions on illness and care-seeking, (Obrist, et al. 2007), proved important during the processes of deciding to seek care. The recognition of severity of symptoms and causes of illness influenced the kind of care that was sought. More specific knowledge was needed on the practical processes of seeking care such as knowledge about the availability of different types of providers, their opening hours, fee levels and how to get in touch with a good provider through the mobilization of friends or relatives (Articles I and II). Knowledge on self-treatment with herbal cures and biomedicine before seeking a provider was another aspect of human capital (Article I). Households had very limited

means of transportation available (physical capital), which was a serious constraint just as the lack of transportation for referral was identified as a major constraint for receiving the needed quality of care (Article I).

Social capital in the form of support from relatives and friends and in some instances from the village head influenced households' healthcare-seeking practices profoundly. The community norms on supporting households during times of health crisis was addressed in all Articles I-IV and provided insights on the multitude of types of support received and given (feeding and caring for sick, taking care of siblings to sick child during short of longer periods of time, adoption practices).

The central parts of the framework, related to illness recognition leading to access and subsequent utilization of care, encompasses relational and dynamic aspects of healthcare-seeking. The findings suggest that two aspects of these dynamics should be modified.



The findings in Articles I-III suggest that processes within the household influenced healthcare-seeking. First, illness was interpreted as a part of the social everyday life in which mothers and other caregivers had social roles and responsibilities (Janzen J M 1987; Kleinman and Kleinman 1991). As a consequence illness recognition was an interpretation of the health status of the child or spouse over time, rather than a one-step recognition before the first provider was consulted. Secondly, this could be repeated several times during the same illness episode if the family member did not recover. New health providers, depending on the five dimensions of access, were thereafter consulted (Articles I and II). Third, interactions with health providers influenced caregivers' assessment of where to seek care next. Familiarity with providers was perceived to minimize uncertainty of decision-making processes. Those aspects of illness recognition are highlighted in the modified framework by presenting illness recognition as a process and secondly, by linking the response of providers directly to these processes.

Low access to health facilities in remote communities was a constraint in particular for pregnant women to reach antenatal care (Article III). It was only in communities with low access to health centers and hospitals that death of children had occurred after only consulting traditional healers (Article I). In communities with better access to health

facilities a higher number of providers including traditional healers, drug vendors and medical doctors were consulted during illness (Article I, II) and pregnant women sought antenatal care (Article III). The preference of seeking local providers (under the given circumstances) (Article II) was justified by perceptions of good accessibility, availability, affordability and acceptability indicating the importance of including several dimensions of access. The fifth dimension of access, namely adequacy, was identified as a concern by households since it was recognized that community health workers had more limited skills and available drugs than at the district hospital.

## **5.2 THE WOMAN-CHILD DYAD, THE FAMILY AND GENDER ISSUES**

When applying the “three-delay framework” (Thaddeus 1994) on fatal illness episodes, some of the sources of the first delay in deciding to seek care related to the social obligations of mothers to consult husbands, grandmothers or elders in the household before leaving the home (Article I). Yet, the meanings attached to complying with these norms confirmed the role of the mother as a “good parent” within her context. As such, the delay could be attributable to her social role in everyday life and the behavior carried more meaning than simply the outcome of delay. The kinship relations form the basis for much interaction and allocation of resources (Baird and Shoemaker 2008; Chazée 2002; Lao National Front for Construction 2005). As such the social context of the individual woman provides both constraints and possibilities for action (Keesing 1981). To understand delay in healthcare-seeking behaviors, we should therefore look beyond the notions of the physical body and its disease including the culturally contingent “social body” (de Kok, et al. 2010; Scheper-Hughes N and Lock M M 1987). In a study from Vietnam it was found that HIV-positive couple’s behaviors related to childbearing was not only shaped by the extended family but also by the lineage needs of a family (Oosterhoff, et al. 2008). Family matters to people and while mothers tried to secure the survival of their children they were also fulfilling their everyday role in the family. Furthermore, the ascribed causes of fatal and severe illness often changed during the illness episodes (Article I, II).

The social reality of illness was also illustrated in other behaviors during illness. In situations of maternal and child illness, it was not only the individual child or mother’s health that was at stake, but also values related to being a family member and part of a household with a household head (Articles I-IV). The social aspects of illness also incorporated risks of causing illness or other misfortune on other family members. To comply with a set of spiritual purification ceremonies was for example important if a family member died out of the community. It could also involve costs to the community owning the land where the relative had died. In setting up arrangements for commercial drivers to provide transportation during health emergencies in rural areas the risk of death occurring during transportation was identified as a barrier for drivers’ willingness to be involved. The costs of purification ceremonies that had to be conducted if the person died during transportation were included in the costs of the transportation (experiences from implementing a health equity fund in Southern Laos based on personal communication with Associate Professor Rolf Wahlström, Karolinska Institutet and Jean-Marc Thome, Swiss Red Cross Country Delegate in Lao PDR). Other examples of illness as linked to future misfortune related to funeral

ceremonies in particular during unnatural deaths of young people (Lao National Front for Construction 2005). One of the case descriptions on coping strategies during repeated episodes of health shocks (Article IV) indicated that two young children's deaths were attributed by community members to failure to cut the spiritual ties to their deceased mother. The interpretation of illness and the understanding of causes of illness and death are in these examples inseparable from the social reality in which people live (Janzen J M 1987; Whyte 1997).

Women described their responsibility to protect the household and to care for children during the whole pregnancy and even during their own illness episodes (Article III), which has also been described in a few other studies (Lao Women's Union and GRID 2005; UNFPA 2008). Women used the power available to them in an agentive way (Mattingly 1994) during milder sickness of children where they decided themselves what treatment to seek first. The costs were low and they could pay themselves. Self-treatment with herbal and biomedicine was a strategy to treat the child during the initial onset of symptoms, which has been documented in a recent study on respiratory illness in Laos (Mayxay, et al. 2013). Other examples are parallel treatments: following the recommendations of household elders (spiritual healing before leaving the community) while seeking formal healthcare at the health center. But long distance and high medical costs constrained women from making these decisions by themselves, which is similar to the findings of another study in rural Laos (Patcharanarumol 2008). Women's bargaining power is important for child survival in two main areas: the extent to which women influence decision-making within the household influences the resources that are used to children's health and education; and the extent to which women control resources for their own health (Tolhurst and Nyongator 2006; UNICEF 2011). The findings indicate that women's bargaining power was constrained when care was needed outside the community.

The focus on the women-child dyad in MCH can benefit from a gender-based analysis, which in Laos mainly has been addressed in relation to HIV and AIDS programs and sexual behaviors (Lyttleton, et al. 2004; Sychareun, et al. 2011) and community-based tourism (Flacke Neudorfer C 2007). In the vulnerability literature there is also an emphasis on gender and changes within agriculture and emerging commercial markets that risk leaving women behind (Asian Development Bank 2012). It has been noted that women's opportunity to mobilize resources varies with ethnic affiliation. In about 60 percent of the Lao-Tai households it is the woman who is managing the household's finances (Lao Women's Union and GRID 2005). In the rural areas where patrilineal ethnic minority groups tend to reside, men are managing the financial decisions in 63 percent of the households (Lao Women's Union and GRID 2005). Further studies could illuminate how these differences impact women's access to healthcare for children and for themselves.

When the woman-child dyad was looked upon from a broader social perspective that included grandmothers of the children and to a limited extent husbands (Article III) we were better able to understand the health practices related to the first trimester (food restrictions that young women were very concerned about), pregnancy complications and home deliveries. The perceived normality of childbirths has also been described in rural Laos as another reason for home deliveries (Sychareun, et al. 2012) and also in

Nepal (Brunson 2010). In comparison, the increasing number of deliveries at health facilities is reportedly changing the traditional practices in neighboring Cambodia (Liljestrand and Sambath 2012). We looked primarily at grandmothers from a perspective of their social position within a particular social and historical context. However, the generational gap is short in Laos - the median age of first marriage is 19 years (Ministry of Health and Lao Statistics Bureau 2012) - which makes intergenerational comparisons most relevant between the youngest pregnant women and the older grandmothers (Article III).

The decision to seek emergency help during obstetric complications was made by husbands and/or household heads (Article IV). Within the literature on improving maternal health, there is some focus on the importance to persuade husbands to be better informed and involved in the birth process (Kabakyenga, et al. 2011; Sapkota, et al. 2012; Story, et al. 2012). Yet, concern is expressed about involving men more in communities where men make most decisions due to the risk of taking control away from the women giving birth (Brunson 2010). A similar concern is expressed by involving grandmothers in MCH programs, stating that involvement of those with greater decision-making authority must take care to challenge rather than reinforce gender norms (UNICEF 2011).

### **5.3 SOCIAL INTERACTIONS BETWEEN PATIENTS AND PROVIDERS**

The social interactions between patients and providers in health facilities influenced the healthcare-seeking practices (Articles I, II). Nurses at health facilities recognized that poor rural and often ethnic minority patients behaved differently than other patients and that they were constrained by unfamiliarity with the facility (Article II). Caregivers described how they felt uncomfortable asking questions during consultations, which in turn made nurses think they did not care about their health. This type of asymmetrical power relation between providers and patients and their caregivers illustrates the medical consultation as a social encounter rather than only a medical one (Mattingly 1994). Many studies on trust and provider-patient relationships have been void of an analysis of the power relations involved (Feierman, et al. 2010; Grimen 2009). Experiences of patients and caregivers in seeking care can give health workers a better understanding of the ways in which healthcare is perceived (Mogensen 2005) including asymmetrical opportunities to communicate. Caregivers' difficulty in assessing the transition from mild to severe symptoms is a specific case in point (Article I). Severity of symptoms has in several studies been found to be a challenge for caregivers (Kallander, et al. 2011; Sharkey, et al. 2011; Sodemann, et al. 1996). The frequent experiences of childhood fevers, diarrhea or coughs and shared experience that the child will recover, indicate a reason why caregivers wait a day or more before they seek care. Improving the quality of the available drugs at the facility might not reduce the delay in seeking care immediately. Health staff would most likely need to give concrete guidance on the signs of severity to make the transition of the child's illness from mild to severe easier to diagnose for caregivers (Kamat V R 2009).

Perceptions on the social dynamics during provider-patient interactions were also expressed by drug vendors who to some extent were boosting their business on the

communication gaps between formal providers and community members. Community health workers and rural nurses from ethnic minorities were other groups expressing concern about the lack of mindfulness in communications with patients unfamiliar to the health facility environment. The lack of awareness of the values and attitudes of the majority culture in the health system functioned inadvertently as a barrier to ethnic minority patients in neighboring Vietnam (Malqvist, et al. 2011).

In discussing pregnancy with women the importance of shyness was frequently mentioned. It is one of the traditional images of women in Laos (Flacke Neudorfer C 2007; Sychareun, et al. 2009) even though few studies have looked into what it means (UNFPA 2008). Shyness has been linked to unfamiliarity with situations or locations such as visiting hospitals or in the domain of livelihood to go to the town and sell vegetables at the market. It could be a result of a lack of confidence and a feeling that these institutions are not for “poor people like them” (UNFPA 2008). As a consequence it was suggested in that study that it was not the antenatal care in itself that is the problem but having it conducted in an unfamiliar location. Antenatal care was reported to be accepted when offered by mobile teams visiting remote villages (UNFPA 2008). The preference for local providers (Articles I, II) can be understood in light of rural remote women’s sense of uncertainty of leaving the community.

#### **5.4 THE LOGISTICS AND PRAGMATICS IN ILLNESS**

In understanding household processes in healthcare-seeking it has so far been argued to be important to analyze these in relation to local meanings of illness within the family and in the interactions with healthcare providers. The resources that families have at their disposal and the context of vulnerability in which disease is a frequent occurrence, is now the focus (Obrist, et al. 2007).

Vulnerability resulted from - and led to - financial barriers despite informal support to cover medical and non-medical expenses (Article IV). The vulnerable households were those that could not raise enough money to seek the care they had wanted and the households that had drained their assets without recovering from the illnesses. The defining difference between health shocks and non-health shocks was the need to pay cash for treatment, as also documented elsewhere (Heltberg and Lund 2009; Ir, et al. 2012; Kenjiro 2005; Wagstaff and Lindelow 2013). The proportion of out-of-pocket payments spent on medical expenditures is very high by international standards at 62 percent (World Bank 2010a). In addition, our findings indicate that loans with very high interest rates raised a danger of long-term debt, which also has been seen in neighboring Cambodia (Kenjiro 2005; Van Damme, et al. 2004). Disagreements in healthcare-seeking strategy were a common feature during severe illness, which included concerns of high costs compared to the likelihood of recovery (Articles I, II). Indeed, several of the households facing a MCH-shock were experiencing a double burden of having lost a child or spouse and spent savings and assets (IV).

The vulnerability to illness was particularly pertinent to women and children in poor households (Wagstaff and Lindelow 2013). Disease, death and injury left poor households economically and medically even more vulnerable than households that

were better off (Wagstaff and Lindelow 2013). An analysis of informal support to disadvantaged groups such as sex workers, women in-debt, or families new in an area, was beyond the scope of analysis but would be important to illustrate additional dimensions of vulnerabilities.

Vulnerable households were also those in need of preventive and curative health that were not continuously available such as unstable access to family planning, lack of formal abortion services and disease outbreak preparedness. These sources of vulnerability were beyond the control of the individual household or community in that effective prevention often depends on population-based interventions and the individual scope for action is limited. This is the case for several life-saving interventions within maternal and child health such as childhood immunizations, infectious disease control and food safety regulations (Matsuoka, et al. 2013; WHO 2007a). Immunization rates have a steep social gradient in Laos in that only 29 per cent of children in the lowest wealth quintile are fully vaccinated, compared with 61 per cent of children in the highest wealth quintile, even though vaccinations are provided free of charge (Ministry of Health and Lao Statistics Bureau 2012). Access to the immunization program through outreach activities are provided less frequently in remote rural areas in Laos (Jacobs, et al. 2012), which is one illustration of the importance of strong preventive healthcare services.

Rather than focusing exclusively on the last episode of illness, a perspective of vulnerability provided a comprehensive picture of how households coped with illness over time. Findings from a low-income setting in Tanzania (Ribera and Hausmann-Muela 2011) indicate that understanding the accumulation of effects of health shocks is an important complement. The accumulation of problems hindered access to care but it also increased households' defenselessness in the short run, by draining assets, and in the long run by reducing women's capacity to contribute to the livelihood of the household.

## **5.5 METHODOLOGICAL CONSIDERATIONS**

The opportunity to consider the context is one of the key arguments for conducting qualitative research. At the same time, the contextualization is also a limitation in terms of generalization of findings. The ethnic diversity in Laos is rich, yet little researched (Ovesen J 2004). The geographic, socio-economic, ethnic and linguistic diversity in rural Laos makes transferability a challenge (Malterud 2001). To adapt to this situation, geographic and ethnic diversity was applied as a sampling strategy. Yet, with more than 200 ethnic groups and limited information about the extent to which healthcare-seeking practices and health beliefs are similar within the four main language family groups, it is not possible to assume representativeness of the majority Lao ethnic nor the multiple ethnic minority groups. The Hmong-Iu Mien language family, consisting of two ethnic groups, was not represented in the sample because they are infrequent residents of the provinces included in the sample (Lao National Front for Construction 2005; Michaud 2009).

The two original studies were exploratory in nature and at the time of the data collection there was very limited research available on the studied topics. It was beyond



the scope of this thesis to collect systematic data on the linkages between health practices and local disease causation theory and the literature is limited on these issues in Laos. The same is true on women's role in reproduction, production and consumption which also could provide a more comprehensive picture of social space for taking care of one's own and children's health.

Due to the organization of the original data collection with an agreed number of interviews and FGDs, the question of saturation was not assessed during the fieldwork. In much funded applied health research design, the scope and time line are agreed at the beginning of the study implementation. These practical and financial limitations make it challenging to include saturation as a parameter of quality at the onset of data collection (Green and Thorogood 2009). For new topics that are identified during the field work (e.g. the role of uncertainty and the changes in childbirth practices of grandmothers) the saturation is even more difficult to accomplish.

The translation of interviews and FGDs and the production of summary transcripts into English is not just a technical task but a part of the data analysis (Green and Thorogood 2009). The production of the transcripts involved a process of discussion and clarification which resulted in going back to listen to the tape recordings on a needs basis.

That what people say can differ from what they do is a key reason for collecting data in peoples' natural environment, where they can also be observed (Charmaz 2004). To address this difficulty the interviews were grounded in healthcare-seeking processes and coping strategies that involved the participant in describing action, the consequences of action and thoughts about them. This illness narrative approach can help the participant to remember details and changes in perceptions as the illness episode unfolded, and thus improve the quality of the data. Triangulation between different types of providers, men and women, provided different perspectives on healthcare-seeking processes which was one way of increasing the validity of the findings (Green and Thorogood 2009). Yet, respondent recall bias is a bias that can influence the results in qualitative as well as quantitative studies (Ansah and Powell-Jackson 2013). A recall period of 24 months was applied in Articles I and II, while a five year recall period was used in Article IV. The severity of the health outcome of the shocks and the use of in-depth semi-structured interviews were critical ways to limit the recall bias. It provided time and support to recall and reflect on the illness episodes through open-ended narration that was supplemented with prompting on specifics issues by the interviewer.

The choice of interpretive description (ID) for the data analysis was considered appropriate for this type of data for several reasons (Thorne 2008). The studies were empirical in their orientations; the objective was to identify themes and main ideas on healthcare-seeking within the material; reflexivity in considering the role of disciplinary biases is emphasized in ID; and the product of ID is to make sense of the dynamics and complexities of healthcare (Hunt 2009).

The study is silent as to which of the processes identified are easiest to influence in a health system perspective. But the study shows that the processes are dynamic and

relational.

### **5.5.1 Reflexivity**

The composition of the research team and the organization of the tasks completed by each member had different advantages and disadvantages during different stages of the study. Although the author of this thesis was much involved in the design of the two main studies and organization of the related fieldwork, she was not on site during the main data collection and she did not master the language(s) used. The presence of a non-Lao speaking researcher is time consuming and can limit the responses of participants due to lack of shared rapport and trust (Birks, et al. 2007; Green and Thorogood 2009). The three Lao moderators had knowledge of the culture and environment from previous experience of data collections, which is important to establish rapport and create a relationship of comfort and trust with participants (Birks, et al. 2007)

It is also of note that the research questions investigated for the purpose of the thesis were not the ones for which the two projects were embarked upon. In this sense the data is revisited in the thesis.

A sequenced conceptualization and design of the study by a multi-disciplinary Lao and international team strengthened the contextualization of the study objectives. Both studies were initiated by a three-week long pilot testing during which revisions of interview and FGDs guides were made on the basis of team discussions, pilot testing of tools in a nearby semi-urban setting, revisions and thereafter field testing in rural settings. Sharing pre-conceptions on determinants of healthcare-seeking within the research team was an important part of the pilot test (Malterud 2001). It was a personal disadvantage for the main author during collection and analysis of data to not be present during the fieldwork. The previous experiences of the author in working with the same Lao consultancy firm on qualitative data collections in remote rural areas were however a help in agreeing on measures of quality and the level of details in the data collected that was necessary.

During the data collection, the field-team and main author were in contact over the phone or by email when possible. In addition, observational data was reported for each community and for each interview/FGD in a separate section in the transcripts. Pictures from the data collection sites also provided information on the contexts. Observations of the rural settings, household conditions and of the interactions with the field team were important sources of reference between the main author and the field team during the following processes of analysis. One of the moderators (and author of the articles BK) was in the field during both studies which resulted in mutual understandings of the pitfalls of data collection and analysis. Nevertheless, the lack of language skills in Lao and several minority languages of the author have restricted the kinds of qualitative analysis that was conducted on the data transcripts. Instead, openness about the steps taken in the data collection and the analysis has been pursued (Malterud 2001). In the beginning of the thesis a few theoretical assumptions were openly presented as a way to declare the entry point to the study topic.

## **5.6 IMPLICATIONS FOR RESEARCH, POLICY AND PRACTICE**

The findings add to the ongoing debate on the difficulties in reaching the targets set of MDG 4 and 5 in Laos. The question on whether “more of the same is enough” will be answered in relation to research (5.6.1) while three other aspects are pertaining to policy and practice.

### **5.6.1 Reasons why mothers and children die in remote areas**

The need for innovative approaches in creating reliable and useful data on determinants of child and maternal death has been acknowledged in the development of methodologies like the verbal autopsy and more recently the social autopsy. The verbal autopsy is a method for establishing the probable medical cause of death through structured interviews with caregivers in settings where civil registration systems are absent (Anker M, et al. 1999; WHO 2007b). The social autopsy complements this analysis by identifying social, behavioral and health system determinants of deaths, also through structured interview processes (Kallander, et al. 2011; Kalter, et al. 2011; Waiswa, et al. 2012). The need for increased flexibility, when gathering social autopsy data, was emphasized by a recent study on maternal deaths (D'Ambruso, et al. 2010). In that study it was demonstrated that when comparing the responses provided by caregivers in answering open-ended and closed-ended survey-inspired questions, the former identified contributing factors to death in up to 25 percent more of the caregiver interviews than the latter. This was the case, despite the fact that the range of social and cultural factors that were probed was restricted. The challenges in applying closed questionnaire-based methods to capture fatal illness episodes were also identified in a study on the spirit child phenomenon in Ghana (Denham, et al. 2010).

The identified reasons for delay in deciding to seek care included constraints in access to care and low quality of health services, factors which are well known and included in the ACCESS framework (Obrist, et al. 2007). However, caregivers also mentioned reasons reflecting gender-based constraints and feelings of insecurity or marginalization when seeking care at health facilities. This finding suggests the importance of broadening the scope of inquiry. The inclusion of an “open-ended illness narrative module” in sub-samples, where broad social and cultural contributory factors are studied, could potentially add value as a complement to the structured verbal and social autopsies. In rural and resource-poor settings, where the majority of maternal and child deaths occur outside a health facility, and the determinants of healthcare-seeking is little understood, this type of comprehensive analysis could improve district-based health officials’ knowledge base of the specific circumstances in their area of service. In reference to the Access framework this would strengthen the link between policy and healthcare services (Obrist, et al. 2007)

### **5.6.2 Uncertainty in healthcare-seeking processes**

It has been argued that doubt and uncertainty in the process of seeking care increase in conjunction with the rise in number of treatments available and the growth of medical knowledge (Gordon, et al. 2000). The healthcare options in Laos were far from clear-

cut, which was a source of uncertainty for households each time care was needed. Uncertainty is a reminder about the irreversibility of utilization of healthcare services. Uncertainty colors the real-life situations in which households in resource-poor settings are required to make decisions they know might not be optimal, which should be considered in healthcare-seeking analysis. Or in other words, we should orient the analysis of illness and social suffering around “what is at stake for particular participants in particular situations” (Kleinman and Kleinman 1991). The experience of illness as a part of the human conditions should be given more prominence in analysis of suffering (Kleinman 2013). Understanding the practical experiences of patients and caregivers includes but is not limited to cultural perceptions about illness.

### **5.6.3 Inter-generational perspectives**

Paying attention to power dynamics within families on pregnancy and newborn care is an important issue for the effectiveness of community-based programs (Kerr, et al. 2008; Satzinger, et al. 2009). Recognizing the existence of intergenerational exchanges does not automatically lead to household consensus, however. Young women’s interactions with grandmothers of their children occur in a context of power and domination. In fact, the interactions between women from different generations can have both negative and positive consequences and there are no simple answers to these social and health-related processes and practices. The crucial contributions made by relatives, including husbands and grandmothers, suggest that a focus on the family as well as the individual women seem warranted in improving maternal and child health programs. The lessons learnt by grandmothers’ about maternal and child mortality and risks of childbirth are of relevance for strengthening the demand creation of young women’s utilization of health services.

### **5.6.4 Health shocks in a vulnerability perspective**

Besides health-related shocks there are many other sources of vulnerability, each with different impact at household level (Alwang J, et al. 2001). From a perspective on reducing maternal and child mortality, the concept of shocks provides an opportunity to relativize the frequency and consequences of episodes of illness with other types of adverse events. A second advantage is the opportunity to capture vulnerability to health risk over time. Third, in terms of policy and practice a vulnerability perspective can help identify the targeted policies or programs that could reduce the negative impact of shocks. The findings indicate that needed policies reach beyond the health sector.

## 6 CONCLUSIONS

*“The conclusion has to be humility”*  
(Chambers 1989)

There are many internal and external processes influencing households’ healthcare-seeking during maternal and child illness. Understanding if, how, and when healthcare-seeking is initiated, stopped or continued is important to reach out to groups in areas that are poorly served or not yet using healthcare services. This represents one of the many challenges in the achievement of the MDG 4 and 5.

Lack of agreement within the household on the severity of illness and on which healthcare provider to seek, contributes to delay in healthcare-seeking decisions during fatal illness episodes of children and mothers. Processes of reaching agreement within the household are integrated parts of healthcare-seeking also during severe or fatal illness episodes.

Household members’ preference for local health providers, in the current circumstances, is associated with low medical and non-medical costs, good accessibility and a sense that local providers are available to them. This is the case, despite the acknowledgement that the services of local health providers are not always adequate.

Finding the “right” health provider – matched to the specific illness, child or mother - is perceived as difficult when the sick child or mother does not recover after initial treatment in the community. Uncertainty about transition from mild to severe symptoms contributes to delays in healthcare-seeking. Seeking different providers during the same illness episode signifies a process of increasing the chances and hopes of recovery.

In the face of pregnancy and childbirth, young women find support within the household and the extended family. During the critical period of the first trimester, during pregnancy complications and childbirth, grandmothers are sources of advice for young women. These grandmothers have themselves experienced impressive changes in childbirth practices during their own reproductive life.

Coping with maternal and child illness is logistically and economically challenging for households. Vulnerability results from - and leads to - financial barriers despite informal support to cover medical and non-medical expenses. Sources of vulnerability include the inability to mobilize cash to seek healthcare despite severe illness; and the spending of savings and selling assets, which nevertheless does not result in the recovery of the family member.

Weakness in the provision of preventive health measures is a source of vulnerability for households.

## 7 ACKNOWLEDGEMENTS

I would like to deeply thank my main supervisor, Professor Lucie Laflamme, for all her support. Your generosity overwhelms me. It is a privilege to return to Sweden after many years away and to be accepted as your student. I am thankful for all your patience, clear-cut thinking, and brilliance in identifying the gaps throughout my writing of this thesis. I have learnt a lot from and enjoyed this time - and all the special moments - tremendously. I thank you.

My co-supervisor Magnus Lindelow - I thank you profoundly for giving me the opportunity in all your multiple and essential roles in DC, Laos and Sweden. Your sharp comments cut across any disciplinary differences or geographical boundaries. I thank you.

Thank you to my mentor and chair, Associate Professor Asli Kulane, for wonderful guidance, support and exchanges on research, globetrotting, parenting and more.

To all the participants in Laos who agreed to contribute thoughts and time on questions on illness and healthcare-seeking.

I thank the National Committee for Rural Development and Poverty Reduction in Vientiane for support in conducting the Lao Vulnerability Study. Special thanks to director general Mr. Kongkeo Vongpaseuth. I thank the Health Service Improvement Project team at the Ministry of Health in Vientiane for support in conducting the “What health workers and patients want” study. Thank you for your help Dr Sisamone Keola, Dr Chanpheng Southivong, Dr Chansaly Phommavong, and Dr Phasouk Vongvichit. I also thank Dr Phetdara Chanthala at the Lao World Bank office for support and help on the way. To the Vulnerability Regional Study team at the World Bank for giving me the opportunity to join the Lao study and later revisit the material in this thesis. My deep thanks to Jamele Rigolini for introducing me to Laos. My first visit took my breath away. I thank Caridad Araujo and Valerie Kozel for support in designing the tools and preparing the study. I really miss sharing the best office with Natsuko Kiso while making sense of the data in the first rounds.

I thank Chansada Souvanlasy, general manager for the Indochina Research Laos office. To work with you and your team(s) has been an enormous experience that has involved many journeys, pilots, calculations, revisions and talks. Thank you for introducing me to the way of work in Laos, when to wait and when not to, the taste of buffalo skin and great discussions. I have enjoyed the collaboration tremendously. Thanks to Khamsing Xomsihapanya and the late Sysaath Phimmasone for all their contributions as moderators in the studies. To Bouasavanh Khanthaphat: Boua without you the studies would not have been the same. I thank you for your compassionate, exceptional, yet straightforward professionalism in Vientiane and all this after days of walking and working in the community. I could not have done this without you and I cherish our collaboration and friendship. To Kinnalone for all your stories and sharing of the ordinary experiences when in Vientiane.

I would like to thank Professor Vinod Diwan and Professor Cecilia Stålsby Lundborg as former heads of Global Health/ICHAR for creating a conducive environment for research. To the ISAC research group for taking me in and making me feel like I belonged. Thank you Marie Hasselberg for all your help and guidance in multiple stages. To Joel Monárrez-Espino for lots of ideas on moving forward and making the corridor an inspiring place. To Lisa Blom for always checking in on me; Betty Elling, Klara Johansson, Hans Yngve, Chris Hanna, and Uzma Ramin Khan for great outings and exchanges in ISAC.

Thank you all Global Health/IHCAR colleagues at different stages of work and research and in different places for sharing your knowledge: Senia, Ulrika, Galit, Mira, Netta, Anna, Susanne, Patricia, Salla, Krushna, Anneli, Erika, Kristi, Göran, Anders, Anastasia, Linus, Hassan, Stefan, Ketkesone, Birgitta, Rachel, Elisabeth, Peter, Linda, Mohamed, Olivia, Ashish, Hamideh and Gorette. To Vinod for many good suggestions on the way. To Ziad El-Khatib for demystifying Endnote and great stories when sharing an office. To Elin Larsson for caring and sharing all the important things. To Ragnar Andersson who once suggested I should register at KI. And to Jette: “tak for hjælpen”. Thank you fellow cover-story-writing colleagues Hana Taha, Joan Kalyango and Meena Daivadanam for all the to-the-point exchanges. To Meena for valuable comments during my pre-defence and for being such a technical wiz.

Thank you Rolf Wahlström for helping me on the way with travel to Laos, books, great comments during my pre-defence and introducing me to researchers from Laos. Thank you Sengchanh Kounnavong and Vanphanom Sychareun for discussions on cultural practices within maternal and child health. I thank Miriam Eliasson for excellent comments during my pre-defence, making me see my own arguments in a new light. Thank you Gun-Britt Eriksson, Elisabeth Kaven, Bo Planstedt and Andreas Sandin for always being helpful and solving things on my way. I thank Gary Watson and John Farrow for tireless language editing that even brings smiles to my face.

Some meetings define who you become. I am grateful for the opportunity given by Professor Peter Aaby, many years ago, to conduct fieldwork in the Bandim Health Project, Guinea-Bissau. Thank you Peter for invaluable lessons. Without those experiences I am not sure I would have pursued the paths of work I have.

To my parents Inga and Bruno who have given me all. Thank you for your unconditional support and understanding. To have three sisters is ideal and beautiful. Thank you Anette, Inge-Marie and Birgit and families for all your support and love. To all my friends I thank you for all the fun, laughter and help during the course of having multiple homes here and there!

My life as a mother – Iris, Asta and Konrad – there is nothing better. You are the joys of my life. To my wonderful husband Magnus – thank you for all your help and for being there. Real peace is being with you.

## 8 REFERENCES

- Alwang J, Siegel PB, and Jörgensen SL  
2001 Vulnerability: A view from different disciplines. The World Bank.
- Anker M, et al.  
1999 A standard verbal autopsy method for investigating cause of death in infants and children. World Health Organization.
- Ansah, E. K., and T. Powell-Jackson  
2013 Can we trust measures of healthcare utilization from household surveys? BMC Public Health 13(1):853.
- Asian Development Bank, World Bank  
2012 Country Gender Assessment for Lao PDR. Reducing vulnerability and increasing opportunity.
- Awiti Ujiji, P  
2011 Striving for Motherhood. Understanding the Socio-Cultural Context of Realizing Childbearing and HIV Therapeutic Behaviors Among Women in Kenya, Department of Public Health Sciences, Karolinska Institutet.
- Baird, IG, and B Shoemaker  
2008 People. Livelihoods, and Development in the Xekong River Basin, Laos. Bangkok: White Lotus Press.
- Barros, A. J., et al.  
2012 Equity in maternal, newborn, and child health interventions in Countdown to 2015: A retrospective review of survey data from 54 countries. Lancet 379(9822):1225-33.
- Bhutta, Z. A., et al.  
2008 What works? Interventions for maternal and child undernutrition and survival. Lancet 371(9610):417-40.
- Bhutta, Z. A., et al.  
2010 Countdown to 2015 decade report (2000-10): Taking stock of maternal, newborn, and child survival. Lancet 375(9730):2032-44.
- Birks, M. J., Y. Chapman, and K. Francis  
2007 Breaching the wall: Interviewing people from other cultures. Journal of Transcultural Nursing 18(2):150-156.
- Brunson, J.  
2010 Confronting maternal mortality, controlling birth in Nepal: The gendered politics of receiving biomedical care at birth. Social Science & Medicine 71(10):1719-27.
- Chambers, R.  
1989 Vulnerability, Coping and Policy - Introduction. Ids Bulletin-Institute of Development Studies 20(2):1-7.
- Charmaz, K.  
2004 Premises, principles, and practices in qualitative research: revisiting the foundations. Qualitative Health Research 14(7):976-93.
- Chazée, L  
2002 The Peoples of Laos. Rural and Ethnic Diversities. Bangkok: White Lotus Press.
- Cousens, S., et al.  
2011 National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995: A systematic analysis. Lancet 377(9774):1319-30.



- D'Ambruoso, L., et al.  
2010 A lost cause? Extending verbal autopsy to investigate biomedical and socio-cultural causes of maternal death in Burkina Faso and Indonesia. *Social Science & Medicine* 71(10):1728-38.
- Darmstadt, G. L., et al.  
2005 Evidence-based, cost-effective interventions: How many newborn babies can we save? *Lancet* 365(9463):977-88.
- de Kok, B., J. Hussein, and P. Jeffery  
2010 Joining-up thinking: Loss in childbearing from inter-disciplinary perspectives. Introduction. *Social Science & Medicine* 71(10):1703-10.
- Denham, A. R., et al.  
2010 Chasing spirits: Clarifying the spirit child phenomenon and infanticide in Northern Ghana. *Social Science & Medicine* 71(3):608-15.
- Ellen, R.F  
1984 *Ethnographic research. A guide to general conduct.* London: Academic Press.
- Feierman, S., et al.  
2010 Anthropology, knowledge-flows and global health. *Global Public Health* 5(2):122-8.
- Flacke Neudorfer C  
2007 Tourism and hospitality planning and development in the third world: A case study from Northern Laos. *Tourism and Hospitality Planning and Development* 4(2):135-147.
- Gilmore, B, and E McAuliffe  
2013 Effectiveness of community health workers delivering preventive interventions for maternal and child health in low- and middle-income countries: A systemic review. *BMC Public Health* 13(847).
- Good, Byron J.  
1990 *Medicine, rationality and experience. An anthropological perspective:* Cambridge University Press.
- Gordon, G. H., S. K. Joos, and J. Byrne  
2000 Physician expressions of uncertainty during patient encounters. *Patient Education and Counseling* 40(1):59-65.
- Government of Lao PDR  
2010 *Accelerating Progress Towards the MDGs: Innovative options for reaching the unreached.* Ministry of Foreign Affairs.
- Government of Lao PDR and the United Nations  
2013 *The Millennium Development Goals. Progress Report for the Lao PDR 2013.*
- Green, J, and N Thorogood  
2009 *Qualitative Methods For Health Research.* London: Sage Publications Ltd.
- Grimen, H.  
2009 Power, trust, and risk: Some reflections on an absent issue. *Medical Anthropology Quarterly* 23(1):16-33.
- Hahn R.A, and Inhorn M. C  
2009 Introduction. *In Anthropology and Public Health. Bridging differences in culture and society.* Hahn R.A and M.C. Inhorn, eds. New York: Oxford University Press.
- Heltberg, R., and N. Lund  
2009 Shocks, Coping, and Outcomes for Pakistan's Poor: Health Risks Predominate. *Journal of Development Studies* 45(6):889-910.

- Holzman, R, and S Jorgensen  
2001 Social risk management: A new conceptual framework for social protection and beyond. *International Tax and Public Finance* 8(4).
- Hunt, M. R.  
2009 Strengths and Challenges in the Use of Interpretive Description: Reflections Arising From a Study of the Moral Experience of Health Professionals in Humanitarian Work. *Qualitative Health Research* 19(9):1284-1292.
- Ir, P., et al.  
2012 Toward a typology of health-related informal credit: An exploration of borrowing practices for paying for health care by the poor in Cambodia. *BMC Health Services Research* 12:383.
- Jacobs, B., et al.  
2012 Building on community outreach for childhood vaccination to deliver maternal and child health services in Laos: A feasibility assessment. *Reproductive Health Matters* 20(40):112-21.
- Janzen J M  
1987 Therapy Management: Concept, reality, process. *Medical Anthropology Quarterly* 1(1):68-84.
- Kabakyenga, J. K., et al.  
2011 The pathway of obstructed labour as perceived by communities in south-western Uganda: A grounded theory study. *Global Health Action* 4.
- Kallander, K., et al.  
2011 Social autopsy: INDEPTH Network experiences of utility, process, practices, and challenges in investigating causes and contributors to mortality. *Population Health Metrics* 9:44.
- Kalter, H. D., et al.  
2011 Social autopsy for maternal and child deaths: A comprehensive literature review to examine the concept and the development of the method. *Population Health Metrics* 9:45.
- Kamat V R  
2009 The anthropology of childhood malaria in Tanzania. *In Anthropology and public health. Briding difference in culture and society.* Hanh R A and I.M. C, eds. Oxford, New York: Oxford University Press.
- Keesing, Roger M  
1981 *Cultural Anthropology. A Contemporary Perspective.* New York: Holt, Rinehart and Winston.
- Kenjiro, Yagura  
2005 Why Illness Causes More Serious Economic Damage than Crop Failure in Rural Cambodia. *Development and Change* 36(4):759-783.
- Kerr, R B, et al.  
2008 "We Grandmothers Know Plenty": Breastfeeding, complementary feeding and the multifaceted role of grandmothers in Malawi. *Social Science & Medicine* 66:1095-1105.
- Khan, K. S., et al.  
2006 WHO analysis of causes of maternal death: A systematic review. *Lancet* 367(9516):1066-74.
- Kleinman, A  
1989 *The Illness Narartives: Suffering, Healing and the Human Condition.* New York: Basic Books.

- Kleinman, A, and J Kleinman  
1991 Suffering and its professional transformation: Toward an ethnography of interpersonal experience. *Cultural & Medical Psychiatry* 15(3):275-301.
- Kleinman, A.  
2013 From Illness as Culture to Caregiving as Moral Experience. *New England Journal of Medicine* 368(15):1376-1377.
- Kozel, V., P. Fallavier, and R. Badiani  
2008 Risk and vulnerability analysis in World Bank analytic work: FY2000—FY2007. World Bank.
- Lao National Front for Construction  
2005 The Ethnic Groups in Lao P.D.R. Vientiane: Department of Ethnics.
- Lao Women's Union, and GRID  
2005 Lao PDR. Gender Profile.
- Leach, M A, et al.  
2008 New therapeutic landscapes in Africa: Parental categories and practices in seeking infant health in the republic of Guinea. *Social Science & Medicine* 66:2157-2167.
- Liljestrand, J., and M. R. Sambath  
2012 Socio-economic improvements and health system strengthening of maternity care are contributing to maternal mortality reduction in Cambodia. *Reproductive Health Matters* 20(39):62-72.
- Lundberg, P. C., and S. Thrakul  
2013 Religion and self-management of Thai Buddhist and Muslim women with type 2 diabetes. *Journal of Clinical Nursing* 22(13-14):1907-1916.
- Lyttleton, C, et al.  
2004 Watermelons, bars and trucks: Dangerous intersections in northwest Lao PDR. An ethnographic study of social change and health vulnerability along the road through Muang Sing and Muang Long. Lao Institute for Cultural Research.
- Malqvist, M., et al.  
2011 Ethnic inequity in neonatal survival: A case-referent study in Northern Vietnam. *Acta Paediatrica* 100(3):340-6.
- Malterud, K.  
2001 Qualitative research: Standards, challenges, and guidelines. *Lancet* 358(9280):483-8.
- Matsuoka, S., et al.  
2013 Performance-based financing with GAVI health system strengthening funding in rural Cambodia: A brief assessment of the impact. *Health Policy and Planning* 1(10).
- Mattingly, C.  
1994 The concept of therapeutic 'emplotment'. *Social Science & Medicine* 38(6):811-22.
- Mayxay, M., et al.  
2013 Respiratory illness healthcare-seeking behavior assessment in the Lao People's Democratic Republic (Laos). *BMC Public Health* 13:444.
- Messerli P, et al.  
2008 Socio-economic atlas of the Lao PDR. An analysis based on the 2005 population and housing census. Bern and Vientiane Geographica Bernensia: Swiss National Center of Competence in Research (NCCR) North-South University of Bern.

- Michaud, J  
2009 Peoples of the Southeast Asian Massif. Lanham: The Scarecrow Press Inc.
- Ministry of Health  
2009 Strategy and Planning Framework for Integrated Package of Maternal, Neonatal and Child Health Services 2009-2015. Ministry of Health.
- Ministry of Health and Lao Statistics Bureau  
2012 Lao PDR. Lao Social Indicator Survey (LSIS) 2011-12.
- Mogensen, H. O.  
2005 Finding a path through the health unit: Practical experience of Ugandan patients. *Medical Anthropology: Cross-Cultural Studies in Health and Illness* 24(3):209-36.
- National Statistics Center  
2005 Lao Reproductive Health Survey 2005. Committee for Planning and Investment.
- Obrist, B, et al.  
2007 Access to health care in contexts of livelihood insecurity: A framework for analysis and action. *PLoS Medicine* 4(10):1584-1588.
- Oosterhoff, P., et al.  
2008 Holding the line: Family responses to pregnancy and the desire for a child in the context of HIV in Vietnam. *Culture Health & Sexuality* 10(4):403-416.
- Ovesen J  
2004 All Lao?: Minorities in the Lao People's Democratic Republic. *In Civilizing the Margins: Southeast Asian Government Policies for the Development of Minorities*. Duncan C, ed. Pp. 214-240. Ithaca: Cornell University Press.
- Patcharanarumol, W.  
2008 Health Care Financing for the Poor in Lao PDR, Health Policy Unit, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine.
- Penrod, J.  
2001 Refinement of the concept of uncertainty. *Journal of Advanced Nursing* 34(2):238-45.
- Pharris-Ciurej, A  
2011 HIV-related Stigma in Vietnam. Implications for the Prevention and Control of HIV in Concentrated Epidemic Settings, Department of Public Health Sciences, Karolinska Institutet.
- Prost, A., et al.  
2013 Women's groups practising participatory learning and action to improve maternal and newborn health in low-resource settings: A systematic review and meta-analysis. *Lancet* 381(9879):1736-46.
- Ribera, J M, and S Hausmann-Muela  
2011 The Straw that Breaks the Camel's Back. Redirecting Health-Seeking Behavior Studies on Malaria and Vulnerability. *Medical Anthropology Quarterly* 25(1):103-121.
- Ronsmans, C., et al.  
2010 Effect of parent's death on child survival in rural Bangladesh: A cohort study. *Lancet* 375(9730):2024-2031.
- Ronsmans, C., and W. J. Graham  
2006 Maternal mortality: Who, when, where, and why. *Lancet* 368(9542):1189-200.

- Sapkota, S., et al.  
2012 In the Nepalese context, can a husband's attendance during childbirth help his wife feel more in control of labour? *BMC Pregnancy Childbirth* 12:49.
- Satzinger, F., R. B. Kerr, and L. Shumba  
2009 Intergenerational Participatory Discussion Groups Foster Knowledge Exchange to Improve Child Nutrition and Food Security in Northern Malawi. *Ecology of Food and Nutrition*, 48(5):369-382.
- Scheper-Hughes N, and Lock M M  
1987 The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology *Medical Anthropology Quarterly* 1:6-41.
- Schroeder, D., and G. Arnason  
2009 Guest editorial: Vulnerability revisited. *Cambridge Quarterly of Healthcare Ethics* 18(2):110-1.
- Schroeder, D., and E. Gefenas  
2009 Vulnerability: Too vague and too broad? *Cambridge Quarterly of Healthcare Ethics* 18(2):113-21.
- Sharkey, A, et al.  
2011 Influences on healthcare-seeking during final illnesses of infants in under-resourced South African settings. *Journal of Health Population and Nutrition* 29(4):379-387.
- Sihavong, A., et al.  
2011 Community perceptions and treatment-seeking behaviour regarding reproductive tract infections including sexually transmitted infections in Lao PDR: A qualitative study. *Journal of Biosocial Science* 43(3):285-303.
- Sodemann, M., et al.  
1996 Maternal perception of cause, signs and severity of diarrhoea in a suburban West African community. *Acta Paediatrica* 85(9):1062-1069.
- Stenson, B., et al.  
2001 Private pharmacy practice and regulation. A randomized trial in Lao P.D.R. *Int J Technol Assess Health Care* 17(4):579-89.
- Storeng, K. T., et al.  
2008 Paying the price: The cost and consequences of emergency obstetric care in Burkina Faso. *Social Science & Medicine* 66(3):545-57.
- Story, W. T., et al.  
2012 Husbands' involvement in delivery care utilization in rural Bangladesh: A qualitative study. *BMC Pregnancy Childbirth* 12:28.
- Sychareun, V, et al.  
2009 Cultural Beliefs and traditional rituals about child birth practices in Lao PDR. *The Asian-Pacific Resource & Research Centre for Women*.
- Sychareun, V., et al.  
2011 Customary adolescent sexual practices among the Akha of northern Lao PDR: Considerations for public health. *Culture, Health & Sexuality: An International Journal for Research, Intervention and Care* 13 Suppl 2:S249-62.
- Sychareun, V., et al.  
2012 Reasons rural Laotians choose home deliveries over delivery at health facilities: A qualitative study. *BMC Pregnancy Childbirth* 12(1):86.
- Syhakhang, L., et al.  
2004a Knowledge and perceptions of drug quality among drug sellers and consumers in Lao PDR. *Health Policy and Planning* 19(6):391-401.
- Syhakhang, L., et al.  
2004b The quality of drugs in private pharmacies in Lao PDR: a repeat study in 1997 and 1999. *Pharmacy World & Science* 26(6):333-8.

- Syhakhang, Lamphone  
2002 The quality of private pharmacy services in a province of Lao PDR: Perceptions, practices and regulatory enforcements, Department of Public Health Sciences, Karolinska Institutet.
- Tambiah, S J  
1970 Buddhism and the spirit cults in Northeast Thailand.
- Thaddeus, S, Maine, D  
1994 Too far to walk: Maternal mortality in context. *Social Science & Medicine* 38:1091-1110.
- Thomsen, S., et al.  
2013 The world we want: Focus on the most disadvantaged. *Global Health Action* 6.
- Thorne, S.  
2008 *Interpretive Description*. Walnut Creek California: Left Coast Press Inc.
- Tolhurst, R, and F.K Nyongator  
2006 Looking within the household: Gender roles and responses to malaria in Ghana. *Royal Society of Tropical Medicine and Hygiene* 100:321-326.
- UNFPA  
2008 Reproductive health at the margins. Results from PEER studies in Southern Laos.
- UNICEF  
2011 Gender influences on child survival, health and nutrition: a narrative review.  
[http://www.unicef.org/gender/files/Gender Influences on Child Survival a Narrative review.pdf](http://www.unicef.org/gender/files/Gender_Influences_on_Child_Survival_a_Narrative_review.pdf): UNICEF.
- 2012 Levels & Trends in Child Mortality. Report 2012. Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation. UNICEF.
- United Nations  
2000 Resolution 55/2: United Nations Millenium Declaration. United Nations.
- 2010 Keeping the promise: A forward-looking review to promote an agreed action agenda to achieve the Millennium Development Goals by 2015. Report of the Secretary-General. United Nations.
- 2012 The Millennium Development Goals Report 2012. United Nations.
- Wagstaff, A., and M. Lindelow  
2013 Are Health Shocks Different? Evidence from a Multishock Survey in Laos. *Health Economics*.
- Waiswa, P.  
2010 Understanding Newborn Care in Uganda - Towards Future Interventions, Department of Health Policy, Planning and Management and Department of Public Health Sciences, Makerere University and Karolinska Institutet.
- Waiswa, P., et al.  
2012 Increased use of social autopsy is needed to improve maternal, neonatal and child health programmes in low-income countries. *Bulletin of the World Health Organization* 90(6):403-403A.
- Van Damme, W., et al.  
2004 Out-of-pocket health expenditure and debt in poor households: Evidence from Cambodia. *Tropical Medicine and International Health* 9(2):273-80.

- Van der Geest, S, and S R Whyte, eds.  
1988 The context of medicines in developing countries. Studies in pharmaceutical anthropology. Amsterdam: Het Spinhuis.
- Van der Sijpt, E.  
2010 Marginal matters: Pregnancy loss as a social event. *Social Science & Medicine* 71(10):1773-9.
- WHO  
2007a Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: WHO's Framework for Action. WHO.  
—  
2007b Verbal autopsy standards: Ascertaining and attributing cause of death. WHO.  
—  
2009 Women and health. Today's evidence - tomorrow's agenda. WHO.  
—  
2012a Causes of child mortality, by region, 2000-2011. *In* Global Health Observatory (GHO).  
[http://www.who.int/gho/child\\_health/mortality/mortality\\_causes\\_region\\_text/en/index.html](http://www.who.int/gho/child_health/mortality/mortality_causes_region_text/en/index.html): WHO.  
—  
2012b Health Policy and Systems Research. A Methodological Reader. Alliance for Health Policy and Systems Research, WHO.  
—  
2012c Maternal mortality, Vol. Fact sheet No. 348.  
<http://www.who.int/mediacentre/factsheets/fs348/en/index.html>: WHO.  
—  
2012d Trends in Maternal Mortality: 1990 to 2010. WHO, UNICEF, UNFPA and The World Bank estimates. WHO.
- Whyte, S R  
1997 Questioning misfortune. The pragmatics of uncertainty in Eastern Uganda. Cambridge: Cambridge University Press.
- Whyte, S R, S Geest, and A Hardon  
2002 Social lives of medicines. Cambridge: Cambridge University Press.
- Victora, C. G., et al.  
2003 Applying an equity lens to child health and mortality: More of the same is not enough. *Lancet* 362(9379):233-241.
- World Bank  
2005 Health Services Improvement Project. The World Bank.  
—  
2010a Out-of-pocket spending and health service utilization in Lao P.D.R. Evidence from the Lao expenditure and consumption surveys. The World Bank.  
—  
2010b Vulnerability and Social Safety Nets in Lao PDR. The World Bank.